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MODELING RELATIONSHIPS BETWEEN INNOVATION ANTECEDENTS AND SERVICE INNOVATION: A ZIMBABWEAN HOTEL MANAGERS PERSPECTIVES

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Abstract: There seem to be a paucity of studies that have investigated the influence of learning philosophy, strategic direction, and transfunctional acclimation service innovation in the Zimbabwean context in the hospitality sector. This is a new trend that is becoming prevalent in service innovation orientation at the global level. The purpose of the study was to examine the relationship between innovation antecedents and service innovation in the hospitality sector of Zimbabwe as this provides leeway towards a major contribution of the GDP of most emerging countries and Zimbabwe is no exception. A quantitative approach was utilised and Smart PLS statistical software for structural equation modelling was used to analyse data. The results indicate that there is a positive and a significant relationship between innovation antecedents and service innovation. However, the relationship between trans-functional acclimation and service innovation was insignificant. The empirical study provided interesting implications to academicians by making a significant contribution to service innovation literature knowledge. This study incalculably adds to ground-breaking knowledge to the existing body of service innovation literature in emerging countries.

Key words: learning philosophy, strategic direction, transfunctional acclimation, service innovation, hotels

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INTRODUCTION

Over the past decade, the service economy has been growing rapidly and may lead to an increase in employment, competitiveness, innovation and economic growth (Tether, 2005). According to Zulkepli, Hasnan and Mohtar (2015), services are provided in all

* Corresponding author

types of business, ranging from SMEs, joint ventures, consulting firms, internet services, transport, tourism, social welfare, telecommunication services, and others. Innovation in services has received great attention in organisational studies due to its impact on society, especially with regard to the direct influence on the creation of jobs and social and economic development (Gallouj, 2007). Most services in tourism are based on human (employee) performance, services are produced and consumed simultaneously in a face-to-face exchange situation and employees and customers are physically and psychologically close enough to influence each other (Turanligil & Altintaş, 2018).

The success of the hotel industry depends heavily on the social and technical skills of its personnel, their ingenuity and hard work, their commitment and attitude (Turanligil & Altintaş, 2018). In this sense, the attainment of innovation enables better organisational performance, which is reflected in growth and productivity (Ferraz et al., 2016). It is imperative to note that, despite the theoretical contributions made by many scholars on innovation antecedents and service innovation, little is known pertaining to the connection between innovation antecedents (firm's learning philosophy, strategic direction, and transfunctional acclimation) and service innovation in the hospitality sector in Zimbabwe. Previous researchers in Zimbabwe have examined hotels and the hospitality sector in various contexts by focusing on an analysis of Zimbabwean hotel managers' perspectives on workforce diversity (Mkono, 2010); a study into guests' perceptions of service quality and loyalty in hotel restaurants in Harare (Mangwiro et al., 2015); the effects of dollarisation on human resources in the hospitality industry in Zimbabwe (Kabote, et al., 2014); challenges facing the use of energy in the tourism and hospitality industry in Zimbabwe and policies that can promote the sustainable use of renewable energy and tourism development (Marunda et al., 2013), as well as the effect of business soft skills on service delivery in the hospitality industry in Harare, Zimbabwe (Wushe et al., 2014).

In light of the above lacuna, the researchers are convinced that there is a dearth of studies that have investigated the relationship between innovation antecedents (firm's learning philosophy, strategic direction, and transfunctional acclimation) and service innovation in the context of developing countries in Africa. This justifies the need for the current empirical study. Furthermore, it is also essential to mention that there is limited literature that focuses on innovation antecedents, and the relationship between innovation antecedents (firm's learning philosophy, strategic direction, & transfunctional acclimation) as the predictor variables of service innovation. Therefore, on the basis of the research gaps mentioned, this study examines the relationship between innovation antecedents (firm's learning philosophy, strategic direction, and transfunctional acclimation) and service innovation in the hospitality sector in Zimbabwe.

Theoretical Rationale

The literature that underpins the current study is based upon learning philosophy, strategic direction, trans-functional acclimation as well as service innovation; the following discussion focuses on the literature.

Learning philosophy: Requisite to an innovation-oriented firm is a learning philosophy which is defined as a pervasive set of organisation-wide understanding about learning, thinking, and acquiring, transferring, and using knowledge in the firm to innovate (Siguaw et al., 2006). Kearney (2015) argues that a learning philosophy is akin to a learning climate where the values and information processing in the organisational context dictate the causal mechanism through which people understand the nature of innovation. Moreover, a learning philosophy implies that innovation orientation is directed towards application of the learning processes at the functional management and staff level (Orfila-Sintes, 2009).

Strategic direction: According to Siguaw, Simpson and Enz (2006), the strategic component of an innovation orientation "reflects the strategic directions implemented by a firm to create the proper behaviors for the continuous superior performance of the business". Strategic direction assumes the firm takes a future-oriented perspective, driven by management, and may be seen to be captured in the 'beliefs and understandings' that define the firm and how it approaches competitive challenges with regard to innovation (Kearneyk, 2015). Strategic direction involves clarity of thought and purpose and is generally articulated through vision and mission statements and objectives (Siguaw, Simpson & Enz, 2006). In addition, effective strategic direction involves clear management of the firm's culture through the capability to change norms and values (Kearney, 2015). Moreover, Keene and Singh (2015) point out that strategic direction is the stated long-term beliefs, understandings and activities of the organisation.

Trans-functional acclimation: Trans-functional acclimation refers to the beliefs about working across functional units, commonly referred to as silos (Keene & Singh, 2015). Trans-functional acclimation is giving and delivering knowledge across the business sub-divisions so as to return diversity of points and also affecting beliefs and understanding that direct thems towards innovation (Zhou et al., 2005). Moreover, as a variable, trans-functional acclimation assists the functional line management and employees of the hotel to gain knowledge in service delivery and its strategies that will enhance service innovation (Siguaw et al., 2006).

Service innovation: According to Ryu and Lee (2012), service innovation can be related to changes in various characteristics of the service product itself. In addition, Vos (2010) is of the view that a service innovation is a new service or such a renewal of an existing service which is put into practice and which provides benefit to the organisation that has developed it; the benefit usually derives from the added value that the renewal provides to the customers. Furthermore, Kjos (2013) points out that service innovation is a multi-stage process whereby organisations transform ideas into new or improved services, in order to advance, compete and differentiate themselves successfully in their marketplace. Moreover, Randhawa and Scerri (2015) conceptualise service innovation as an "elevated service offering" that is made up of "new client interface/customer encounter; new service delivery system; new organizational architecture or marketing proposition; and/or improvements in productivity and performance through human resource management", further highlighting its multidimensional aspects.

Conceptual model and hypothesis development

The foregoing discussion of the literature culminated in the formulation of the conceptual framework illustrated in Figure 1.

Learning philosophy and strategic direction

It is vital to elucidate the nexus between learning philosophy and strategic direction. According to Wood and Brotherton (2008), a culture that supports innovation encourages employees and managers to challenge old ideas by instilling a commitment to continuous learning and strategic change. The work of Marsick and Watkins (2003) also concur that creating a culture that is conducive to learning is imperative to achieve a rewarding working place that encourages the development of employees' capacity to learn. Beyene, et al., (2016) are of the view that the learning effort of an organisation should be directed by a predefined strategic objective that can lead to shared interpretation of the information. Based on the foregoing discourse, it is logical for one to presuppose that a positive linkage exist between learning philosophy and strategic direction in the context under consideration in this study. As such, the following hypothesis is proposed:

H_1: Learning philosophy has a positive relationship with strategic direction

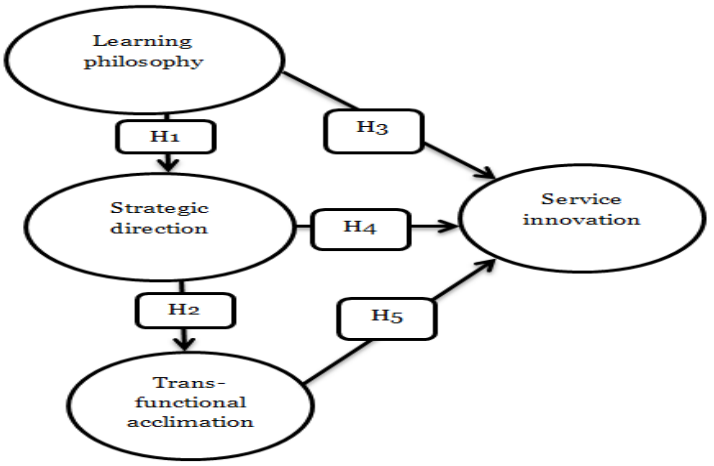

Figure 1. Conceptual model

Strategic direction and trans-functional acclimation

The strategic component of an innovation oriented firm reflects the strategic directions implemented by a firm to create the proper behaviours for a continuous superior performance of the business (Gatignon & Xuereb, 1997). In essence, this component is the way of thinking and leading that drives the firm over the long run, keeping it innovative (Barba-Sánchez et al., 2007). On the other hand, trans-functional acclimation is generally seen as a set of common understandings and beliefs, pervading the innovation orientated firm that creates a unifying comradeship, enthusi-asm, and devotion among employees (Worren et al., 2002). According to Ndhlovu (2016), a strategic measure for improving the operations of small to medium size hotels is trans-functional acclimation. In a nutshell, from the authors' elucidations, it can be noted that when there is strategic direction within an organisation, such as an hotel, it promotes mutual understanding as well as beliefs among hotel employees and this is a true reflection of trans-functional acclimation. This study proposes that:

H_2: Strategic direction has a positive relationship with trans-functional acclimation

Learning philosophy and service innovation

To establish the learning philosophy in the hotel sector, the definition of "learning philosophy" as given by Siguaw, Simpson and Enz (2006) is adopted. The critical question that then arises is whether the learning philosophy variable influences service innovation in the hotel sector. The promotion of the development and adoption of an innovative environment is recognised as a major push factor for creativity (Amabile, 1996). In the context of the hospitality/hotel services sector, an environment that promotes innovation creates an ideal learning environment and helps in building the relationships between the employee, organisation and the delivery of service performance in order to satisfy the customer. This is supported by the theory of reasoned action (TORA) which states that it is likely that the hotel will have improved services which lead to repeat purchases and in the long run, the relationships are built between the customer and the hotel as an entity. The learning philosophy, in

conjunction with service innovation, helps in creating and redesigning services and the learning environment that satisfy the customers in the consumption of services and promotes relationship marketing. Based on the foregoing discussion, it appears that there is a positive association between learning philosophy and service innovation. This being the case, the following hypothesis is put forward:

H_3: Learning philosophy has a positive relationship with service innovation

Strategic direction and service innovation

It is of significance to assess the relationship that exists between strategic direction and service innovation. In order for the hotel to achieve service innovation, there is a need for their innovation orientation to be in alignment with the planning, designing, recreating and responding to all these factors during their service processes (Zhou et al., 2005). If the above mentioned factors in strategic direction can be considered in the hotel, a measurement in attaining the service innovation and the output performance will be improved (Agwaral & Selen, 2009). Innovation occurs when appropriate strategies are implemented. When management and employees are receptive to innovation, it is easier to create and implement new ideas and business designs that result in service innovation. In a hotel set up, such an approach gives the service offering competitive advantage as it relates to a good hotel image. Hence, following this line of discussion, it is hypothesised that:

H_4: Strategic direction has a positive relationship with service innovation

Trans-functional acclimation and service innovation

Moreover, it is also imperative to elucidate on the relationship that exists between trans-functional acclimation and service innovation. Trans-functional acclimation facilitates and encourages the sharing of knowledge across departments in order to tap into a multiplicity of views and beliefs among all the functional areas in order to direct them towards innovation (Zhou et al., 2005). This variable, trans-functional acclimation assists the functional line management and employees of the hotel to gain knowledge in service delivery and its strategies that will enhance service innovation (Siguaw et al., 2006). The hotels with large service offering capacity are more likely to innovate and develop new capabilities to facilitate improved business performances (Berthon et al., 1996). Therefore, this paper postulates that there is a positive link between trans-functional acclimation and service innovation. Following from this, it may be hypothesised that:

H_5: Trans-functional acclimation has a positive relationship with service innovation

METHODOLOGY

The data for this research was obtained from city centre and resort-based hotels in Zimbabwe. The research sampling frame was the Rainbow tourism group of hotels, the African Sun group of hotels, as well as affiliate lodges ranging from 3*** to 5***** graded hotels. The list of hotels was obtained from the Zimbabwe Tourism Authority (ZTA) in Zimbabwe. Due to the nature of this research, the targeted research participants were the hotel managers. In particular, officials who occupied top managerial positions, hotel employees and Ministry of Tourism and hospitality industry employees were approached. This was done to ensure the competence of the respondents in evaluating the hotels' service innovation, financial performance, customer retention and hotel reputation. A self-administered structured questionnaire was used as the research instrument and out

the total of 170 questionnaires distributed, 151 usable questionnaires were retrieved for the final data analysis, representing a response rate of 88.9 %.

Sample description

Descriptive statistics in Table: 1 show the gender, position and department of respondents who participated in the study. As indicated in Table 1, this study shows that fewer females participated in the study and constitute 36% (n=55) of the total target population. Male consumers who participated in the study were 64% (n=96) of the total population. In terms of the positions, most of the respondents (30%; n=45) indicated that there are front line staff member and the least of the respondents (17%; n=26) indicated that they are General Managers. Moreover, in terms of the departments in which the respondents are working, the majority which are 40% (n=60) of the respondents indicated that they work within the food and beverage department, the least respondents were 2% (n=3) from the personnel department respectively.

Table 1. Sample demographic characteristics

Gender	**Frequency**	**Percentage**
Male	96	64%
Female	55	36%
Total	**151**	**100%**
Position	**Frequency**	**Percentage**
Front Line Staff	41	27%
Supervisor	45	30%
Unit Director	39	26%
General Manager	26	17%
Total	**151**	**100%**
Department	**Frequency**	**Percentage**
Food and Beverage	60	40%
Housekeeping	20	13%
Personnel	3	2%
IT	9	6%
Restaurant Services	43	30%
Marketing	5	3%
Support Services	11	7%
Total	**151**	**100%**

Scale accuracy analysis

Reliability and validity of the measurement instruments proved to be good so the study proceeded to test the proposed hypotheses. In total, there were five hypotheses tested. The same results of the path coefficients are tabulated in Table 2 depicting the Item to Total correlations, Average variance extracted (AVE), Composite Reliability (CR) and Factor Loadings. As clarified above, T3 was deleted due to the fact that the factor loadings were below 0.5 which is the recommended threshold, according to Anderson and Gerbin (1988). Table 2 presents the research constructs, Cronbach alpha test, Composite reliability (CR), Average variance extracted (AVE) and item loadings. The lowest item to total loading is TA1 with 0.514 and the highest is LP4 with 0.787. On Factor loadings, the lowest is SI1 with 0.538 and the highest is 0.898 which is TA1. This shows that the measurement instruments are valid. The lowest Cronbach alpha is 0.717 and the highest is 0.918 which shows that the constructs are very reliable and explain more that 50% of the variance.

Inter-Construct Correlation Matrix

Nunnally and Bernstein (1994) prove that one of the methods used to check on the discriminant validity of the research constructs was the evaluation of whether the correlations among latent constructs were less than 0.60. A correlation value of less than 0.60 is recommended in the empirical literature to confirm the existence of discriminant validity (Nunnally & Bernstein, 1994). As can be seen, all the correlations are below the standard level of 0.60 which indicates the existence of discriminant validity.

Table 2. Measurement Accuracy Assessment and Descriptive Statistics

Research constructs		Descriptive statistics*		Cronbach's test		C.R.	AVE	Measurement Item Loadings
		Mean	SD	Item-total	α Value			
Learning Philosophy (LP)	LP1	0.412	1.117	0.630	0.763	0.834	0.458	0.572
	LP2			0.666				0.687
	LP3			0.715				0.586
	LP4			0.787				0.713
	LP5			0.652				0.749
	LP6			0.707				0.735
Strategic Direction (SD)	SD1	0.404	1.179	0.619	0.918	0.930	0.529	0.556
	SD2			0.761				0.627
	SD3			0.715				0.807
	SD4			0.569				0.814
	SD5			0.531				0.804
Transfunctional Acclimation (TA)	TA1	0.419	1.490	0.514	0.778	0.848	0.532	0.898
	TA2			0.554				0.602
Service Innovation (SI)	SI1	0.396	1.137	0.561	0.717	0.730	0.584	0.538
	SI2			0.588				0.690
	SI3			0.588				0.699
	SI4			0.632				0.734
	SI5			0.641				0.749
	SI6			0.639				0.724
	SI7			0.622				0.695
	SI8			0.552				0.785
	SI9			0.559				0.820
	SI10			0.602				0.723
	SI11			0.600				0.777
	SI12			0.634				0.757

Table 3. Inter-Construct Correlation Matrix

Variables	LP	SD	TA	SI
LP	**1.000**			
SD	0.427	**1.000**		
TA	0.420	0.430	**1.000**	
SI	0.376	0.588	0.564	**1.000**

Learning Philosophy = (LP);
Strategic Direction = (SD);
Trans-functional Acclimation = (TA);
Service Innovation = (SI)

Global goodness-of-fit

Smart PLS is a general technique for estimating paths involving latent constructs indirectly observed by multiple indicators (Bontis, 1998). However, Smart PLS software

does not provide goodness-of-fit measures for the full path model as LISREL and AMOS do, but it provides only R^2 values for the dependent variables. Conversely, a method to calculate a global goodness-of-fit (GoF) measure was proposed by Amato, Vinzi and Tenenhaus (2004), and this method takes into account both the quality of the measurement model and the structural model (Chinomona 2013; Streukens, 2008). The global goodness-of-fit (GoF) statistic was calculated using the following equation, as suggested by Tenenhaus, Vinzi, Chatelin and Lauro (2005):

$$GoF = \sqrt{AVE} * R^2$$

where AVE represents the average of all AVE values for the research variables while R^2 represents the average of all R^2 values in the full path model. The calculated global goodness of fit (GoF) is 0.61, which exceeds the recommended threshold of GoF > 0.36 suggested by Wetzels, Odekerken-Schröder and Van Oppen (2009) as well as Chinomona (2013). Thus, the study confirms the existence of the data's goodness-of-fit to the research model.

Path Model Results and Factor Loadings

Figure 2 shows the path modelling results, as well as the item loadings for the research constructs.

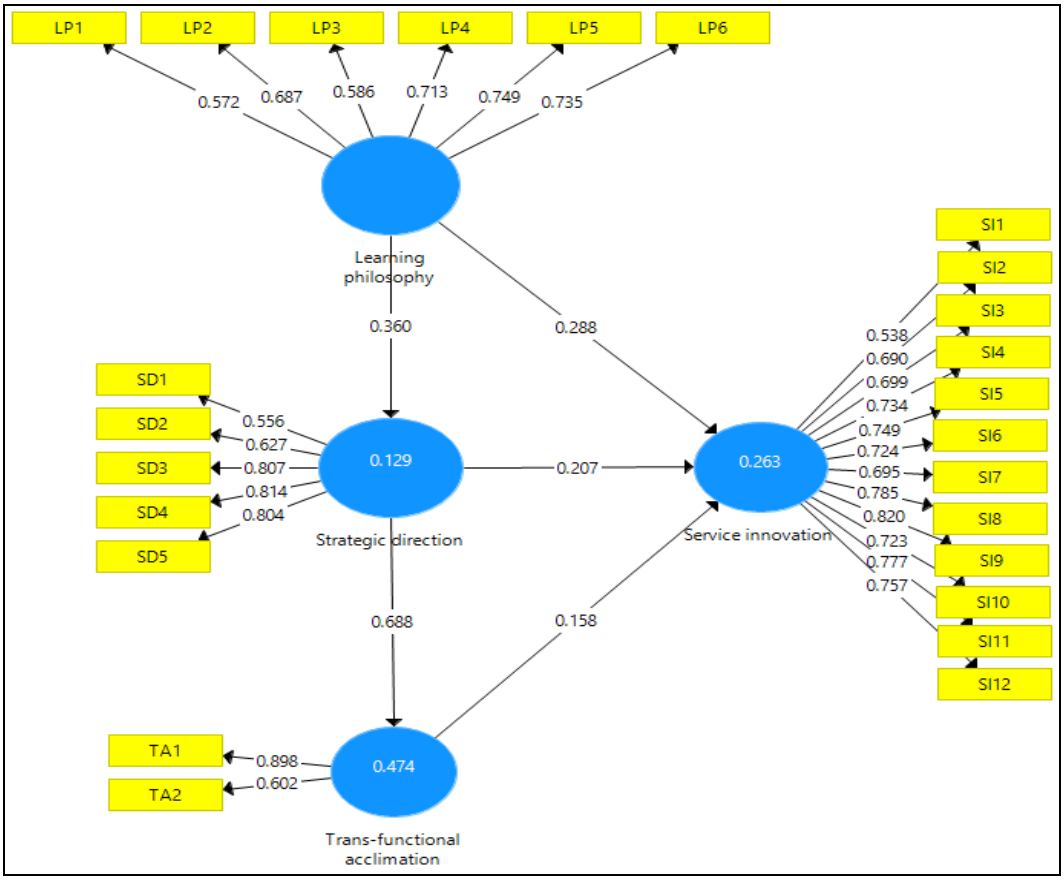

Figure 2. Path Modeling and Factor Loading Results

Research Findings and Discussions

Hypothesis one (H_1): Learning Philosophy (LP) → Strategic Direction (SD)

Figure 2 and Table 4 also indicate that H_1, Learning Philosophy (LP) to Strategic Direction (SD) is supported by the hypothesis finding (0.360) and is significant at t-statistics 4.645. Again, the strength of the association is indicated by a path coefficient of 0.360. This implies that learning philosophy (LP) is positively related to strategic direction (SD) in a significant way. Thus, higher levels of learning of staff in a hotel will lead to higher levels of strategic direction.

Hypothesis two (H_2): Strategic Direction (SD) → Trans-functional acclimation

It can be observed in Figure 2 and Table 4 that H_2 Strategic Direction (SD) to Trans-functional Acclimation is supported by the hypothesis result (path coefficient) of 0.668 and is significant at t-statistics 3.543. The strength of the relationship is indicated by a path coefficient of 15.299. This implies that strategic direction has a strong and significant impact on trans-functional acclimation.

Therefore, when a hotel has a well-grounded strategic direction, the higher the level of transfunctional acclimation will be.

Table 4. Results: structural equation model analysis

Path	Hypothesis	Path coefficients (β)	T- Statistics	Decision on Hypotheses
Learning Philosophy (LP) → Strategic Direction (SD)	H1	0.360[a]	4.645	Supported
Strategic Direction (SD) → Transfunctional acclimation (TA)	H2	0.688[a]	15.299	Supported
Learning Philosophy (LP) → Service innovation (SI)	H3	0.288[a]	3.503	Supported
Strategic Direction (SD)→ Service innovation (SI)	H4	0.207[a]	2.586	Supported
Trans-functional acclimation (TA)→ Service innovation (SI)	H5	0.150[a]	1.637	Not Supported

Hypothesis three (H_3): Learning Philosophy (LP) → Service innovation (SI)

It can be observed in Figure 2 and Table 4 that H_3 Learning philosophy (LP) to Service innovation (SI) is supported by the hypothesis result (path coefficient) of 0.288 and is significant at t-statistics 3.543. The strength of the relationship is indicated by a path coefficient of 0.288. This implies that learning philosophy directly influences service innovation in a positive significant way. The more a hotel is engaged in learning, the higher the level of service.

Hypothesis four (H_4): Strategic Direction (SD)→ Service innovation (SI)

It is depicted in Figure 2 and Table 4 that H_4, Strategic Direction (SD) to Service innovation (SI) is supported significantly. The t-statistics is 2.586. The strength of the relationship is indicated by the path coefficient of 0.207. This finding suggests that strategic direction has a direct relationship with innovation, so when a hotel has a strategic direction, the more it is capable of engaging in service innovation.

Hypothesis five (H_5): Trans-functional acclimation (TA)→ Service innovation (SI)

Figure 2 and Table 4 also indicate that H_5, Trans-functional acclimation (TA) to Service innovation (SI) is not supported, as indicated by the hypothesis finding (0.150)

and is insignificant at t-statistics 1.637. This implies that trans-functional acclimation is not positively related to service innovation. An investigation of the research findings indicated that strategic direction and trans-functional acclimation has the strongest influence on each other, as indicated by a path coefficient of (0.688) when compared to other research constructs, therefore, for academicians in the field of innovation, this finding enhances their understanding of the relationship as this is a useful contribution to existing literature on these two variables.On the practitioners' side, this study also submits that hotel managers can benefit from the implications of these findings. For instance, given the robust relationship between learning philosophy and service innovation (0.288), hotel managers in Zimbabwe ought to establish a learning philosophy in order to be well engaged in service innovation. Precisely, employees can learn or they can be taught on how to renew an existing service which is a resemblance of service innovation.

CONCLUSION

The study substantiates that innovations have a positive relationship with service innovation except that of trans-functional acclimation. Learning Philosophy was found to have a high positive influence towards service innovation. Practically, this study makes an important contribution to the service industry, specifically the tourism and hospitality sector. Theoretically, this study contributes to the existing body of knowledge in the service innovation literature in hotels. The findings would have been more enlightening if data from all hotels in Zimbabwe were gathered as well as compared. Subsequent research should contemplate replicating this study in other developing countries for result comparisons. Furthermore, more valuable and insightful findings could have been found by conducting a longitudinal study of the influence of service innovation and its outcome in all hospitality/hotel sectors.

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LANDSCAPE ECOLOGICAL ANALYSIS OF THE MODERN DELTA OF THE URAL (ZHAYIK) RIVER

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Abstract: Varied tourist values of places increase the possibility of practicing various forms of tourism. This study presents a landscape and ecological analysis of the Ural delta, taking into account its potential for tourism development. The delta of the described river is an important natural value due to its tourist values. It can be classified in the geosites category as a valuable asset affecting the tourist potential of the region. This scientific article discusses the methodology of landscape-ecological analysis of the delta areas in consideration of anthropogenic transformation of natural environmental components. We identified the main factors of anthropogenic transformation of the soil and vegetative cover. By employing geographic information technologies (software support and satellite data), up-to-date soil and vegetation maps of the Ural delta were created. With the help of estimated geo-ecological figures, we produced a map displaying anthropogenic disturbance of landscapes. The obtained results can be applied in territorial planning and ecological-geographical studies for construction of large economic objects.

Keywords: river delta, landscape, landscape analysis, man-induced impact

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INTRODUCTION

Currently, landscape–ecological analysis is considered one of the most important methods in the study of the natural capacity of a territory, which takes into account structural and functional dynamic features of natural complexes of different taxonomic ranks. The method ultimately aims to study the current ecological situation of any region, which determines the contemporary state of landscape complexes and depends on the proportionality of the projected social functions and natural properties of landscape complexes and their stability (Kochurov, 2003). Varied tourist values of places increase the possibility of practicing various forms of tourism (Gozner & Avram, 2010; Ilieş & Wendt, 2015; Ilieş et al., 2009; Tatar et al., 2017). The work presents a landscape and ecological analysis of the Ural delta, taking into account its potential for tourism development. The delta of the described river is an important natural value due to its tourist values. It can be classified in the geosites category as a valuable asset affecting the tourist potential of the region (Gozner, 2010; Ilieş & Josan, 2009; Wendt, 2011; Berdenov et al., 2016). Landscape-ecological analysis of a territory focuses on the study of links between components of the natural environment, population, and economy through explicit assessment (i.e. through application of a set of analytical and synthetic quantified indicators that directly or indirectly characterize the degree of landscape sustainability (Mikhno et al., 2014).

THE RESEARCH TERRITORY

In 1935, the Ural delta included 7-10 main river branches including Bolshoy Yaitskiy, Maliy Yaitskiy, Zolotoy, Zarosliy, Bukharka, and Peretaska.

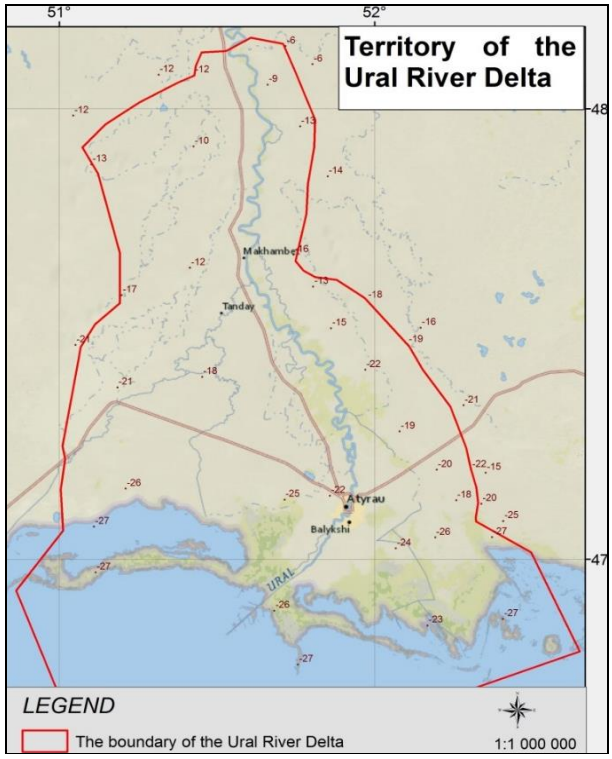

Figure 1. Map of the Ural (Zhayik) River Delta Territory

At that time Zolotoy was the main branch, and the city of Atyrau was located 18 km away from the sea. Due to the lowering of water level by 1977, the left branches of Peretska, Bukharka, Zarosliy and Soltyenok silted up and now form inland dry depressions (Polonskiy & Baydin, 1982). Nowadays, the Ural delta begins in the village of Zelyoniy which stands more than 170 km away from the current river mouth. The width of the river gradually increases from 10-15 km near Zelyoniy up to 60 km at the mouth. As far as the city of Atyrau, the Ural delta constitutes an ordinary river valley. At this point, two outflows, the Marynka and the Baksay, that only get filled with the water from the Ural in wet years, separate from the river. The Zolotoy branch forms a river part of the Ural-Caspian channel which, within a further 16 km of the estuarial coast, goes into a sea section of the channel to a depth of 1.8 meters. This channel connects the Ural mouth with the Ural Borozdina, the deepest area of the eastern part of the Northern Caspian. The Ural Borozdina is an extension of the underwater river bed of the Ural which was made by the river when the sea level was lower. In addition to the downstream, there is a meander floodplain along the river that has a width of 0.5 to 3 km; its height above the water level of the river is gradually decreasing and currently ranges from 6 to 7 meters near the village of Topoli and remains up to 2 meters near the village of Kandaurovka, situated respectively 156 km and 24 km from the city of Atyrau (Figure 1).

The research territory is predominantly located in the southern part of the Caspian basin and includes the present-day Ural River delta and the adjoining shallow part of the sea which lies 27 m below sea level (present background sea level) down to -23 m on land and down to -29 m at sea as seen in Figure 1. The north-west to south-east length of the research area is 85.2 km with an average width of 43 km and a total area of 2,751.6 km².

MATERIALS AND METHODS

Traditional approaches of geographical research were used for collection and analysis of materials. The solution of the main goal of this work – to define the anthropogenic variability of the Delta part of the Ural basin – was based on the implementation of comparative-geographical and landscape-cartographic analyses, scientific expeditions, and other research methods to study the dynamic natural sites.

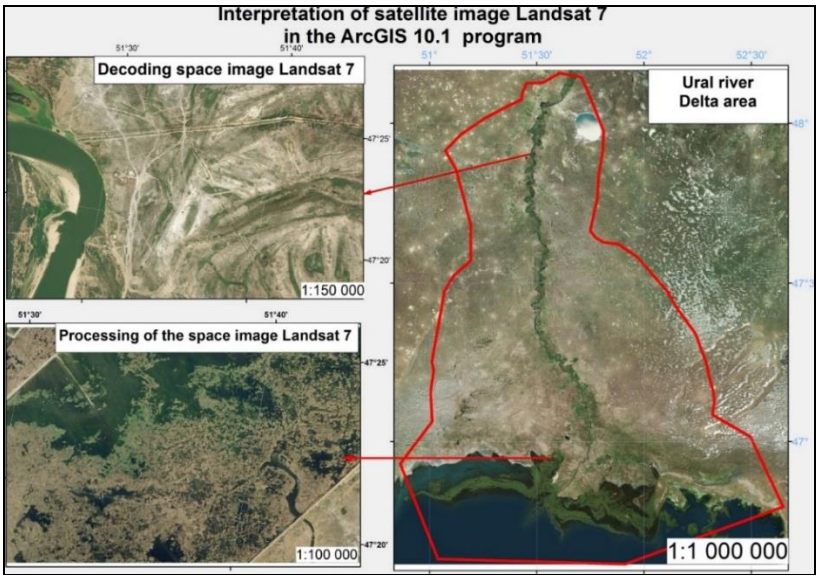

Figure 2. Satellite image interpretation (Landsat7)

Landscape analysis of the territory is a system matrix of geo-ecological assessment of territories. The notion of landscapes makes the most common expression of a systemic approach to nature (Mikhno et al., 2014). A landscape is a hierarchy of natural formations of different temporal and spatial scales, a set of interrelated natural components (lithogenic basis, air masses, natural waters, soils, vegetation, and wildlife) in the form of territorial entities of various hierarchical ranks (Berdenov, 2015).

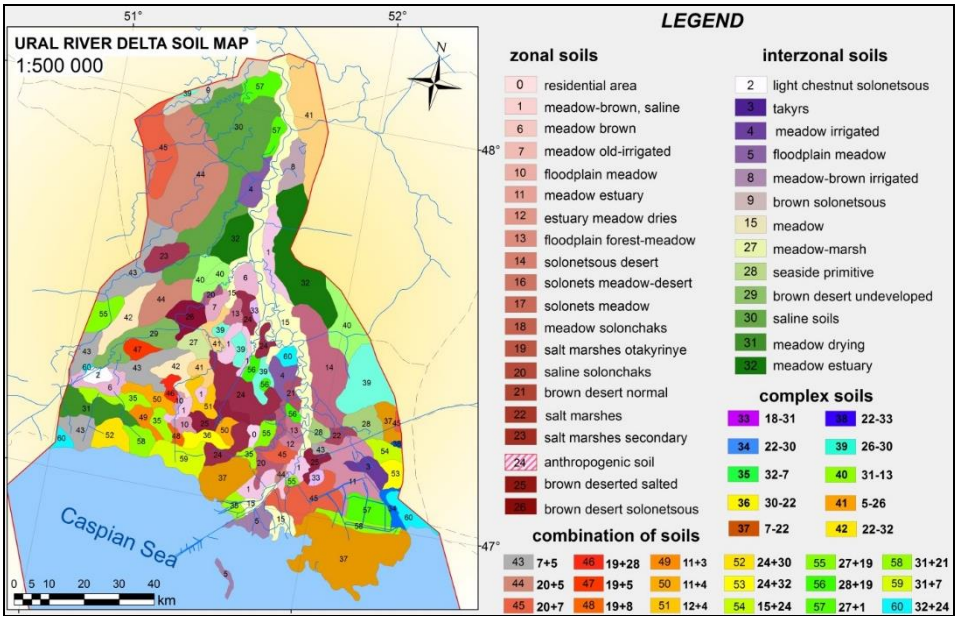

Figure 3. Soil map of the research territory

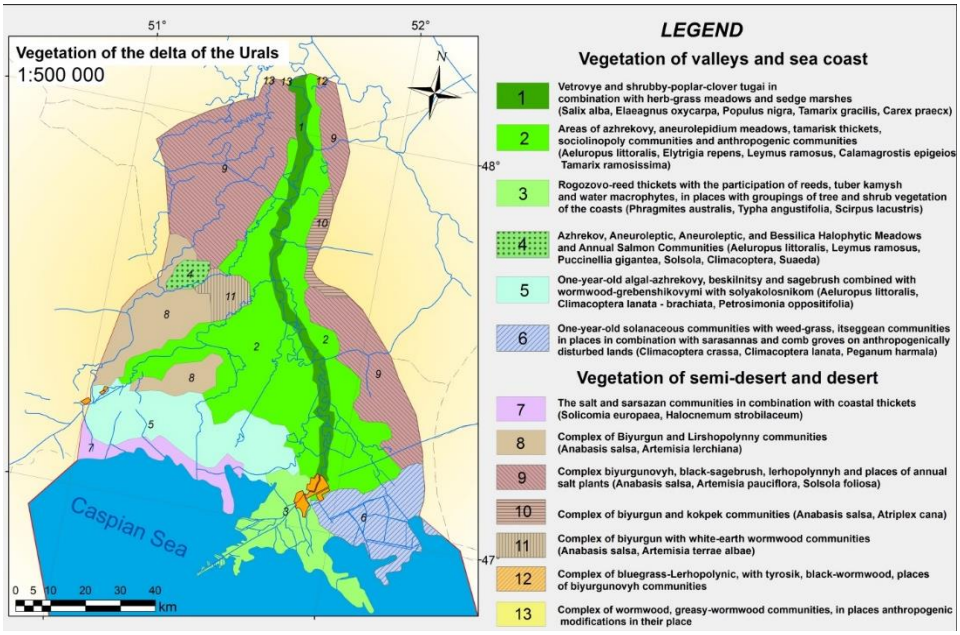

Figure 4. Vegetation map of the Ural River delta

The components of the landscape contain a material-energy and information exchange which is the biogeochemical circulation of elements that characterize a landscape as a whole geosystem. Information interrelations within landscapes can be traced in both space and time, and indicate that certain natural components transfer territorially and temporally ranked diversity to others (Chibilev, 1987).

The studies were conducted in the summers of 2016-2017. Digital topographic maps of 1:100,000 scale, satellite images of Landsat 7 with a resolution of 15-30 m., and published archive data served as the primary source data of the research (Meldebekov & Bayzhanov, 2005). Digital images were employed to update information on the coastline, road network, settlements, agricultural areas, etc. The images were interpreted through taught classification, and the interpretations were supplemented and duly adjusted by expertise (Figure 2). In decoding, we received up-to-date maps of the vegetation and soil cover (Figures 3 and 4). A landscape map of the Ural river delta at a scale of 1:500,000 was prepared based on the principles of hierarchical structure of geosystems through integration of structural and structural-dynamic parameters and by taking into account the economic activity of the areas and by drawing on landscape profiling and standardization of index plots (Figure 5).

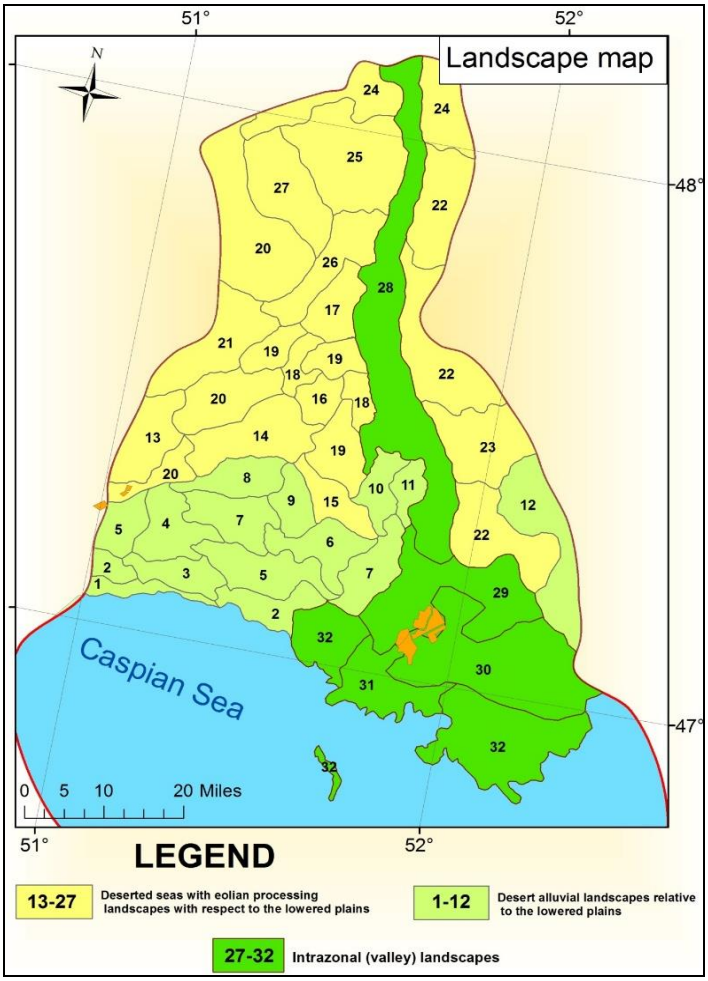

Figure 5. Landscape map of the Ural River delta

Landscape ecological analysis takes into account landscape differentiation of the territory with allocation of ecological-landscape zones and expresses sustainability of the territory to external impacts delivered in certain parts of the landscape (areas, stows, substows, and facies). The result is a territorial frame of nature management with ecologically homogeneous areas (Amirzhanovna et al., 2017).

It seems necessary to use a differentiated approach to assess the landscape ecological state of the delta territories. This, in turn, entails the presence of structuring criteria of the ecological state of landscape complexes of the corresponding taxonomic rank. Specification of a representative set of analytical and synthetic quantitative indicators should be based on structural specifics of morphological complexes (first on terrain types and their variants, and groups of stow kinds) that set the landscape capacity of the relative region.

Landscape-ecological analysis of the research area is based on methodological works in two directions (Methodology Instructions, 2005): impact area and impact level. The final step is an overall assessment of natural territorial complexes by way of summing up the obtained data and mapping the anthropogenic impact on the landscape of the Ural River delta (Yeginbayeva et al., 2016).

To that end, the following factors of landscape ecological assessment were defined: *structural-morphological aspects; adverse ecological and geographical processes; anthropogenic transformation of landscapes; ecological infrastructures of landscapes;* and *environment-oriented factors* (Mikhno et al., 2014).

Structural-morphological assessment of landscapes. Structural-morphological assessment of landscape complexes is a primary and necessary component of landscape ecological studies of any territorial unit, both natural (natural area, province, stow, facie) and social (region, district).

Assessment of anthropogenic transformation of landscapes. This is another mandatory element of landscape ecological analysis of the municipal districts territory. Exceeding a certain level of anthropogenic load leads to disruption of ecological links between natural components and landscape complexes, to decreased ability of self-regeneration, and ultimately to degradation of geosystems.

Assessment of negative ecological and geographical processes. Two groups of natural-anthropogenic processes have particular importance in assessing the ecological state of the residential districts of the Zhayik River delta: contamination of certain landscape components, and development of exodynamic processes.

In order to determine the ecological state of the landscape we conducted quantitative (4-point) rating of factors according to A. G. Isachenko (Isachenko, 1993) to identify the degree of impact on natural territorial complexes and single components of nature; their maximum and minimum values can be interpreted as a criterion of an important ecological factor. Based on this, we distinguish the following categories of anthropogenic load on the landscapes:

- landscapes of minor anthropogenic impact are those where only single components of the natural complex are affected and the disturbance is reversible;
- landscapes of low anthropogenic impact are those where the load is subject to the single landscape components, mainly vegetation, but the ability of regeneration is present and close to the original;
- landscapes of middle anthropogenic impact are those where a large part of the components of the natural complex is subject to load so that the natural complex is substituted by a natural-anthropogenic one;
- landscapes of strong anthropogenic impact are those where the load is applied to all components, i.e. the natural complex is changed by a natural-anthropogenic one.

RESULTS AND DISCUSSION

In order to define climatic conditions of the Atyrau index plot, we used the mean annual data on "RSE KazGydromet" meteorological stations over the past five years. The study area is located in the southern part of the Caspian basin to the below-sea absolute level of -27 m. The geological cross-section of the research area distinguishes basement and platform sedimentary cover.

Crystalline basement rocks within the site are found at depths of 7-8 km. The structure of sedimentary cover distinguishes subsalt, salt, and above-salt complexes. The above - salt complex includes rocks from the upper Permian to the Quaternary inclusive, which are mostly clay and sandy layers with bands of limestone and marlstone.

The terrain of modern alluvial-deltaic plains situated on both banks of the Ural River downstream of Atyrau looks relatively more dissected. The plains surface is complicated by deltaic channels, meander lakes and numerous draws. The width of the plain in the north of the site is 17 km; it gets narrower south-westwards and is 14 km wide here. The delta plains are composed of loams, sandy loams and sands with a capacity of up to 3 m, which are underlaid by sea late-Khvalynskiy clay deposits. The studied area belongs to the Aral-Caspian province of the desert zone, where zonal soil types are brown desert soils (Faizov, 1983). Morphogenetic properties of the soil and structure of the soil cover of the researched territory is explained not only by zonal but also largely by hydrological factors. Processes of soil formation in the deltaic area are closely linked to the fluctuations at modern sea level (Figure 2). Changes in hydrological conditions associated with fluctuating levels of the Caspian Sea have become so dynamic that the signs of soil-forming process cannot gain a foothold in the end-products of soil formation. The fluctuation of the sea level floods the already formed soils under marine sediments. Today the flooded narrow coastal strip undergoes enhanced hydromorphism and desalinization of soils. We made 25 soil profiles as part of the field research (Figure 6).

Figure 6. Soil profile No. 3 (Seaside Solonchak Profile)

We selected soil samples from 15 profiles for chemical analyses (humus, exchangeable bases, exchange capacity, mechanical structure, etc.). The total number of samples for general analyses exceeded 100.

The results of chemical analyses are shown in Table 1.

Table 1. Basic chemical properties of the soil

Profile No.	Depth, cm	Humus, %	Total Nitrogen, %	CO_2, %	Gypsum	Absorbed Bases, mg-equ for 100 g of soil					pH water
						Ca	Mg	K	Na	Total	
1	0-18	2.8	0.15	4.46	-						8.3
	18-33	1.5		3.73	-	14.5	36	0.61	3.87	54.98	8.2
	44-54			2.38	2.09	4	12.5	0.36	0.46	17.32	8.98
	72-82	-		2.42	1.67						8.95
2	0-13		0.1								8.15
	23-33										8.05
	44-54										8.2
	72-82										8.32
5	0-16	1.,3	0.05	15.43	-	3.5	3.5	0.21	1.22	8.43	9.1
	18-28	0.35		9.85		6	4	0.26	2.76	13.02	8.4
	35-45			6.35		8	8	0.75	2.01	18.76	8.56
	62-72	-		3.48	3.21						8.7
6	0-12	0.06	0.03								9.51
	15-25	0.26									8.9
	44-54										8.96
7	0-16	1.28	0.07								9.25
	27-37										8.54
	60-70				13.58						8.64
8	0-6	1.48	0.08								9
	9-19	0.66									9.53
	36-46										8.56
9	0-18	0.1	0.04	5.37		7.5	5.5	0.42	1.77	15.19	8.3
	21-31	0.23		5.44		9.5	11	0.33	0.91	21.74	8.1
	38-48			3.32		3	6.5	0.37	1.08	10.95	8.25
	59-69			3.73	0.23	-	-	-	-	-	8
	98-108			5.83	2	-	-	-	-	-	8.1
10	0-19	0.1	0.04								9.05
	29-39										8.97
	70-80										8.89
	110-120										8.91
12	0-18	0.26	0.04								9.05
	19-29	0.13				5.5	4.5	0.21	0.41	10.62	9.18
	30-40					10.5	7.5	0.23	0.65	18.88	8.85
	60-70										8.37
15	0-20	0.1	0.04								8.87
	30-40	0.03									8.58
	65-75										8.35

There were collected samples for abbreviated water analysis from 5 profiles where groundwater was present. We collected composite samples from 10 plots from surficial horizons for chemical analyses aiming to detect heavy metals. The results of the chemical analysis are shown in Table 2. Data on all profiles and analyses of soil cover was recorded in a geodatabase. As the results of the chemical analyses demonstrate, the content of active forms of copper, zinc, cadmium, lead, and cobalt are within the limits of maximum permissible concentrations (MPC) throughout the territory. As for active nickel, the highest nickel content can be seen in samples collected in the city of Atyrau (1.5 of MPC) and at the spots located 15 km to the south of Atyrau (1.7 to 1.9 of MPC). A similar

situation is with active chrome, the highest concentrations (up to 1.9-2.2 of MPC) of which are recorded at the spot that is close to the airport and in the city of Atyrau (within 2-4 km), particularly in the area where soil is exposed to the highest anthropogenic loads.

Table 2. Content of heavy metals (mg/kg) in soil

Profile No.	Sampling Depth, cm	Zinc	Copper	Lead	Cadmium	Cobalt	Nickel	Chrome
Active Forms								
1	0-10	0.9	0.9	8	0.5	2.4	3.2	6.9
2	0-10	0.8	0.2	4.5	0.2	1.3	2	4.2
3	0-10	0.9	0.7	6.4	0.5	1.6	5.1	10.4
4	0-10	1.3	1	5.7	0.4	1.9	4.1	8.6
5	0-10	0.9	0.8	8.6	0.6	2.2	4.8	9.2
MPC		23	3	no	no	5	4	6
Total Forms								
1	0-10	21.2	8	12	0.9	7.2	25.2	68
2	0-10	20.4	6.4	8.8	0.9	6.8	27.6	80.4
3	0-10	74.8	21.6	14.2	0.9	14.8	67.6	176
4	0-10	28.4	12.4	10.2	0.8	9.2	34	104.8
5	0-10	44.4	12.8	17.2	0.9	11.2	35.2	120.4
MPC		110	23	32			35	

The highest concentrations of total forms of heavy metals also belong to nickel. As for the mobile forms, nickel's content amounts to over 3 MPC in the area near Atyrau. A slight excess of total copper over MPC was detected. The study revealed that the highest crests of the head of the delta are composed of stratified layers of micaceous sands with interlayers of bluish-brown clays and clay loams covered with wormwood, estragon, woodreed and agropyron cristatum. There are many bushes of tamarisk and small willow groves. Disturbance of the researched area's soil cover is a consequence of anthropogenic factors. It comes in the form of areal degradation of soil and vegetation under the influence of a local factor, which is the elaboration of oil fields, quarries, construction of settlements, industrial objects and cattle-breeding farms, and of a linear factor which includes influence of the road network, communication lines, oil pipelines, canals, dams, etc. Frequently, the anthropogenic impact stimulates the natural processes of soil degradation (Mendybayev et al., 2015). Formation and dynamics of vegetation of the research area are subject to factors of direct influence of the sea, the Ural River floods and extreme flower variegation of soils. Therefore, the structure of vegetation and species diversity of natural communities are characterized by instability and weak soil maturity, due to the relative youth of the land and periodic changes of moisture and salinity of soils, especially in hydromorphic soils of washing mode.

The vegetation of the region was studied during the vegetation period of 2017. Communities are represented mainly by meadow vegetation. In the wind-affected zone of marsh solonchaks, there is continuous cover of glasswort with some tamarisk. In the areas of close groundwater, there are shoreweed and alkali grass halophytic meadows with some shrubs and sub-shrubs. With more distance from the sea and lowering of groundwater levels, these plant communities are replaced by wormwood-grass and wormwood-tamarisk-grass, then shrub-saltwart, and – in the Eastern part of the research area – mortuk communities (Figure 3). A significant impact on plant cover transformation is produced by the use of land for grazing. Overgrazing gives rise to pasture degradation, a decrease in projective cover and change of grass stand, which, in

turn, results in the replacement of feeding crops (wormwood grass) by weeds and plants with low feeding value (burweed, peganum, some saltwarts) (Bizhanova & Kurochkina, 1989). Due to adverse climatic conditions, the vegetation of the research area transforms because of weak sustainability to anthropogenic impacts and extremely low compensatory capacity of regeneration and formation of secondary ecosystems, especially in technogenic ecotopes. The studies have shown that areas of severe disturbance are localized (around oil wells and construction objects), i.e. the effect does not cover large areas, hence we should expect more rapid growth of vegetation due to vegetative mobility of the main dominant species of wormwood and perennial saltwort. All the basic dominants such as wormwood and perennial glasswort (barnyard grass, sarsazan, anabasis) are characterized by stable regeneration and can quickly master the disturbed areas. However, newly formed secondary communities will lack a fully floristic composition and thus have an unstable structure (Zhamangara & Lucas, 1999), which is why they will be vulnerable to all kinds of anthropogenic impacts for a long time.

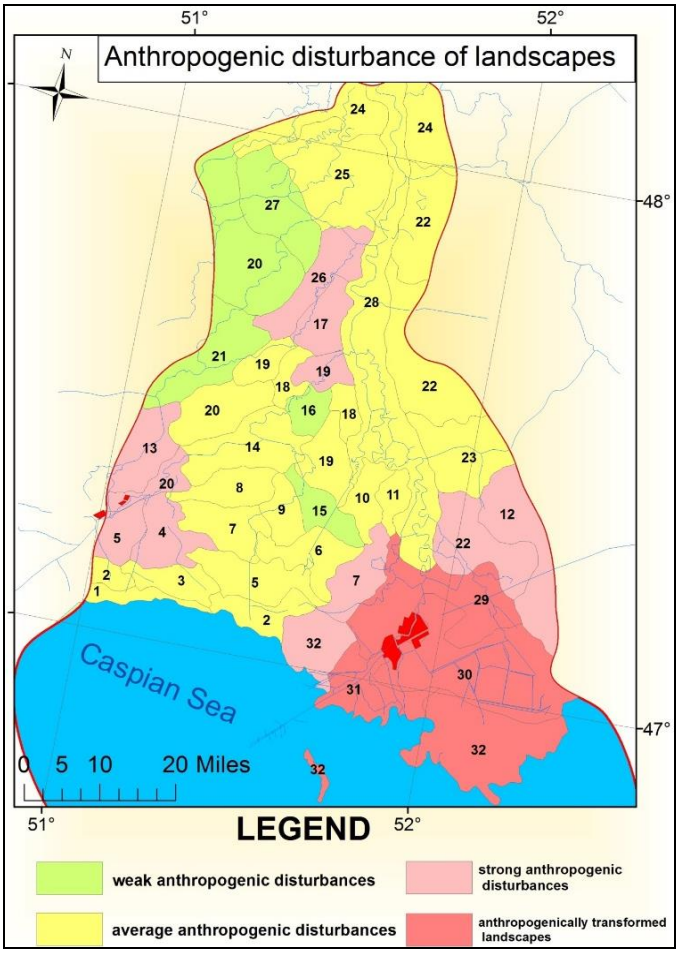

Figure 7. Map of anthropogenic disturbance of landscapes

The most stable and fast recovering communities are the ones of intrazonal meadow-shrub type (Nurmambetov & Akiyanova, 1989) which are formed under

conditions of excessive moisture and have a high biological variety of vegetation and multiple-tiered structure. The main dominant species (reed, shoreweed, saltmarsh grass, clubroot) reproduce easily by seed and vegetative propagation (Figure 7 - Landscape 1, 2, 3). The xerophytic suffruticósa desert vegetation emerging at zonal brown soils is relatively stable (Figure 7 - Landscape 7, 22). The halophytic vegetation of salt marshes is poorly resistant. The communities are usually monodominant and have very few related species, and the conditions of the ecotopes (high salinity) limit the settling of other species. The natural vegetation near residential areas, oil fields and other economic objects is highly transformed, therefore the possibility of compensation is very low. Here, the formation of a secondary weed community similar to the surrounding area can be expected (Figure 7 - Landscape 29, 30, 31, 32). Full restoration of communities with no special phytomelirative measures is impossible as the areas have already lost their ecological and resource capacity. Landscapes of the deltaic zone of the Ural River are mostly characterized by local types of pollution. In light of this, we should consider, above all, local features of the territory when struggling against it. A suitable level of contamination investigation is meso-territorial, corresponding to the level of landscapes.

Geoecological assessment of the territory from an economic perspective is an essential component of landscape ecological studies. When studying the impact of human activities on the environment, performance indicators should reflect nature and intensity of anthropogenic load on the landscape. The main anthropogenic source of the research area is mining and processing of hydrocarbon deposits. Thus, following the results of various archive materials and chemical analyses of soil and vegetation samples obtained by the field methods, the anthropogenically most disturbed landscapes of the Ural River delta were defined according to a 4-point scale (Figure 7).

CONCLUSIONS

It has been established that landscape Figure 7 - Nos. 29, 30, 31 and 32 exist under the most difficult geo-ecological conditions, where all components of natural environment are transformed and a completely modified natural-technogenic complex is formed as they bear the main sources of technogenesis (factories, plants, etc.). This territory represents 20% of the total research area. Figure 7 - Landscape No. 30 is subject to strong anthropogenic load because it is situated in close proximity to anthropogenic sources.

Figure 7 - Landscape nos. 4, 5, 7, 12, 13, 17, 19, 20, 22, 26, and 32 exist in conditions of strong anthropogenic disturbance of natural components and are mainly concentrated in urban areas. Landscapes with a medium degree of disturbance of natural systems occupy the largest part of the research territory and equal 50% of the area. They are concentrated in the area of degradation of agricultural land. The landscapes least exposed to anthropogenic transformation are those under Figure 7 - nos. 20, 21, 27 that are located in the eastern part of the Ural River delta as they are only partly used for grazing.

Following the results of the landscape ecological analysis in the context of migration and accumulation of elements in deposit environments, we conclude that the territory of the delta is primarily prone to the anthropogenic impact of the oil and petrochemical industry. The mining areas are characterized by complex ecogeochemical variety that includes supertoxic and toxic elements of the 1st and 2nd hazard classes.

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BUSINESS TOURISM IN CHINA. THE CASE OF GUANGZHOU

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Abstract: This paper aims at studying the business tourism that affects this economically emerging country, with special regard to the business tourism in Guangzhou (better known as Canton), its influence on urban economy and its relations with other types of tourism. A qualitative-quantitative approach has been used: the qualitative part has been based upon the existing literature and the direct observation of the analysed area, during a field mission of about one month; the quantitative part has been based on related figures. Business tourism represents the primary motivation of inbound tourism in Guangzhou, which is a hot destination for investments, offering considerable business opportunities. Guangzhou is also the Chinese city that hosts the highest number of trade fairs, the most important of which is the "China Import and Export Fair", the biggest Chinese commercial fair. Figures about inbound business tourism flow are not available. Nevertheless, we can assume that business tourism represents the core business of the tourism sector in the city and estimate that the related incoming flow is not less than one million visitors per year.

Key words: China, Guangzhou, business tourism, trade fairs, development.

* * * * * *

INTRODUCTION TO BUSINESS TOURISM

Business tourism, considered as one of the most ancient form of tourism (crf. Davidson & Cope, 2002), has gained increasing importance worldwide in the last decades: more and more travels are made for professional purposes and to create and strengthen economic relationships. According to UNWTO figures, in 2012 business travels accounted for approximately 14% of all international travels (cfr. Virgil & Popsa, 2014). Furthermore, as we can see in Figure 1, forecasts for next years are positive. According to Innocenti (2007), we can talk about business tourism when the travel is

* Corresponding author

made to carry out a professional activity able to generate an income that is higher than the related expenditures (food, accommodation, transportation etc.). Unlike the leisure segment, in the case of business tourism the tourist services are aimed at companies, bodies, institutions and organizations, in the context of a "B2B" (business-to-business) relationship (Capocchi, 2006). Hence the birth and diffusion of the travel manager, a new corporate executive in charge of selecting travel agencies and tour operators, planning trade agreements with the main suppliers, monitoring the fares applied by carriers, with the goal of reducing the costs for the company without penalizing, but rather improving, the standards of the required services. In parallel, on the supply side, many tour operators are specialising in the business segment or are creating corporate departments specifically addressed to business customers, like the "Business Travel Agencies", aimed at creating tourist packages for companies.

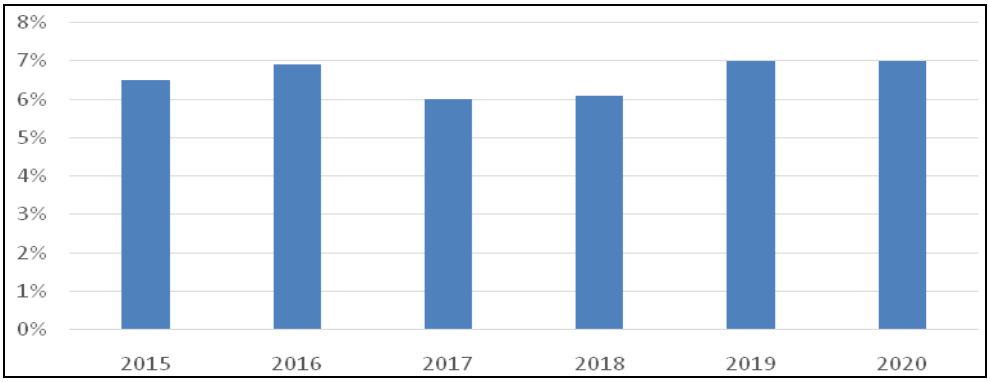

Figure 1. Global business travel spending growth forecast from 2015 to 2020 (Source: www.statista.com)

In general, even if leisure and business segments can use the same means of transport and the same accommodation facilities, there are relevant differences, such as, for example, the clear prevalence of air travels and high level hotels for business travelers. Consequently, the cost of transportation and the average daily spending of a business traveler can be considerably higher than those of a leisure tourist. It also seems that the business segment is more conjunctural, that is more sensitive to the economic trends, if compared to leisure tourism: the financial crisis that occurred in recent years had a negative impact on the tourism sector as a whole, but above all on business travels. It is evident that if the turnovers of the companies decrease, costs for travels and transfers will be the first to be cut. The so-called MICE sub-category (meeting, incentive, conference, event) concerns trips made to attend meetings, congresses, conferences and fairs or for incentive purposes (such as the so called "educational tours"). In fact, there is no professional or industrial association, trade union organization, political party or interest group of any kind that does not organize, even several times during the year, meetings to address specific or general topics.

On the supply side, an increasing number of local authorities have created Convention Bureaus, that are institutional bodies able to act as an interface between the demand (professional and industrial associations, scientific institutions, political parties, trade unions, etc.) and the supply (hotels, airlines, catering companies, interpreting and translation agencies, etc). The Convention Bureaus, moreover, have the task to promote the image of the destination as a favorable MICE location. By the way, adequate facilities are not enough to guarantee the success of the destination, as the customers, which can be particularly demanding, require a whole series of ancillary or complementary services able

to make the stay as pleasant as possible. Together with business "environment", accessibility, transportation facilities and accommodation capacity and quality, the possibility to enjoy traditional or innovative cultural resources, wellness centres, casinos, shopping areas, sport facilities, etc., in order to match the job with the leisure, is becoming a key element in the choice of the location (Gozner & Zarrilli, 2012; Gozner, 2015). As it has been noticed, "we note that the factors that influence the choice of the organizers of a location for carrying out certain business events have in view mainly the places with good air links, with a high standard of facilities, which protect the environment and with an attractive image for the business tourist, a tourist with high expectations" (Mureşan et al., p. 1105). In the following chapters, business tourism in China, with special reference to the city of Guangzhou, will be analysed. Actually, in our opinion the city of Guangzhou, thanks to geographical, historical and cultural reasons, possesses all the features necessary to attract investments from the outside, to compete effectively in the business tourism sector and to stand out as one of the most important locations in Southeast Asia for major trade fairs.

METHODOLOGY AND MATERIALS

To carry on the research, a qualitative-quantitative approach has been used. The research method was firstly supported by the existent literature on the topic (Mok,1985; Martins et al., 2017; Huang & Chen, 2015; economy and tourism forums and blogs; China National Tourism Administration; Eurostat; UNWTO). Figures on Guangzhou Fair have been mainly supplied by ICE [1] bureau in Guangzhou. The qualitative part of the research has been realized thanks to a field mission of about a month (from 28.12.2016 to 23.01.2017), aimed at collecting useful documents and figures and having a direct observation of the analysed area, through which it has been possible to get a better understanding of the socio-cultural and economic context of the city of Guangzhou. Locals, functionaries (accommodation facilities, hotels, restaurants, airport, railway station) and public bodies (Guangzhou Immigration Office, Italian Chamber of Commerce in China, Chinese Tourism National Office in Rome) have been questioned, but few answers have been obtained, because of a kind of reticence due to cultural and political reasons.

CHINESE INCOMING TOURISM

The Chinese model, that the West has tried to domesticate without results, with its about 1,4 billion people and a yearly growing GDP at an average rate of 6,5%, is characterized by a political authoritarianism combined with the liberalization of the economy. Nevertheless, from 1978 to present, policies of economic reforms and of worldwide trade opening have represented one of the most decisive phenomenon of the recent history of China. During this period People's Republic of China underwent deep transformations: both urban and rural societies, ways of living, ways of thinking and behaviors have changed. Economic, financial and business strategies have changed too (Dall'Ara & Dionisio, 2012). China has opened itself to the rest of the world, and the rest of the world, firstly the West, has looked and continues to look at China in a new way.

Now China is the fourth country in the world as a tourist destination with almost 60 million of international arrivals for leisure or business tourism (UNWTO, 2017), behind France, United States and Spain. The bigger share of tourism is the domestic one that, thanks to a yearly increase of 10%, contributes to the growth of Chinese GDP in the amount of 4%. Nevertheless, the foreign tourism segment shouldn't be underestimated in terms of contribution to the overall growth of Chinese economy, and in particular the flows from Asia and Europe, which represent the main part of inbound tourism.

[1] The Italian Trade & Investment Agency, an agency of Italian Ministry of Economic Development, for the promotion overseas and the globalization of the Italian companies.

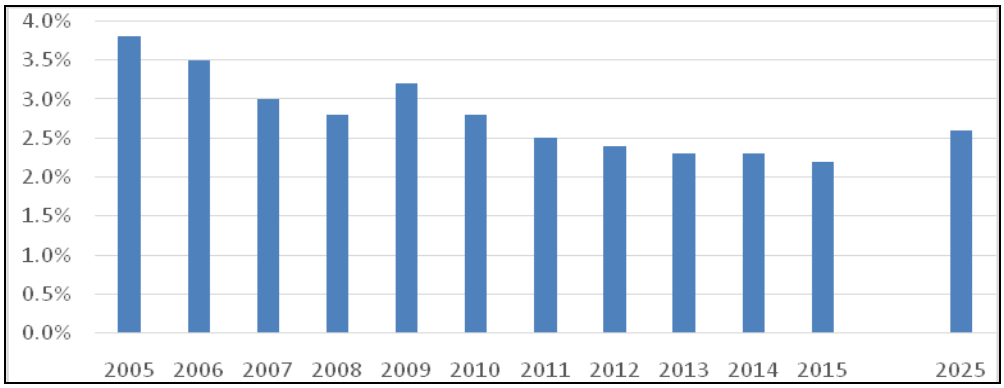

Figure 2. Money spent by foreign tourists as % of total exports per year (Source: www.wttc.org)

Figure 2 compares the share of money spent by foreign tourists on total exports, which has decreased over time but shows a positive prevision for the near future. Table 1 displays the top 17 countries of origin of inbound tourism in China in 2017.

A pattern of geographical proximity can be observed, with Myanmar, Vietnam, South Korea, Japan and Russia ranking in the first positions. Tourism is becoming increasingly important for China both as a source of revenue and as means to enhance its international image. It is important the way countries leverage their international image to persuade other countries to support their interests. Therefore, it is crucial to assess the global appeal of China and how the Chinese government seeks to cultivate its soft power. Table 1, therefore, gives us come indication about the attractiveness of China as a tourist destination and how Chinese government utilizes tourism as a political tool to foster Chinese interests.

Table 1. Top origin countries of inbound tourism in China in 2017 (%)
(Source: www.travelchinaguide.com)

Countries	%
1. Myanmar	22.5
2. Vietnam	15.2
3. South Korea	9
4. Japan	6.2
5. Russia	5.5
6. USA	5.4
7. Mongolia	4.3
8. Malaysia	2.9
9. Philippines	2.7
10. Singapore	2.2
11. India	1.9
12. Canada	1.9
13. Thailand	1.8
14. Australia	1.7
15. Indonesia	1.6
16. Germany	1.5
17. UK	1.4

BUSINESS TOURISM IN CHINA

A growing country like China is a very good opportunity for a great variety of investments and trade exchanges and it's time to accept that the new global business traveler speaks Chinese as well (Samarani, 2008). The Business and Innovation Blog

ranks the 12 best opportunities of investments in China, from import-export to healthcare, from green economy to IT, from telecommunications to jewelry etc.

Figure 3 shows that 77,2% of the total Chinese tourist spending is based on leisure tourism (especially cultural and nature tourism), while the rest (22,8%) is represented by business tourism, which is supposed to increase in the future. In table 2 we can see that most of business tourists are from Asia (58% of the total business tourism in China), because of the geographical proximity, followed by Europe (25,5%) and America (10%). Despite the geographical proximity and the big economic interests, Oceania gives a small contribution to the business tourism flow (2,5%), because of obvious demographic reasons.

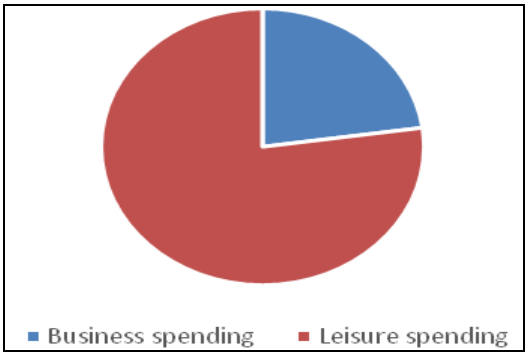

Figure 3. Share distribution in leisure tourism and business tourism spending (Source: www.wttc.org)

Table 2. Foreign arrivals for area of origin in 2015: share on total and business tourism flows (Source: Our elaboration from China National Tourism Administration)

area	total tourism flow	total business tourism flow
Asia	64%	58%
Europe	19%	25,5%
America	12%	10%
Oceania	3%	2,5%
Africa	2%	4%
Total	100%	100%

On the other side, we can see that Europe and Africa, differently from the other areas, display greater shares of business tourists on the total flow from each area. In the case of Europe, probably it's because of the economic opportunities of this growing country for European firms seeking for investment occasions and cost savings on production factors (labour, raw materials, semifinished products). In the case of Africa, the reasons are presumably different: with a share on total inbound tourism in China of just 2%, Africa contributes to Chinese business tourism to a double extent (4%). At first sight it could seem a strange value, but actually it finds its origins in the reality of the facts: since at least the last two decades, China has been present on international scene as the biggest developing country of the world and the biggest buyer of strategic raw materials. At the same time Africa, that has the highest number of developing countries, represents in perspective the most important supplier of such materials. It is clear that such new circumstances have created new opportunities for economic and business connections between China and Africa. It is obvious that these two areas are in the right place at the right time: African governments (but not African people) are benefiting from the exploitation of natural resources and China is finding the tools of its development also thanks to this trade exchange.

TOURISM IN GUANGZHOU: INTRODUCTIVE REMARKS

The city of Guangzhou, better known as Canton, is on the south-east coast of China, near Hong Kong; it is the ninth most populous city in the world and the third most important city of China after Beijing and Shanghai. Thanks to its strategic position near the Pearl River Delta, the biggest metropolitan conurbation of the world, Guangzhou quickly developed as one of the best port for import-export, becoming the capital of Guangdong Province and, thanks also to its international airport (which is one of the three most important airports of China, listed as one of the first class airports in the world), one of the richest cities of southern China. Guangzhou is different from the other Chinese cities, because of its cultural stratification of symbols and architectures, ranging from monuments of Chinese history to one of the most ancient mosques of China, to remains of Western colonialism. Unlike Beijing and Shanghai, Guangzhou developed step by step. After centuries of degradation caused by overcrowded and unhealthy neighbourhoods, the current structure of the city dates back to the massive rehabilitation which took place in 1920, when a great part of the central ancient walls was demolished and wide avenues and squares were created. Considered for a long time the most polluted and chaotic city of China, in the last decades it has transformed its image into that of a livable one: the quality of life in Guangzhou is now quite good, thanks to the low cost of life, the relatively low level of pollution, the several majestic natural sites and its characteristic culture, consisting in a mix of ancient traditions and futuristic facilities. Thanks to such a duality of old and new features, its international airport, its metro, its high-velocity trains and its symbols (e.g. the Guangzhou Tower, the second highest building of China), Guangzhou is surely a city that looks to innovation without neglecting its traditional culture, and its cuisine in particular. Cantonese cuisine (Figure 4, 5) is very well known worldwide: in fact, the Chinese cuisine as we known it is the Cantonese one.

Figure 4. Example of typical Cantonese cuisine

Figure 5. Traditional food open air market

Guangzhou has always been the door of China, for better or for worse; in fact, it used to trade with the West when for Beijing the foreigner was the “devil”. Thanks to this openness, the Cantonese area is more developed compared to the rest of the country: in fact, economic liberalization started here. Furthermore, Chinese people that we can find in Europe and in USA comes particularly from Guangzhou (Romano, 2012).

A DIVERSIFIED TOURIST OFFER

Thanks to its emerging and manifold situation, Guangzhou can attract considerable tourist flows with different motivations and purposes. Actually, Guangzhou is the fifth

more visited Chinese city by foreign tourists, after the most famous Beijing and Shanghai, and the other two important southern cities of Hong Kong and Macau. As for domestic tourism, from the last decade, Guangzhou is the third most visited city, after Beijing and Shanghai, particularly in the first week of October during the National Holiday and then in the Spring Festival. Guangzhou, in effect, has a very diversified tourist offer, which blends various types of tourism that can be enjoyed in one only travel. This is particularly attracting for the business tourists, who, as stated above, often want to combine job with pleasure, especially in a city like Guangzhou (Figure 6, 7) where they have the possibility to match a job mission with cultural and naturalist experiences.

Figure 6. Shangxiajiu Pedestrian Street

Figure 7. The centre of Guangzhou

Outlined below - with the exception of business tourism, which will be discussed in details in the next chapter - are the main kinds of tourism that this eclectic city has to offer:

- *Cultural tourism*: Guangzhou is characterized by a contrast between old and new cultural features, ranging from temples and historic sites dating back to 4th century, such as the cultural remains of Chinese Buddhism, to monuments and symbols related to the Maoist period, to modern and westernized buildings and infrastructures. The best examples are: the *Temple of the six Banyan Trees*, one of the most majestic temples, with its three copper statues of Buddha, among the biggest in Guangdong, that represent past, present and future; the *Bright Filial Piety Temple*, that is one of the most impressive of China and, according to the legend, existing before the settlement of Guangzhou; commemorative statues like the *Guangzhou Liberation Statue*, built to commemorate the liberation of the city from Yin Jin Chang and removed by Mao during the Cultural Revolution and then reinstated in 1980, and the *Bronze Statue of Dr Sun Yat-Set*, that represents an ambitious young man, with two books, one written in Chinese and the other in English, to symbolise his big mental opening. The most important sign of modernity is the *Guangzhou Tower* (600 m), the second highest building of China and the fourth in the world. Its strange and asymmetric design symbolises the dynamism of the city. Inaugurated on September 30th, 2010 during the Asian Games, it consists of 37 floors that house exhibition centres, a conference centre, a cinema, several restaurants, a panoramic view point and a pedestrian area that is connected to the river (Figure 8, 9). The best moment to visit the tower is in the evening, when the river reflects its colorful led lights creating a unique show.
- *Nature-based Tourism*: Although Guangzhou is a mainly modern and built city, there are various huge green areas, like parks and gardens, that help the city to improve the urban landscape and the air quality. Its majestic mountains, known as "The best beauty

of Guangzhou", its tropical gardens, its botanical gardens with the rarest species of flowers in the world, the little rivers that, together with the Pearl River, constitute the hydrographic network of the city and that be crossed by small boats, are surely interesting destination for a nature-based tourist motivation. As best examples, we can cite the *Baiyun Mountain*, known also as "White Clouds"; the *South China Botanical Garden*, the biggest tropical botanical garden of China, including so many species that it is considered as a botanical museum; another important facility is the *Yuntai Garden*, known as "the Pearl of Flowers' City" of Guangzhou, the biggest park of this type in all China.

Figure 8. Guangzhou Tower

Fig. 9. Evening show on Pearl River

- *Sport Tourism*: a nice curiosity is about the sport, where we can find great football Italian names. Actually, the city of Guangzhou has a quite good football team. Founded in 1954 with the name "Guangzhou Football Team", it was the first football club in China. In the years it changed various proprietors and names. Between 2010 and 2011, with the denomination of Real Estate Grande, it started to significantly penetrate the football market, also investing abroad. In 2012 the Italian Marcello Lippi was employed as "mister", which led to winning the Chinese Championship and the National Cup, as well as the AFC Champions League in 2013. Later Lippi became technical director, leaving the position of "mister" to Fabio Cannavaro. In the case of Gangzhou and its football team, it is possible to talk about sport tourism, also thanks to the presence as protagonists of some of the most famous Italian champions. Moreover, in 2010 the city hosted the Asian Games, the most important sport show of China. In that occasion the biggest urban reorganization of the city was made, which changed the appearance of Guangzhou thanks to futuristic buildings and a remarkable infrastructural development.

BUSINESS TOURISM IN GUANGZHOU

Business tourism represents the beating heart and the primary motivation of inbound tourism in Guangzhou. Today Guangzhou is the economic, political, scientific and cultural

centre of southern China, and is also the third most important city of China after Beijing and Shanghai. It has very modern infrastructures, 9 metro lines, several train stations that link city with the rest of the country (also thanks to high speed lines), a very important international airport, a majestic and enormous modern exhibition centre and a futuristic business centre. As already said, it is a very dynamic city, quite open to the West, as well as a commercial hub with an excellent transport network and high level infrastructures, including its port, which ranks fourth in China for the import-export of each type of goods: "Today, thanks to its strategically-placed location, it has sea connections to over 300 ports in more than 80 countries all over the world" (Icontainers, 2018). Moreover, the city has some dedicated areas for commercial and productive settlements: Guangzhou Economic & Technological Development District; Guangzhou Hi-Tech Industrial Development Zone; Guangzhou Export Processing Zone; Guangzhou Free Trade Zone. It is a hot destination for investments, offering considerable business opportunities. As a matter of facts, since 2015 companies from more than 130 countries invested in Guangzhou, in several sectors, such as manufacturing, services, transports, finance, technology, trade. In figure 10 the share distribution of foreign investments in Guangzhou area by origin is represented. Excluding Hong Kong, which has now returned under Chinese sovereignty with a special economic status, the biggest share comes from a group of countries defined as "Relevant Islands", formed mainly by United Kingdom and some tax havens, followed by Japan and Singapore.

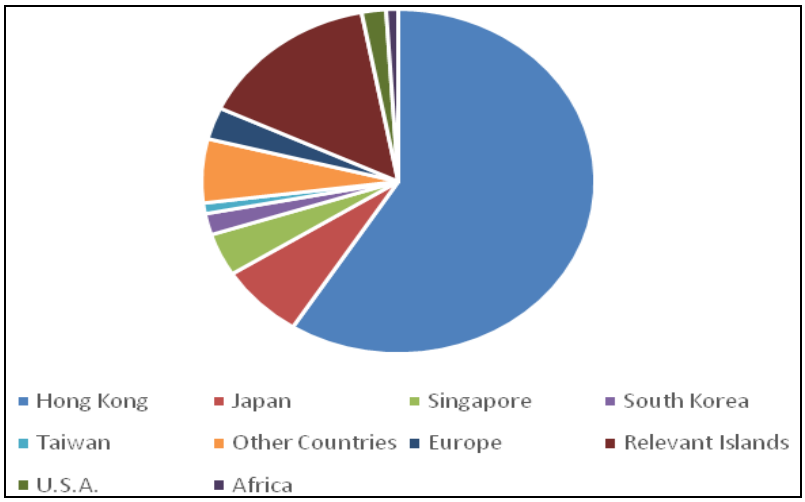

Figure 10. Share distribution of foreign investments by origin (Source: Guangzhou International)

Since 2007 the Bureau of Foreign Trade and Economic Cooperation of Guangzhou Municipality is promoting the urban economy, also by publishing the so-called "white paper", which illustrates the main macro-economic data about the city. In table 3 the main data related to 2015 are displayed.

Guangzhou is also the Chinese city that hosts the highest number of trade fairs (e.g.: the fairs of clothing, industry, home *décor*, food, technology, manufacturing etc.), the most important of which, from the economic and commercial points of view, is the "China Import and Export Fair" (Canton Fair), instituted in 1957. In 2008 the Canton Fair has been transferred in the new modern exhibition centre of Pazhou, in southeastern Guangzhou. The fair takes place each year in two sessions (spring and autumn) and is the biggest Chinese commercial fair with the most extended array of products, the highest number of exhibitors and visitors, both Chinese and foreigners, the biggest exhibition

area and the highest number of concluded sale contracts. Actually, this fair concerns every kind of item, equipment and machinery produced in China. It has a gigantic size, with its 630.000 square meters of exhibition space, 25.000 exhibitors, 30.000 stands, about 400.000 visitors and a yearly business volume that exceeds 60 billion dollars.

Table 3. Main macro-economic data about Guangzhou in 2015 (Source: Guangzhou International)

Index	Year-on-year growth (%)
Gross Domestic Product (GDP)	8,4%
Gross Value of Industrial Output	6,4%
Added Value of Industrial Enterprises	7,2%
Fixed Asset Investment	10,6%
Total Retail Sales of Consumer Goods	11,0%
Import	3,5%
Export	12,7%
Actual Foreign Investment	6,1%
Investment by Chinese Companies in overseas investment	30,4%
Service Trade	14,5%

With sales representatives from various countries and sectors, no doubt it is the most important, functioning, diversified and popular import-export fair in China. There are international commercial societies, research laboratories, industries of all sectors and firms established in China (with Chinese, mixed or foreign capital), as well as multinational corporations. Thanks to the presence of thousand of firms, the Canton Fair is the starting point for the firm that wants to trade with China, particularly in the electronics, light industry and textile sectors. At the same time it represents a way to deal with technical collaboration, transport, insurance, publicity, consultancy, but also a way to take contacts with potential suppliers or clients in view of future investments or to maintain a network of contacts, which is a central element of any international economic activity. During a field research hindered by reticence and scarce collaboration on the part of the Chinese institutional bodies, we were supplied by ICE, and in particular by ITA office, Italian Trade Agency, located in Guangzhou, with data on the fair (processed by Canton Fair). The fair takes place each year in two sessions (spring and autumn) and is the biggest Chinese commercial fair with the most extended array of products, the highest number of exhibitors and visitors, both Chinese and foreigners, the biggest exhibition area and the highest number of concluded sale contracts.

Table 4. Data on Guangzhou Fair per decade from 1960 to 2010 (Source: www.cantonfair.org.cn)

year	number of buyers		
	spring session	autumn session	total
1960	2.688	2.542	5.230
1970	7.290	8.046	15.336
1980	20.560	21.959	42.519
1990	40.436	42.236	82.672
2000	98.005	105.031	203.036
2010	203.996	200.612	404.608

Actually, this fair concerns every kind of item, equipment and machinery produced in China. It has a gigantic size, with its 630.000 square meters of exhibition space, 25.000 exhibitors, 30.000 stands, about 400.000 visitors and a yearly business volume that exceeds 60 billion dollars. Table 4 shows a remarkable increase of buyers over the decades from 1960 to 2010 (from about 5.000 to more than 400.000). It can also be seen that the growth is

quite regular until 2010, with the number of buyers doubling – or more than doubling – at every decade, which is the sign of a country that, step by step, opened itself to the rest of the world and attracted investors and commercial partners worldwide at a growing pace.

Table 5. Data on Guangzhou Fair per year from 2011 to 2017 (Source: www.cantonfair.org.cn)

year	number of buyers			business turnover (bn $)
	spring session	autumn session	total	
2011	207.103	209.175	416.278	74.760
2012	210.000	188.145	398.145	68.710
2013	202.766	189.646	392.412	67.230
2014	188.119	186.104	374.223	60.211
2015	184.801	177.544	362.345	55.066
2016	185.596	185.704	371.300	55.974
2017	196.490	191.950	388.440	60.180

Table 5, however, shows a significant decrease both in terms of buyers and business turnover between 2012 and 2015, probably as a consequence of the global financial crisis, that inevitably had repercussions also on Chinese economy, even if to a lesser extent than many other countries. Since 2016, however, an upswing is taking place, possibly a symptom of a global economic recovery. The above-mentioned data are in fact very meaningful and confirm the importance of business tourism for Guangzhou, no doubt the most significant type of tourism for the city. Unfortunately, related figures are not available. Nevertheless, an estimate of the order of magnitude of this phenomenon can be done: with about 400.000 buyers and about 25.000 exhibitors spending at least 2 nights in accommodation facilities, we approach a yearly value of about 1 million overnight stays just for the "China Import and Export Fair", which is only one – even if the most important - of the many fairs that take place in Guangzhou every year. It's reasonable to assume that the total figure is much higher, so much so as to represent the core business of the tourism sector in the city and an outstanding source for the urban economic development.

CONCLUSIONS

Business tourism has gained in the last decades increasing importance worldwide. According to UNWTO figures, in 2012 business travels accounted for approximately 14% of all international travels, and forecasts for next years are positive. In the case of China, this percentage is even higher, because of the economic opportunities offered by this growing country: 22,8% of the total inbound flow is represented by business tourism, which is supposed to increase of 4,9% in the 2025. In the context of Chinese urban network, the city of Guangzhou (also known as Canton) occupies an important place: on the south-east coast of China, in a strategic position near the Pearl River Delta, Guangzhou quickly developed as one of the best port for import-export. Thanks to a fascinating mix of old and new features, its international airport, its metro, its high-velocity trains and its symbols (e.g. the Guangzhou Tower, the second highest building of China), Guangzhou is surely a city that looks to innovation without neglecting its traditional culture. Thanks to its emerging and manifold situation, and to a diversified tourist offer, Guangzhou attracts considerable tourist flows with different motivations and purposes. This is particularly attracting for the business tourists, who often want to combine job with pleasure. Business tourism, actually, represents the primary motivation of inbound tourism in Guangzhou, which is a hot destination for investments, offering considerable business opportunities: since 2015 companies from more than 130 countries invested in Guangzhou in several sectors, such as manufacturing, services, transports,

finance, technology, trade. Even more important, Guangzhou is also the Chinese city that hosts the highest number of trade fairs, the most important of which is the "China Import and Export Fair", the biggest Chinese commercial fair with the most extended array of products, the highest number of exhibitors and visitors, the biggest exhibition area and the highest number of concluded sale contracts, with about 400.000 buyers, 25.000 exhibitors and a business turnover of more than 60 billion dollars.

Unfortunately, figures about inbound business tourism flow are not available. Nevertheless, we can assume that business tourism represents the core business of the tourism sector in the city and an outstanding source for the urban economic development.

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CULTURAL ASPECT OF SENTIMENTAL TOURISM WITHIN UKRAINIAN-POLISH BORDER

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Abstract: Ukrainian cultural heritage in Poland and Polish on the territories of Ukraine (especially western oblasts) create a potent base in expanding of sentimental tourism. Interaction of past periods between Ukraine and Poland, mutual history and tourist's family affair, motivate to travel with such a goal. These events left a particular trace, for instance: proper history facts in books and various touristic objects (historical and cultural memorials) on the western side of Ukraine and eastern side of Poland. This work should represent the main aim of sentimental tourism, the definition from various scientists, personal investigation wich leads to a better understanding of such trip. The methods of research: theoretical, historical, graphical, analysis and synthesis of the literature, survey. Results: the concept of sentimental tourism from different scientists is given; characteristic of Ukrainian-Polish areas in table and map is included; the results of own investigation (survey of respondents) in tables and diagrams is provided.

Key words: sentimental tourism, Ukrainian-Polish border, Lviv, memorials, culture, relatives

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INTRODUCTION

Sentimental tourism, as well as tourism in general, is the property of the whole state and a block of colossal income, advertising and tourist attractions, it is impossible to mention in general, this is understandable. Such tourism, in particular, stimulates friendship among people. As far as friendship with Russia is concerned, the question is controversial, but with Poland and other countries - foremost. As centuries passed, to begin with, various nations came to find Ukraine as the second motherland, nations, who were haunted for their religion, politic and some other believes, craving better conditions for living. In such case, most of them amplified culture (traditions) of nation and country (Kalinowski & Jacov, 2015).

DISCUSSIONS

Sentimental tourism is a type of travel in wich the great aim is to come with specific emotions of tourists, knowing as "nostalgia" (Kuzik, 2010). The trait of it is to visit

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familiar places of the past, ancestors' existence, childhood and birthplaces. Sentimental tourism rearranges the national moral and raises patriotic feelings. At a point, those people were forced to separate with their families or motherland (Kuzik, 2010).

Equivalent, in the American literature is "the roots syndrome tourism" or "ethnic tourism". This kind of tourism has existed since a long time, but in East Central Europe it was recently intensified and become important income source. The subject of the sentimental tourism is a specific group of people who once have left their country for good (Baraniecki & Wisniowa, 2011).

In modern scientific literature there's a widely use of this term but its importance in tourism geography is not quite expanded. For example: Polish scientist Tomczewska-Popowycz N. I. give such definition "sentimental tourism is a kind of trip the main goal of which is to come back to the places which force to feel specific feelings of nostalgia" The main base of it is a cultural and historical heritage (Tomczewska-Popowycz, 2016) Sentimental tourism deals with terms such as: "sentiments", "national minority", "Ukrainian diaspora", "ethnic lands and borderline", "leftover".

Sentiments are a loose of human senses and feelings. In the first place, nostalgic feeling is a principle of sentimental tourism (Kuzik, 2010).

National minority is the citizen group with their (ethnic, religion and language) characteristics which differ from other citizens. These groups of people are numerically smaller within one country (Shapoval, 2006).

Ukrainian diaspora is a category of people of Ukrainian descent who live outside Ukraine and foreign ukrainians that liaise with their families (Shapoval, 2006).

Ethnic lands is the territories where historically formed groups of people spoke certain language, honor their common traditions, culture and history (Shapoval, 2006).

Ethnic borderline are the lines of demarcation of ethnic territory which are not stable and change under the influence of political factors, often with the use of military force, by ethnocide (Shapoval, 2006).

Leftover is the cultural relics (results of human evolution, history etc). A kind of human's work and believes from generation to generation (Shapoval, 2006).

In retrospect, when Ukraine proclaimed its independence in 1991, it had influenced on routine, dare say, of polish ethnic group on the western Ukraine. Lots of polish cultural associations had been created and schools that had been opened in Ukrainian cities. Poles, Germans, Jews – all these tourists make possible to develop sentimental tourism. Ethnic mosaic of some region had been lasted for ages. In fact, when Poles occupied Galicia they had been lived there 400 years and intended to come to stay in Ukraine. However, it didn't work out. Nowadays Lviv, Zhovkva, Zolochiv (Lviv Oblast), Kamianets-Podilskyi (Khmelnitsky Oblast), - have become centers of sentimental tourism, they're close enough to the Polish border. Before Ukrainians deportation, before the Second World War, from the whole population of Lviv, 70 % of them – were Poles, in 1989 – 1,2 % and in 2001 – 0,7 % (19 thousand people). In the past, Poles travel massively, especially those, which were born and lived on the western Ukraine (Pecarchuk, 2011).

A lot of polish amateur tourist organization in Lviv such as **TOWARZYSTWO MIŁOŚNIKÓW LWOWA** manage to interest with their sentimental trips, visiting noble locations with polish culture and many more. Here are some of them: Lychakiv cemetery (Lviv) where buried famous Poles (Wladyslaw Belza – a writer (1913); Maria Konopnicka – a journalist and poet (1910); Juliusz Konstanty Ordon – a participant and hero of Polish November Uprising (1887), Gabriela Zapolska – a novelist and actress (1921), Karol Szajnoca – an historian and writer (1868), Artur Grottger – the painter (1867) etc) (Pecarchuk, 2011). Lychakiv cemetery, where the burial place of the Lviv eaglets was also destroyed after the Second World War, however, in 2005 the efforts of

the presidents of Poland and Ukraine were reopened (Tomczewska-Popowycz, 2016). Cemetery of the Defenders of Lviv (also: Cemetery of the Eaglets) - an autonomous part of the Lychakiv cemetery in Lviv. It occupies a separate place - the slopes of the hills from the Pohulanka side. There are graves of the participants of the battle for Lviv and Małopolska Wschodnia, who died in 1918-1920 or died in later years. It is often called the Eaglets' Cemetery; since almost 3,000 soldiers buried there, some of them are Orlęta Lwowskie, that is, high school and higher school students, and intelligence. He was called a holy place by the Poles (Campo Santo). World war soldiers from different countries also buried there. Ukraine spared monuments to some of Poles: Martinivka village (Cherkasy oblast) – a memorial room and monument to an activist Ludwik Warynski who was born there; Lviv – a monument to a poet and political activist Adam Mickiewicz, dated 1904 (Kuzik, 2010). Poles architects worked in Lviv: Piotr Barbon (Piotr Beber) reconstructed the Lviv Town Hall, Korniakt Tower (the part of Dormition Church) and also, the Castle in Zhovkva city (Lilio, etal., 2007). In fact, Lviv is the city with the richest and highest level of touristic objects (heritage) within Ukrainian-Polish border. Public architecture took the first place for its importance in Lviv Oblast, in which it takes 20 %, also military architecture with 12 objects (Kuzik, 2010). In 2003 Volyn Oblast carried 30 monuments of history and culture, 4 of them – were polish (Pecarchuk, 2011).

There is the law on the Ukraine territory "*On the protection of cultural heritage*", which divides into 10 chapters and consists 49 articles. This law regulates various relations (social, economic) in the field of cultural heritage protection in order to preserve them in the interests of present and further generations (www.zakon2.rada.gov.ua). Furthermore, we can mention «Agreement between Ukraine and Poland about legal regime of Ukrainian-Polish border and common cooperation (www.zakon0.rada.gov.ua).

Ukrainian-Polish border is a territory which covers a couple of administrative regions across the borderline of two countries. The length of the border is 535 km. The borderline area is 85 018 km², the Ukrainian side covers 41 977 km² and Polish - 43 041 km² (Miszczuk, 2002; Więckowski, 2010). The Ukrainian districts, (especially Lviv and Volyn), have very good conditions for the development of agriculture, and hence this sector of the economy is significant for them, it has quite a traditional structure in Volyn oblast, while in Lviv it undergoes restructuring, owing in particular to the inflow of foreign capital (Komornicki & Miszczuk, 2010). Within borderlands, tourism has become the most important branch of the economy and one that is often treated as the sole opportunity for development at the same time becoming the primary domain of integration (Krawczyk, 2005). Polish scientist A. Fedun (Fedun, 2001) had a particular investigation "Main directions of Ukrainian-Polish border cooperation in the conditions of the European integration process" in this field and determined 4 administrative units within Ukrainian-polish border (Table 1): Territories of Ukrainian-Polish border (Fedun A. Main directions of Ukrainian-Polish border cooperation in the conditions of the European integration process, 2001). These administrative units can be seen on the map (Figure 1).

Table 1. Territories of Ukrainian-Polish border

№	Administrative area	Country
1.	Lublin Voivodeship	Poland
2.	Podkarpackie Voivodeship	
1.	Volyn Oblast	Ukraine
2.	Lviv Oblast	

Andriy Matseliuk a head of **Lviv association of tourism development** made a basic touristic plan to develop this type of tourism on the mentioned territories in 2014.

Regional growth agency in Przemysl (Poland) interacted as a strategic partner of the program. As the matter of fact, this case deals with promotion of touristic potential (heritage) of Lviv Oblast, Podkarpackie Voivodeship and Lublin Voivodeship. The main course of this partnership was to unit two countries with common intentions in touristic sphere also an extensive presentation of their product. Due to historical events, borderline change, mass deportation of people, sentimental tourism is a popular one within the confines of Ukrainian-Polish border (Shapoval, 2006).

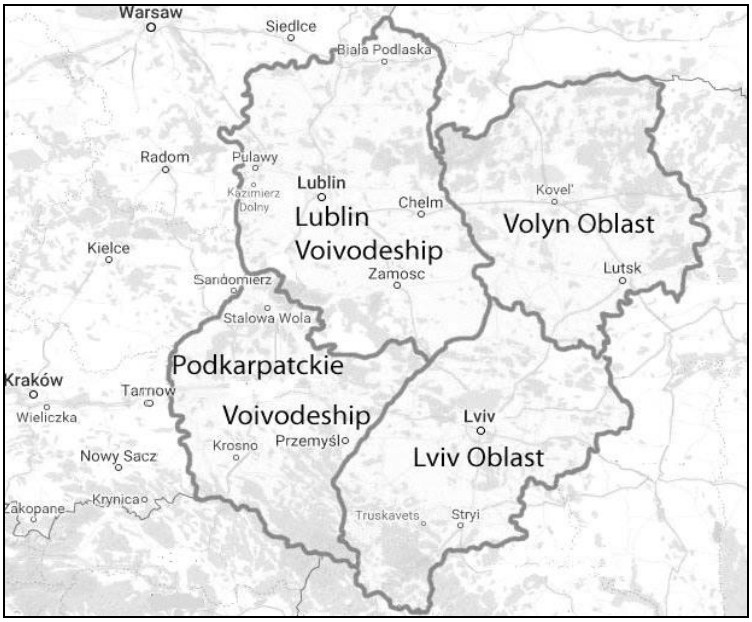

Figure 1. Territories of Ukrainian-Polish border on map (www.google.com/maps/places, 2017)

After deportations, the number of Ukrainians on Polish lands (Chelm land, Nadsanie, Podlachia, Lemkivshchyna) has decreased. Most Ukrainians from those regions were resettled in the western regions of Ukraine (about 483 thousand people). Before Operation Vistula ukrainians were forbidden to live closer than 50 km to the western border with Poland. Taking into account the past relations with Poland, a kind of "ethnic offence" was formed in Ukrainians. **Ethnic offence** is an emotional-expressive feeling that memory remains as a result of past pressure of other society (Shapoval, 2006).

These principles no longer exist today. The biggest concentration of Ukrainians in Poland are in Warsaw (approximately 10 thousand of people) and in Krakow (approximately 3 thousand) and other cities. 20 thousand of Ukrainians live in Poland (Shabliy, 2004). According to Wikipedia resource, in 2011 more than 50 thousand of Ukrainians lived in Poland and in 2017 there were about 1 million of Ukrainians (www.wikipedia.com). Ukrainian lyceums have been formed, institutes for the training of Ukrainian teachers are in operation, and different departments have been opened in Warsaw, Lublin, Krakow universities (Shabliy, 2004). Ukrainian people emigrate in order to find better conditions for living and also they can keep contact with their family. Ukraine is leading the level of labor migration. This fact is explained by an increasingly tense situation within the state, low wages and a standard of living and also a cultural factor (Tomczewska-Popowycz, 2016). The concept of emigration indicates a temporary departure and a short stay of an individual outside of his native land. The modern borders of Ukraine

are ethno-historical and are beyond its borders, and the Ukrainian diaspora exists in the form of various ethno-real communities in another environment (Savchuk, 2004).

Borders can be used as tourist attractions, so in this case, sentimental tourism is the right example. Some people cross borders just so they can claim that they have been in a different country. The development of tourism in these areas is associated highly with the processes of modernization, globalization, integration (Więckowski, 2010).

Survey investigation was made. It gas been lasted for one month. For that time 115 students of 3 Lviv's universities (Ivan Franko National University; Lviv Polytechnic National University; Lviv State University of Physical Culture) were questioned in the form of a questionnaire, 17-20 years old. Such questions were given:

1. Do you have family or family roots in Poland?
2. In which city your family live?
3. What was the reason of your family to stay in Poland?
4. How often do you visit them?
5. Do you plan to go to Poland in the nearest future?

The results of the investigation have been tabulated and diagramed (Table 2):

Table 2: How many of respondents have relatives in Poland

№	The presence of family roots in Poland	The number of respondents
1.	There are relatives in Poland	30
2.	There are not relatives in Poland	75
3.	Not aware	10

The results of investigation from table 2 in diagram:

1. 30 respondents have family in Poland (the blue part);
2. 75 respondents do not have family in Poland (the purple part);
3. 10 respondents so far not aware (the yellow part).

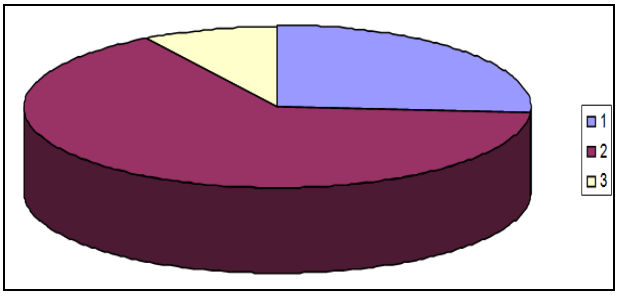

Figure 2. How many of respondents have relatives in Poland in diagram

Table 3. Poland cities where respondents' families live

№	City
1.	Gdansk
2.	Krakow
3.	Lodz
4.	Lubachow
5.	Lublin
6.	Tomaszow
7.	Warsaw
8.	Wroclaw
9.	Zamosc

More than 70 students do not have family in Poland but it doesn't mean that they wouldn't go to visit Poland. 10 of respondents are not aware with the fact that they have someone there or hard to tell at the particular moment. 30 students generally visit their family and list of the Poland cities you can find in Table 3. The next one gives an information about possibility of visiting Poland in the nearest future, on the Figure 3 it can be seen in diagram.

1. 103 students are planning to go to Poland (the blue part);
2. 12 students do not (the purple part).

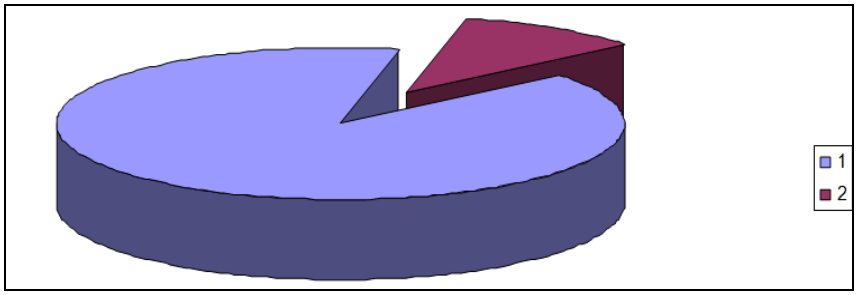

Figure 3. A possibility to visit Poland in the nearest future (2017)

The purpose of such trips is mainly short-term visits and meetings with relatives. A dozen respondents said that the family was in Poland due to wage migration, and only four said that relatives live in Poland for several generations. So, more than 100 students are planning to see Poland whether they have family there or not. Tourism is a potentially attractive type of economic activity within the Ukrainian-Polish border but today level of providing its potential is still very low which are caused by differences in the provision due to: the instability of the institutes of tourism management; unsatisfactory scientific support of tourism development; insufficient cooperation between travel companies (Bilanyuk, 2012). Crossing a border is attractive for many tourists, even the crossing of a border by tourists that otherwise remain their own countries constitutes an additional attraction of a stay (Więckowski, 2008). Tourist policy in Poland is aimed at improvement of the system of domestic and foreign tourism through further efforts to create an attractive tourist image of the country in the world, infrastructure development, increasing attention to preservation cultural heritage of the country. Ukraine's position is not that perspective. Development of tourism industry in Ukraine in recent years is characterized by constant dynamics (Chetyrbuk, 2014). One of the most important characteristics of this trip is the affinity with the motherland and the family, and this is one of the most important human needs. Events that motivate tourists to travel that way are usually the events of the past or a certain attitude of the participants themselves. Participants of the trip can be divided into such group:

1. Participants of different events (wars, state conflicts, the formation of new countries etc.);
2. Children of those, with whom they have a family affair;
3. Those, which are in search of their roots and motherland (Kozovyy, 2017).

CONCLUSIONS

Sentimental tourism is a kind of tourism that continues to evolve. Unfortunately, the Ukrainian authorities do their best to ensure that Ukrainians, not only, travel abroad, but also feel disputed feelings and doubts about their role and motivation as a nation. Ukraine is very rich country, with unique history, culture and various touristic objects. Tourists arrive, with the hope of seeing the long-awaited progress, remain disappointed. Sentimental tourism is a kind of trip that attracts tourists with specific feelings. The area

of sentimental tourism of the Ukrainian-Polish borderland covers significant areas of western Ukraine (Lviv and Volyn Oblasts) and eastern Poland (Lublin and Podkarpackie Voivodeships). The cultural aspect of sentimental tourism is not only in rest and restoring relationships with the family, but also in the education of the individual. Tourists enrich with knowledge of the history of their family and state. A significant number of tourist facilities contribute to a significant potential for the development of such tourism. There are many factors in Ukraine that have suspended the development of the state in the international arena (politics, culture, etc.), but the key is life according to the old Soviet rules that are not needed by anyone. This method is reflected in the level of attractiveness of Ukraine as a potentially rich country in all respects. Frequently-found phrases: "Years of independence", "Ukraine is independent" and so on... We live under the Soviet principles, in fact Poland evolves in the opposite direction.

Aknowlegment

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THE IMPLICATIONS OF FINANCIAL CONSTRAINTS: AN EXPLORATORY STUDY AMONG LODGING FIRMS IN U.S.A

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Abstract: The purpose of this exploratory study is to analyze the nature and implications of financial constraint problems in the American lodging sector. For this purpose, the lodging firms' financial performance measures, such as EBITDA, sales, sales growth, return on assets, and profit margin are examined to compare the extent to which financing, investment, dividend, and cash holding policies diverge between financially constrained and unconstrained lodging firms. The results show that financially constrained firms are smaller in size and value, have lower cash, make less investments, pay lower dividends, generate lower revenues, some of which contradict the findings in mainstream corporate finance literature, where higher cash holdings and better performance were reported for financially constrained firms. Although these firms have negative return on assets and profit margin, they have higher financial leverage and promising growth opportunities. Managerial implications are discussed within the realm of financing, dividend, investment, and cash management policies.

Keywords: financial constraints, lodging, firm performance, investment, financing, finance

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INTRODUCTION

The implications of financial constraints on firms' investment, financing, dividend, and cash holding polices have been extensively examined in mainstream corporate finance literature. The debate over whether and the extent to which financial constraints affect firms' abovementioned policies have started with the so-called *irrelevance theorem* proposed by Modigliani and Miller (1958). In their seminal paper, the authors argued that positive net present value (NPV) projects create value for the firm regardless of whether firm uses internal or external capital to finance their projects. That is, financing decision of investments does not affect the profitability of investments and hence the source of capital is irrelevant to investment decisions. Nevertheless, empirical studies have provided substantive evidence against the irrelevance theorem showing that essentially

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financing and investment decisions are dependent (Myers & Majluf, 1984; Fazzari et al., 1988; Franzoni, 2009; Khatami et al., 2014). The main argument is that asymmetric information problem exists in the capital markets, which may create a significant variation between the cost of internal and external funds for financially constrained firms (Whited & Wu, 2006). The purpose of this study is to analyze the nature and implications of financial constraints problem in the American lodging sector. For this purpose, the lodging firms' performance measures are examined to compare the extent to which financing, investment, dividend, and cash holding policies diverge between financially constrained and unconstrained lodging firms.

LITERATURE REVIEW

Firms are considered financially constrained "if they face a wedge between the internal and external costs of funds. A firm is considered more financially constrained as the wedge between its internal and external cost of funds increases" (Kaplan & Zingales, 1997, 172). The margin between the cost of internal and external funds might be so high that it could turn a positive NPV investment into negative. Consequently, the degree of financial constraints affects corporations' investment, financing, dividend, and cash holding policies. Studies of Fazzari et al. (1988), Kaplan and Zingales (1997), and Whited and Wu (2006), to mention a few, showed that financially constrained firms' investments are very sensitive to internal funds whereas unconstrained firms' investments are not related to internal funds. In the same vein, Franzoni (2009), Denis and Sibilkov (2009), and more recently Khatami et al. (2014) showed that cash is more valuable in financially constrained firms because these firms have greater investment opportunities.

They argue that financially constrained firms will be able to fund their value-increasing investments with retained cash and hence shareholders of financially constrained firms place higher value in cash. Although the implications of financial constraints have been widely studied in mainstream corporate finance literature, these studies do not consider the unique features of the lodging industry. Lodging firms experience challenges to sustain their profits due to economically sensitive nature of this business. Hotel room prices and occupancy rates fluctuates throughout a typical year and fall significantly during economic downturns. Financially constrained lodging firms might experience difficulties financing their projects, which primarily consist of real estate properties that require substantial initial and ongoing capital investments. The following quote from a property report on Wall Street Journal summarizes the nature and risk of investments in the lodging industry (Karmin, 2016).

"Shares of U.S. hotel operators, owners and timeshare companies tumbled more than 22% in 2015 compared with flat returns for the broader U.S. stock market, and are down another 13% year to date, according to Goldman Sachs Group Inc., nearly twice the broad market's drop. The recent financial market volatility has caused activity for lodging deals in the commercial mortgage-backed securities market—the main source of debt financing for big hotel transactions—to slow to a trickle."

This information collectively establishes the needs for assessment of the implications of financial constraints in the lodging firms' financing, investment, dividend, and cash holding policies. Canina et al. (2001) and more recently Kim & Gu (2009) investigated lodging firms' dividend paying policies. The results from these studies showed that lodging firms gain positive returns from dividend payments and that large firm with fewer investment opportunities pays more dividends. Sheel (1994) analyzed the debt behavior of lodging firms and found that the lodging industry has unique short- and long-term debt behavior determining their leverage ratios. Dalbor et al. (2007) examined the relationship between long-term debt behavior and lodging firms' value and concluded

that long-term debt positively affects firm value as opposed to previous findings in corporate finance literature. Kim & Jang (2012) compared the financial constraint levels of Hotel Real Estate Investment Trusts (REITs) and C-corporation hotels based on Tobin's Q and showed that Hotel-REITs are more constrained than C-corporation hotels. While former studies have examined lodging firms' investments, financing, dividend, and cash policies, these studies did not investigate the differences between financially constrained and unconstrained lodging firms' respective policies. Therefore, in spite of the well-documented magnitude of the financial constraints problem in corporate finance literature, there is still critical need to examine whether there is a divergence between financially constrained and unconstrained lodging firms in terms of financing, investment, dividend, and cash holding policies. As stated in the study of Chirita et al., (2015), the implementation of development projects for recreational locations is also a way to attract tourists and new investments.

METHODOLOGY

Measurement

The sample of this study consists of the lodging companies that are publicly traded in the New York Stock Exchange, American Exchange, or NASDAQ during the period of 1995-2015. The sample was limited to firms with financial information available on the COMPUSTAT annual database. This database covers firms' annual financial reports, such as balance sheet, income statement, and statement of cash flow, which includes variables used in this study. The final sample consists of 242 firm-year observations.

Based on the finance and hospitality literature, the following variables are included in this study. *Investment* is measured by capital expenditures (item 128); *cash* is measured by cash and short-term investments (item 1); *cash flow* is measured by the income before extraordinary items (item 18) plus depreciation and amortization (item 14); *size* is measured by total assets (item 6); *acquisition expenditures* is the acquisitions (item 129); *market value* is defined as the number of common shares (item 54) times the fiscal year closing price for stock *i* on year *t* (item 199); *leverage* is measured as long term debt (item 9) plus debt in current liabilities (item 34) divided by total book assets; *dividends* is the common dividends (item 21); *share repurchases* is the purchases of common and preferred stock (item 115); *earnings before interest, taxes, depreciation and amortization (EBITDA)* is measured by operating income before depreciation (item 13); *revenues* is measured by sales (item 12); *return on assets (ROA)* is defined as the income before extraordinary items (item 18) divided by total assets (item 6); *profit margin* is measured by the income before extraordinary items (item 18) divided by revenues (item 12); and *Tobin's Q* is defined as total assets plus firm's market value minus common equity (item 60), balance sheet deferred taxes (item 74) and leverage divided by total assets.

Data collection

Financial constraint indices are used as grouping variables to sort firms as constrained and unconstrained firm portfolios based on firms' degrees of financial constraints. Two different financial constraint indices are used to identify firms' financial constraint levels. Specifically, the Whited and Wu (2006) index and the Cleary index (Hennessy & Whited, 2007) are utilized to sort firms as constrained and unconstrained. The WW and Cleary financial constraint indices are constructed following the methodologies used in Whited and Wu (2006) and Hennessy and Whited (2007), respectively as follows.

$$WW = 0.93 - 0.09 \times CF - 0.06 \times DIVPOS + 0.02 \times TLTD - 0.04 \times LNTA + 0.1 \times ISG - 0.035 \times SG \quad (1)$$

$$Cleary = -0.12 \times CURAT - 1.90 \times TLTD + 0.001 \times COVER + 1.46 \times IMARG + 2.03 \times SG - 0.05 \times SLACK \quad (2)$$

where *CF* is the cash flow; *DIVPOS* is an indicator that is equal to one if the firm pays dividends and zero otherwise; *TLTD* is the total long term debt (item 9); *LNTA* is the natural logarithm of total assets; *ISG* is the sample firms' average sales growth; *SG* is the firm's sales growth; *CURAT* is the current assets (item 4) divided by current liabilities (item 5); *COVER* is the interest coverage and measured as earning before interest and taxes (item 3 minus item 14) over interest expense (item 15) plus preferred dividend payments (item 19) divided by one minus tax rate, where tax rate equals to income taxes (item 16) divided by operating income before depreciation (item 13) minus depreciation and amortization (item 14) minus interest expense (item 15); *IMARG* is the net income (item 18) divided by sales (item 12); and *SLACK* is the financial slack measured as cash and short-term investments (item 1) plus 0.5 times inventory (item 3) plus 0.7 times accounts receivable (item 2) minus short term loans (item 196) divided by net fixed assets (item 8). Items are Compustat annual items and the constant term, 0.93, in the WW index is obtained from Franzoni (2009). A higher score of the index indicates greater financial constraints problems. Firms are categorized as constrained (above sample's median value) and unconstrained (below sample's median value) based on WW and Cleary financial constraint index values. Firms are also grouped as constrained and unconstrained based on their dividend paying policy, where firms are included in the constrained group if they do not pay any dividends and in the unconstrained group if they pay dividends.

RESULTS

Table 1 represents descriptive statistics (i.e., mean, median, and standard deviation) for the variables used in this study. Three alternative measures of financial constraints used in this study to test whether the differences between firms' performance measures remain persistent under different financial constraints specifications. Table 2 presents the correlation matrix for the financial constraint proxiesAccording to the correlation coefficients there is positive and significant relationships between three alternative financial constraint measures. Therefore, the financial constraint variables are reliable. Figure 1 illustrates the comparison of size, investment, EBITDA, dividends, revenues, and cash between financially constrained and unconstrained lodging firms using the WW financial constraint index throughout the study period.

Table 1. Summary Statistics

Variables	Mean	Median	Standard Deviation
Cash	153.77	38.59	254.99
Change in cash	0.003	0.002	0.26
Cash Flow	0.07	0.05	0.14
Investment (Capex)	124.96	60.78	151.71
Acquisition Expenditures	58.50	0	202.60
Total Assets	2,773.55	873.91	4,258.00
Market Value	2,540.53	549.39	4,463.94
Leverage	0.43	0.39	0.26
Tobin's Q	3.18	1.58	9.24
Dividends	24.45	0	69.07
Share Repurchases	101.87	0	332.96
EBITDA	276.29	70.07	439.54
Revenues (Sales)	1,693.88	348.22	3,004.63
Sales Growth	0.19	-0.01	1.46
Return on Assets	0.01	0.02	0.05
Profit Margin	0.01	0.04	0.13

Table 2. Correlation Matrix of Financial Constraints Measures

Variables	WW Index	Cleary Index	Dividend Payout Policy
WW Index	1		
Cleary Index	0.46[a]	1	
Dividend Payout Policy	0.5[a]	0.44[a]	1
a donates 1% statistical significance level			

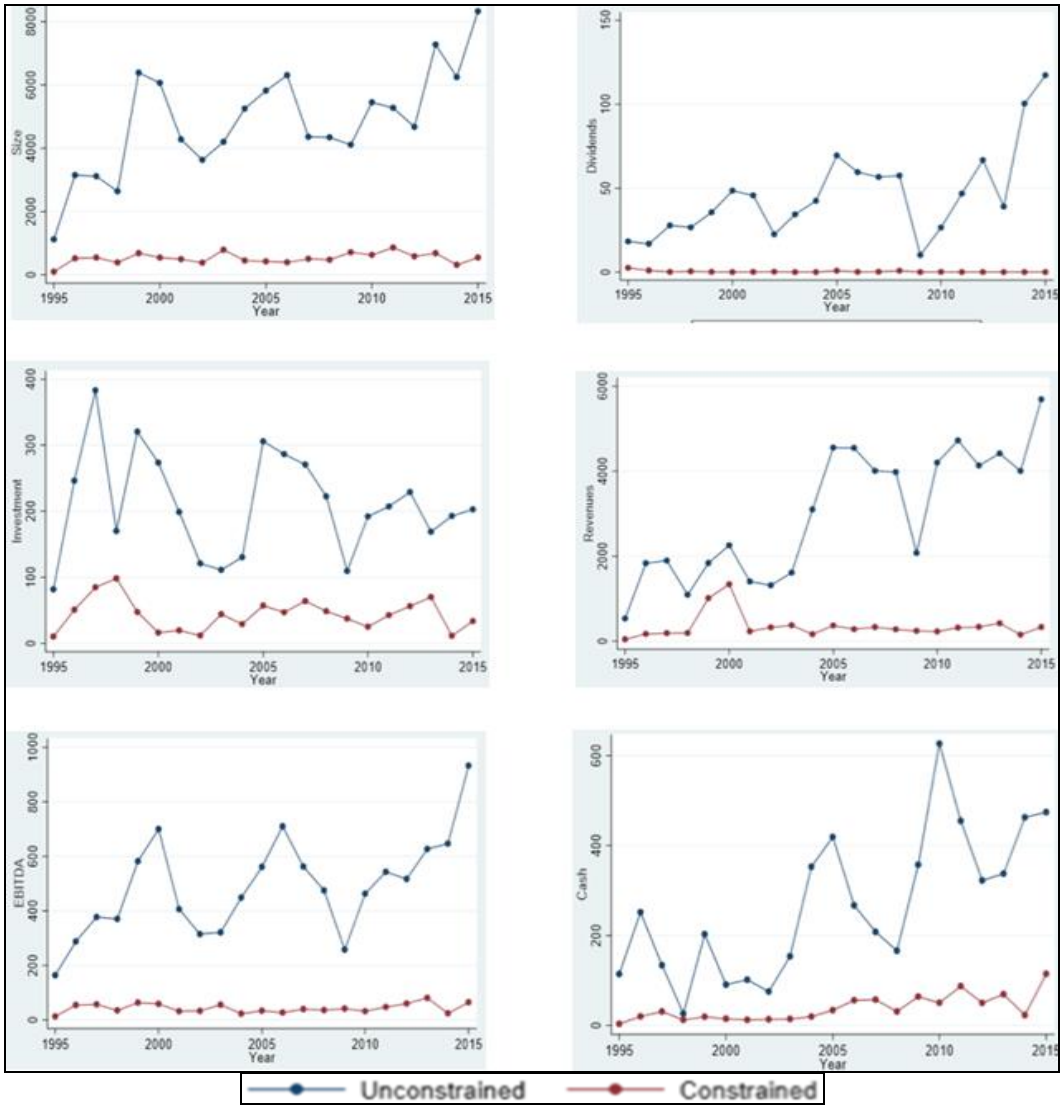

Figure 1. Comparison of Constrained and Unconstrationed Lodging Firms

While these values fluctuate over the years, financially constrained firms appear to be smaller in size, make less investment, have lower operating performance (EBITDA), pay lower dividends, generate lower revenues, and hold lower cash compared to financially unconstrained counterparts. These preliminary results seem to contradict some of the findings in mainstream corporate finance literature, where higher cash holdings and

better performance were found for financially constrained firms. Nevertheless, further statistical analysis need to be conducted to provide evidence on the differences between financially constrained and unconstrained lodging firms' performances.

Main Findings

Independent sample t-test is conducted to test the mean differences between financially constrained and unconstrained lodging firms' firm performances. The selected firm measures are *cash, change in cash, cash flow, investment (capex), acquisition expenditures, total assets, market value, leverage, Tobin's Q, dividends, share repurchases, EBITDA, revenues (sales), sales growth, return on assets, and profit margin* using WW financial constraint index to categorize firms as financially constrained and unconstrained. Table 3 presents the results of these tests.

Table 3. The mean differences comparison between constrained and unconstrained lodging firms (WW Index)

Variables	Constrained	Unconstrained	t-value	Sig.
Cash	36.54	270.99	8.04	***
Change in cash	0.005	0.001	-0.15	N.S.
Cash Flow	0.08	0.06	-1.65	*
Investment (Capex)	46.98	202.29	9.23	***
Acquisition Expenditures	16.63	102.27	3.23	***
Total Assets	540.14	5,006.97	9.57	***
Market Value	332.67	4,748.4	8.88	***
Leverage	0.52	0.34	-6.01	***
Tobin's Q	2	4.35	-1.98	*
Dividends	0.31	48.59	5.79	***
Share Repurchases	4.84	200.64	4.59	***
EBITDA	44.47	496.99	10.07	***
Revenues (Sales)	346.12	3,041.64	7.8	***
Sales Growth	0.45	-0.07	-2.76	**
Return on Assets	-0.002	0.02	4.18	***
Profit Margin	-0.01	0.04	3.38	***

***, **, and * donate 1%, 5%, and 10% statistical significance levels, respectively. N.S. donates not significant

The results show that there is a statically significant difference between financially constrained and unconstrained firms for all of the selected firm measures with the exception of change in cash variable. According to these results, financially constrained firms keep lower cash (36.54 vs. 270.99), make less investments both in acquisitions (16.63 vs. 102.27) and capital expenditures (46.98 vs. 202.29), are smaller in size in terms of total assets (540.14 vs. 5,006.97), have lower market value (332.67 vs. 4,748.4), pay much lower dividends (0.31 vs. 48.59) and make lower share repurchases (4.84 vs. 200.64), have lower operating performance (EBITDA) (44.47 vs. 496.99), and generate lower revenues (346.12 vs. 3,041.64). Furthermore, financially constrained firms have a negative return on assets and also negative profit margin, while financially unconstrained firms' return on assets and profit margins are positive. Nonetheless, financially constrained firms have higher cash flows compared to unconstrained firms (0.08 vs. 0.06) and much higher leverage (0.52 vs. 0.34). Tobin's Q, which is a proxy used to capture the growth opportunities of a company, is lower for financially constrained firms compared to unconstrained firms (2 vs. 4.35). A higher value of Tobin's Q indicates higher growth opportunities. It should be noted, however, that Tobin's Q is not a reliable proxy as it may not very well capture the growth opportunities especially in small firms (Whited & Wu, 2006). The difference in sales growth between financially constrained and unconstrained firms prove this point, as sales growth is

higher in financially constrained firms than unconstrained firms (0.45 vs. -0.07). While these results provide significant evidence that the selected financial measures are significantly different for financially constrained and unconstrained lodging firms, we further analyze the mean differences using two alternative financial constraint proxies, namely Cleary index and dividend payout policy. Table 4 and Table 5 present these results.

Table 4. The mean differences between constrained and unconstrained lodging firms (Cleary Index)

Variables	Constrained	Unconstrained	t-value	Sig.
Cash	61.87	245.67	-5.99	***
Change in cash	0.02	-0.01	0.87	N.S.
Cash Flow	0.05	0.09	-2.43	**
Investment (Capex)	66.25	183.19	-6.47	***
Acquisition Expenditures	27.62	89.1	-2.29	**
Total Assets	1,040.54	4,506.55	-6.92	***
Market Value	542.67	4,538.39	-7.77	***
Leverage	0.53	0.32	6.67	***
Tobin's Q	3.24	3.1	0.11	N.S.
Dividends	6.57	42.33	-4.16	***
Share Repurchases	6.09	199.37	-4.53	***
EBITDA	85.76	455.69	-7.71	***
Revenues (Sales)	461.09	2,926.67	-6.98	***
Sales Growth	0.03	0.34	-1.65	*
Return on Assets	-0.007	0.03	-5.99	***
Profit Margin	-0.02	0.05	-5.47	***

***, **, and * donate 1%, 5%, and 10% statistical significance levels, respectively. N.S. donates not significant

Table 5. The mean differences between constrained and unconstrained lodging firms (Dividend Payout)

Variables	Constrained	Unconstrained	t-value	Sig.
Cash	111.04	227.23	-3.49	***
Change in cash	0.001	0.006	-0.12	N.S.
Cash Flow	0.07	0.06	0.51	N.S.
Investment (Capex)	82.42	197.61	-6.1	***
Acquisition Expenditures	37.6	94.24	-2.03	**
Total Assets	1487.52	4984.35	-6.7	***
Market Value	1117.86	4986.24	-7.14	***
Leverage	0.46	0.36	3.12	***
Tobin's Q	3.79	2.11	1.37	N.S.
Dividends	0	66.48	-8.14	***
Share Repurchases	16.21	241.94	-5.21	***
EBITDA	114.76	538.86	-8.76	***
Revenues (Sales)	733.59	3344.72	-7.16	***
Sales Growth	0.29	0.02	1.41	N.S.
Return on Assets	-0.003	0.03	-4.55	***
Profit Margin	-0.006	0.05	-3.45	***

***, **, and * donate 1%, 5%, and 10% statistical significance levels, respectively. N.S. donates not significant

The results from Table 4 and Table 5 confirm the mean difference test results using WW index with few exceptions. For example, the difference between Tobin's Q means for financially constrained and unconstrained firms is not statistically significant using Cleary index and dividend payout policy financial constraint measures, which brings into question the reliability of the Tobin's Q in measuring firms' growth opportunities. Also, the differences between cash flow and sales growth are statistically insignificant based on dividend payout policy measure of financial constraints. Despite the few inconsistencies

between financial constraint indices of WW index, Cleary index, and dividend payout policy, the results provide substantive evidence that financially constrained firms keep lower cash, make less investments, are smaller in size and value, pay lower dividends, have lower performance, and have a negative return on assets and negative profit margin. However, financially constrained firms have higher leverage compared to unconstrained firms. (We further analyzed the median differences between financially constrained and unconstrained firms for the selected financial variables. The results were consistent with the findings using mean difference test and are available from the authors upon request.)

CONCLUSION AND IMPLICATIONS

CEOs of financially constrained lodging firms might bypass a positive NPV investment, if internal funds are not sufficient. Financial constraint problems may cause lodging firms to operate in a suboptimal investment level, which in turn can affect firm cash and dividend policies. This study compared divergence between financially constrained and unconstrained lodging firms' performance measures, such as EBITDA, sales, sales growth, return on assets, and profit margin to analyze the nature and implications of financial constraint problems in the U.S. lodging sector. The results show that financially constrained firms have lower cash holdings but higher cash flows, suggesting that these firms have higher investment and operating activities. Although financially constrained firms make fewer investments and are smaller in size and value, they have better growth prospects. The results also showed that financially constrained firms pay lower dividends, which is in line with theoretical expectations. Obviously, larger firms are more likely to pay higher dividends because they are in a maturity phase, where further growth may be a trickle. While financially constrained firms generate lower revenues, which seems to contradict the findings in mainstream corporate finance literature, these could be mainly due to the fact that financially constrained firms are smaller in size and value. Hence, they have limited sources of revenues, as these firms are likely to be young and small compared to unconstrained firms. Although financially constrained firms have negative return on assets and profit margin, they are likely to be profitable as they mature because these firms have growth opportunities. While the results from this study showed that there are significant differences between financially constrained and unconstrained firms financial measures, why these firms are constrained is not clear. Financially constrained hotel firms have higher leverage as opposed to the general notion that financially constrained firms cannot raise external funds to make investments. This contradictory finding suggests that financial constraints in the lodging industry might not be due to capital market imperfection but probably these firms are financially constrained because they are overly-levered. High leverage increases risk of bankruptcy, especially during economic downturns, while firms with lower leverage are more likely to survive during recessions. While financially constrained firms are less likely to make investments in research and development, hotel firms do not seem to make investments in research and development regardless of the degree of financial constraints. Overall, the results from this exploratory study suggest that lodging firms' characteristics are different from firms in other industries.

Industry Implications

Managerial and practical implications of this study are noteworthy. Financially constrained hotel firms should retain more of their cash instead of distributing them to shareholders to eliminate underinvestment problems and potentially bankruptcy. The retrained earnings allow managers to allocate internal resources efficiently and ultimately to increase investment to an optimal investment level, where the firm value is maximized. Financially constrained firms may be able to reduce the wedge between external and internal funds in acquisitions because asymmetric information between acquiring firms and the target company could be fewer in relation to the capital markets. Furthermore,

financially constrained firms with growth prospects should consider expanding through franchising when they have insufficient cash to undertake positive NPV projects. Expansion through franchising eliminates the need for costly external finances because franchisor does not require substantial capital investment. Financially constrained hotel firms might be profitable investment opportunities for stock market investor because these firms indicate growth prospects. However, stockholders should closely examine these firms' leverage, as excess leverage may lead to bankruptcy.

Limitations and Recommendations for Future Research

Despite its contribution to the hospitality and corporate finance literature, this study has limitations. The existing financial constraint measures are developed based on firms' including all industries. Although these financial constraint indices can be used to measure lodging firms' degree of financial constraints, they may not capture idiosyncratic characteristics of the lodging industry. Therefore, future studies may develop financial constraint proxies to capture the unique characteristics of the lodging industry. These future studies may cover different geographical regions as well. The lack of investments in research and developments requires further investigation especially for unconstrained hotel firms. Also, the value of investment, cash holdings, and investment-cash flow sensitivity should be further examined to determine the extent to which financial constraints affect firms' value of investment, cash holdings, and dependence on cash flow for investment.

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AN INVENTORY DATABASE FOR GEOEDUCATIONAL OUTREACH BASED ON VOLUNTEERED GEOGRAPHIC INFORMATION (VGI) APPROACH IN MALAYSIA

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Abstract: The authors aim to construct a geosite database in Malaysia that is based on volunteered geographic information approach. This is because geosites information is quite scattered around the country. Free tools from the internet such as google form and wixwebsite.com were used to produce the database. The database is used to compile information not just from researchers but also from the public, and also functions to store, display and promote geosites in Malaysia. Therefore, based on its current functionality, this database could also perform as geo-educational tool for the public and also in an effort to conserve area with high geological interest.

Key words: Database, geosite, geoheritage, inventory, volunteered geographic information

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INTRODUCTION

Geodiversity as defined by Dixon (1996) is a range or diversity of features, assemblages, systems and processes in geology, geomorphology, and soil. A geosite on the other hand is defined differently. A definition provided by the European Association for the Conservation of the Geological Heritage (ProGeo) 2011, clearly stated that a geosite is a 'key locality' that shows geological features with scientific interest, which can tell a story on the evolution of the earth and geological history. Such elements are for examples, stratigraphy, palaeobiology, mineral, plate tectonic, volcanic, and so on. A geodiversity therefore is a term used to indicate a group of geosites with different geological featuress in an area. To date, Malaysia has one UNESCO Global Geopark and two national geoparks. The first Geopark in Malaysia is known as the Langkawi UNESCO Global Geopark (LUGG), and the other two geoparks are the Jerai National Geopark and Kinta Valley National Geopark. The LUGG has three geoforest parks namely, the Machinchang Cambrian, Kilim Karst, and Dayang Bunting Marble Geoforest Parks (Ali et al., 2012).

The Machinchang showcases the oldest rock formation in Malaysia (550-490 million years old with abundant fossils and unique landscape. The prominent geosites in the Kilim Karst Geoforest Park are caves (e.g. Kelawar, Buaya, Langsir, etc), Langgun Lake, and Mempelam Bay. The Dayang Bunting Marble Geoforest Park features a large doline which is now has become a lake. This geoforest park features diverse minerals, fossils, and landforms in its many geosites (e.g. Ular Island, Tuba Island, Tepor Island, and Wang Buluh Cave). The Kinta Valley National Geopark is predominantly underlain by limestone formation with small occurrence of other clastic sedimentary rocks and its geosites are mostly on cave formation and fossils (e.g. Gunung Kanthan), hot spring (e.g. Lubuk Timah Hotspring), and waterfall (e.g Batu Berungkai waterfall) (Daud et al., 2017). The Jerai National Geopark covers around 500 km^2 and has around 25 geosites that have been identified (Zakaraya, 2017). The few examples of these geosites are found along the footslope of Mount Jerai, and Titi Hayun Recreational Center.

In order to conserve geosites, inventory is the first step to be taken (Moura et al., (2017). Dixon (1996) stated that the greatest obstacle to achieve the objectives of conserving geological sites are the lack of information that provides details on the uniqueness, importance and best representatives of features in a country. Failure to to do so have led to certain geosites being removed or damaged by anthropogenic causes. For example, inundation of Lake Pedder landform assemblages and removal of terminal moraine marking, both by hydroelectric development and quarry respectively (Dixon, 1996). Internationally, many countries have produced programs and wide range of approaches to document the diversity of geological and geomorphological interests in their countries (Dingwall et al., 2005). In Malaysia, systematic and centralised documentations of geosites remains a challenge. One notable paper on a database that can compile and store information on geosite was first published in 2004 (Komoo et al., 2004). The database constructed using Microsoft Access has three sections; general information such as locality, name of geosites, etc; heritage characterisation information; and geosite management information. At past, this database is appropriate as as information of geosites are still few in numbers. However, as development in Malaysia is rapidly progressing, identification of new geosites must be conducted faster than the previous years. This effort must involves not only the government agencies but also the public. Therefore new database system that could be used easily to compile, stored, and display information on geosites is urgently needed to keep up with the pace with the current situation. Apart from getting an up to date system, this study has also identified several reasons on why a database is urgently needed at this moment in Malaysia. Some of the reasons are:

- geosite mapping and geopark have been one of the national agendas within the past few years and government agencies throughout Malaysia are actively pursuing it;
- national institutions are also conducting many research on potential geosite which connect geology with other disciplines such as biology, ecology, and culture;
- there is also a need to educate the public and make them aware on the existence of geosite throughout the country, this could help in protecting and promoting the geosite.

Therefore, as these events are occurring, vast data are pouring in and a system is needed to keep and manage these mass of data. Based on the necessity mentioned above, this study is conducted to focus on four objectives as follows:

a) To produce a system that is capable to capture data through crowdsourcing
b) To design a system that is friendly and familiar to the end user and to the administrator
c) To compile data on potential geosites in the country via one centralised system
d) To design a system that could be used for public education

In Malaysia, the government commitment to develop and maintain the tourism sector is almost limitless, making this sector ranks second in GDP contribution after the manufacturing sector (Mosbah & Saleh, 2014). Producing the database to document geosites in Malaysia is in line with the vision and mission of Tourism Malaysia to transform the country into a world class tourist destination by the year 2020 and at the same time to conserve the heritage of the country (Ministry of Tourism, Arts, and Culture Malaysia). The term 'heritage' used here could also include natural heritage such as geoheritage, which comprises of geological features high in scientific, cultural, aesthetic and educational significance (Lazzari & Aloia, 2014; Kepalaite, 2015).

PURPOSES OF A GEOSITE DATABASE

When dealing with enormous amount of data several questions may arise starting with what information to keep and why? how to keep this data? and where to store them? If these information are for the public (e.g. education), how to get them across? Based on these questions, the literature studies in this article are divided into four parts as follows: Data inventory, record keeping, public involvement, and lastly, how to get the information to the public.

(a) Database inventory for a geosite/geoheritage

Geological heritage or geoheritage is essentially important because they are an open book that contains the memory of the earth that tells us about events that happened in the past; without them, we would not be able to understand the processes that affected our earth at present (Diaz-Martinez & Gullen-Mondejar, 2009). At the international level, geoheritage has become important because it has the story that are linked to the history of human civilization providing resources for development and also providing a sense of place not only to the community around the place but also to visitors (Brocx & Semeniuk, 2009). One of the ways to manage and plan for development and conservation of geoheritage sites is to have a proper inventory system.

The importance of geoheritage inventories is well discussed in Betard et al., (2015), where according to them, an inventory is part of the documentation for decision making in geopark application and also in solving management issues that are related to geotourism and geoconservation. Their inventory, which is done in the Regional Natural Park of France (PNR territory), comprises of 143 geosites that were ranked based on their level of importance that were obtained from numerical assessment conducted during the inventory process. The rank range from low heritage value with local interest (0 star) to high heritage value with international interest (3 star); within the PNR territory, there are 19 geosites with

3 stars, 34 geosites were given 2 stars, and the other 53 with just 1 star. Ranking these geosites would not be possible without a proper documentation on each of the geosite.

Inventory for geosite/geoheritage is not only useful for geotourism and geoconservation. It also constitutes a good foundation for geoeducation activities (Betard et al., 2015). Vye (2016) has demonstrated on how geosites inventory can play a significant role in educating the public in Keweenaw Peninsula. This is done by stewardship of geosites program. The educational values for these geosites were derived from qualitative assessments done by school teachers. Thus, in view of the benefits to have geosites inventories at the international level, IUGS (2012, 2014) has included developing an inventory for geoheritage sites as one of their main objectives that need to be achieved in their Geoheritage Task Group. Several data inventory methodologies have been adopted by various researchers in the past. Brilha (2016) has proposed several inventory elements for a geosite. These elements are arranged in sequential order including scientific, educational and touristic values. Another well demonstrated method of an inventory system can be found in Randrianaly et al., (2016) in which the system is focused more on acquiring elements in the field and the data input requirement are very comprehensive which include the general information on the geological site (e.g. property, toponym, GPS coordinates, geological map, scientific interest, etc) and secondary information such as the type of protection, level or preservation and the existence of cultural values resembling myths or legendary stories. Other method of inventory at the local and regional levels are discussed in depth by Joyce (2010) and Vye (2016).

(b) Record keeping

One of the prime example of geoheritage database is found in Calder et al., (2017). They have produced a database containing geosites in Nova Scotia that is completed with levels of significance for each geosite. These geoheritage sites were separated into natural and cultural sites. The attributes provided for each category are presented in Table 1.

Table 1 Categories in the Nova Scotia database system (Source: modified from Calder et al. 2017)

Natural category	Cultural category
Site name	Site name
County, age (geological period)	County, category (e.g. First nation sites, memorials, museums)
Level of significance (i.e. 1–globally unique, 2–globally significant or 3–exceptional example	Coordinate information
Brief description	Links to other data including photos, Websites and related documents
Coordinate information in UTM and latitude and longitude	

Integration of database with GIS applications are also common in geoheritage information management. One of the earlier work combining GIS application and the web was done by Ghiraldi et al., (2009) for the Piemonte Region, Italy. Here, they intergrated GIS applications with the internet to publish cartographical information which include images, descriptive cards and bird's-eye virtual views. This combination of Web-GIS application can perform as an instrument to present research results and to promote knowledge of geosites to the public at large. To reach to the general public, their Web-GIS application was developed using an open source web mapping known as MapServer (https://mapserver.org). Li et al., (2015) also discussed how GIS was used with the internet to form a WebGIS database for several databases in China. Another way of record keeping is using the GIS geodatabase found in ArcGIS application. The advantages of using GIS geodatabase were discussed in Cioban et al., (2011). The advantages that were

highlighted are: geodatabase provides editable domain for attributes; a new geodatabase can be generated that has the same structure as the previous one and flies transfer are also achievable; sharing of common data among users is possible; and validation rules that control how features behave can be imposed in a geodatabase.

(c) Public Involvement

Due to the design structure of the internet, user plays both roles as information consumer and also as information provider; thus this dynamic system creates an environment where collaboration among individuals can be made (Flanagin & Mertzger, 2008). An appropriate term for this 'interaction' is crowdsourcing. An example of crowdsourcing is where an organization is using a network of collaborators to solve a problem (Misra et al., 2014). Alternatively, crowdsourcing can be defined as a system that enlists a multitude of people to assist in solving varieties of issues (Doan et al., 2011). However useful the crowdsourcing approach is, the effectiveness of the system used to collect the information is dependent on the end-users, which is the public in general. Therefore, the level of knowledge in geospatial technology such as GIS skill of the end users must be taken into account for any construction of applications that are based on GIS (Aburizaiza & Ames, 2009). In geographic terms, crowdsourcing is similar to volunteered geographic information (VGI). This is a term that denotes the collection of geographic information by way of crowdsourcing technique (Fast & Rinner, 2014). Alternately, VGI can be defined as citizens contributing geospatial information about the earth or environment through a collaborative projects (Mooney et al., 2013).

Both systems use individuals who are not necessarily in the same organization to solve certain issues revolving around an organization. Although crowdsourcing or VGI is less labour-intensive and can minimize cost within an organisation, several precautions need to be taken attentively such as the quality, reliability and overall value of the data that were shared (Flanagin & Metzger, 2008). One of the good examples of VGI is the information sharing in Wikimapia and Flickr sites where photographs are referenced with GPS coordinates and descriptions (Goodchild, 2007). Ho and Rajabifard (2010) described VGI as a spatial information product for the society by the society. An example of crowdsourcing approach implemented in geoheritage practices is the development list of geoheritage sites in Nova Scotia, which involved input from the public in general (Calder et al., 2017). Another example was discussed in Dahl et al., (2015). Due to absence of systematical classification and identification of important geosites in their database, crowdsourcing was used to validate and valorize registration that were conducted for the past 30 years. Guidelines however, were used for these validation practices. By getting the public involved, they hope to raise awareness on important sites.

Other example of full utilization of the usefulness of VGI was during the earthquake relief effort in Haiti. Zook et al., (2010) have perfectly demonstrated how a volunteer geographic information (VGI) system can contribute to a better interaction between distant places for relief work and aid agencies without being physically present in the affected locations. They also argued that crowdsourced information is likely to be just as helpful as information that were produced by centralized means in their relief works.

Other ways to get input from the public is by web-mapping using an open source applications, such as the google map. This method was used by Martin et al., (2014) to disseminate and obtain information on geosite inventories Switzerland at both national and regional scales. According to Martin et al. (2014), there are three components in web-mapping, which are dynamism, usability, and interactivity. These components summarize the manners in ways web-mapping can be used:

a) Users can edit, update, replace and add items in real time;

b) No specialised training is required to handle tools in the web to present concise and clear in-formation;

c) Some thematic and spatial selections can be conducted easily by users.

In terms of devices for data sharing, smartphones are common tools to share geospatial information at the moment (Neis & Zielstra, 2014). Senaratne et al., (2014) argue that due to the ubiquity of advancement in web and location-sensing technologies, over the pass decades, which some are handheld devices, spatial information can be produced easily regardless of the citizens' knowledge on geospatial. However, some of these information that were provided by the public have drawbacks because of their varying quality (Senaratne et al., 2014). According to them, this is due to the varying technologies and tools with different level of accuracy provided by diverse contributors and the lack of gatekeepers.

(d) Getting the message across

Keeping the geosite information in a database away from the public will not be beneficial for conservation and promotion efforts. Public education and awareness is very important in keeping the place well protected from destructive development. One of the excellent efforts by the management of Nova Scotia for geosite promotion is to allow user to download the locations of interesting geoheritage sites in a digital format (Calder et al., 2017). Apart from free downloadable data, a story map on the geoheritage of Nova Scotia was also produced for public awareness. The story map is complete with photos, maps, descriptions, and also provides link to other useful information about the sites. Both, information on geopark and its interpretation systems are necessary for geoeducation and geoconservation (Li et al., 2015). They also show that to be effective in communicating geoeducation to the public, a geopark must have at least two basic systems; a geopark database and a geopark website. An example of these systems are shown in the structure of the Ningcheng Geopark Database. The few important elements found in the database are information on fundamental geology, resources and environment and tourism information, and according to them devices such as smartphone can also be used to accelerate scientific information on geoparks for education and communication purposes.

EMERGING TREND OF GEOGRAPHIC INFORMATION MANAGEMENT IN TOURISM

In the past, GIS is primarily used by professionals in the administration mainly due to the fact that they had access to required peripherals for the system and they are the one to process and analyse spatial data (Abdalla & Frank, 2014). Commonly in the previous years, maps and multimedia stored in CD-Rom are tools used in environmental tourism (Castaldini, 2008). Emerging of new technological trends such as big data, collective sensing, advanced spatio-temporal data, and internet of things can be used to address information needs in tourism activities (Steenbruggen, 2016). Based on the document published by the United Nations Initiative on Global Geospatial Information Management (UN-GGIM 2013), data captured and generated have grow exponentially and this trend will continue in the next five to ten years with the emerging of new technologies. This new trend owed it successes to the existence of 'mobile' technology (UN-GGIM, 2013; Abdalla & Frank, 2014; Sttenburggen, 2016). Cayla & Martin, (2018) envision that in the future, cutting edge technologies such as geovisualisation models using high-resolution images and 3D representation techniques will be useful for such following events:

a) To prevent geohazard events;

b) To keep digital archive of vulnerable sites;

c) To produce replicas such as cave replicas;

d) To augment reality for geotourist.

In light of this emerging technologies and how they will benefits geosites conservation, relevant agencies who are directly or indirectly involve in geosite management must use this technology to collect vast information from the public and at the same time to use these emerging technologies to educate people on matters concerning geosite conservation.

METHODOLOGICAL FRAMEWORK

Discussions on the methodology are divided into two parts, namely: the non-technical requirement of the database and the database construction.

(a) Database Non-Technical Requirement

There are several requirements outlined when the design of the database was planned. The requirements are:

a) *Crowdsourcing* - The main aim of the system is to be able to collect data from everywhere and anyone.

b) *Free* - The system should be free or at a nominal cost. Maintenance cost, whenever possible should be avoided.

c) *User friendly* - Easily maneuvered, no hidden details or link.

d) *Familiarity* - The system must be tools that are commonly used by everyone. This is particularly applied to forms and maps that are displayed in the site. Apart from end users, the system should also be in a condition where it is easy to be maintain and managed by an appointed administrator.

e) *File conversion* - In terms of a file conversion, the raw data should be easily converted to other formats to be used in other software (e.g. GIS softwares).

f) *Mobile friendly* - Smartphone should be able to display the system for viewing and collecting data.

g) *Public display* - Public can view the proposed geosites in a map and also the attributes relevant to the geosites.

h) *GIS software* - GIS software should be able to store, display, and analyse the data from the system whenever needed.

(b) Database Construction

In general, the whole system can be divided into four stages (Figure 1): the collection, organizing and conversion of files, storage, and finally the display. At the collection part, users will enter the information on a particular geosite via the google form provided by the administrator and later, the administrator will organise the data entry into a systematic order. Conversion of files are only conducted when necessary, for example, if the data is needed in a different format or file extension. The third part is the storage, where there are several options on how the data can be kept, based on the decision of the administrator. The final part is the display, where the data entered by the user is shown to the public, which is under the discretion of the administrator.

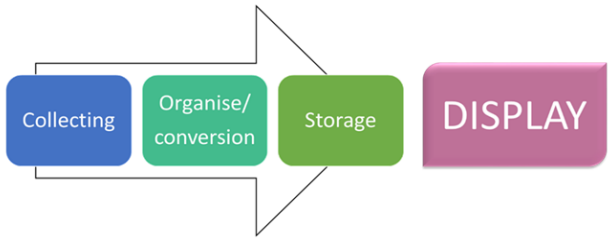


Figure 1. Stages in managing the database

These four parts of the database were produced by using several free online tools as presented in Table 2. Each of the four parts are discussed as follows:

Table 2 Free online tools that were used to construct the database

Stages			
Collecting	**Organising/Conversion**	**Storage**	**Display**
Google form	Google sheets	Google drive	Wix.com
	Microsoft Excel	Geodatabase	Google Maps
			Google Earth
			ArcGIS

i) Collection Stage

The collection stage involves users to enter information directly into the inventory form designed using the google form tool. The inventory form has three categories of questions that are considered crucial for a potential geosite, which are: General category, geosite characterization, and geosite management. Explanation on each of the categories is given in the result and discussion section of this article. The main domain of the form is a text. Pictures such as maps and photos can also be uploaded on the form. After users enter their data, the administrator will examine the data quality and he can either reject, accept or keep the data for future consideration based on the data quality. Subsequently, the location and basic information of the site will be displayed on a google map for the public. Figure 2 outlines the steps in the collection stage.

ii) Organisation and Data Conversion

This stage is controled by the appointed administrator who will conduct the labelling, organise the data into groups of locations (e.g. in the same state, district, etc) and also prepare the data in a file that can be easily converted to other file types. The tools involved in this stage are google sheet and Microsoft Excel.

iii) Storage

The data is stored in a google sheet and kept in a google drive. However, the administrator can also store the data in a geodatabase (ArcGIS). Microsoft Excel is another option to store the data, but since some of the data contain pictures or maps, Microsoft Excel might not be a proper option.

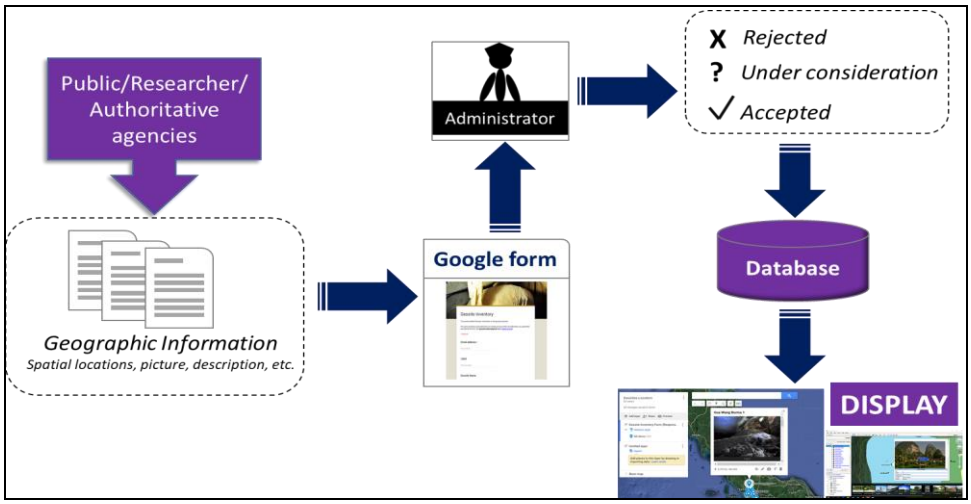


Figure 2. Stages in the collection parts of the database

iv) Display

To display the information of geosites in Malaysia, the wix.com website builder is used to display maps and also to keep the inventory form. This tool is easy to use and a website can be created within days. Google maps and Google Earth are used to display the location of geosites and their information. ArcGIS can also be used to display the data when needed.

RESULT & DISCUSSION

The discussions on the database are divided into four sections as follows: the main display, geo-educational sites, maps on potential geosites, and the inventory form.

a) Main Display

The database was created in a form of a website that is reachable via the link below:

https://geoparkmalaysia.wixsite.com/geoparkmalaysia

The wix.com website builder was used to construct the main display. The database is linked to other important elements of the database including the inventory forms, geoeducational locations, and the potential geosites map. The display of the database is divided into four main sections as follows:

i) The title section that informs users about the aim of the geoheritage efforts in Malaysia (Figure 3)

ii) The link to the national and UNESCO Global Geoparks in Malaysia. So far, only the websites of the Langkawi UNESCO Global Geopark is active, the other two are still under construction

iii) Geoeducational locations of several places in Malaysia

iv) Potential geosites map and the inventory form

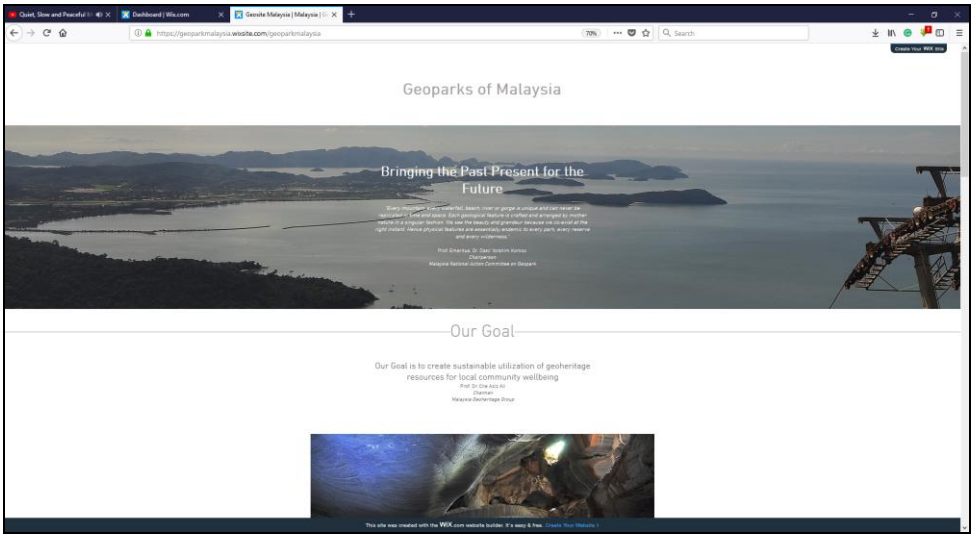


Figure 3. The aim of the geoheritage effort in Malaysia is firstly presented to inform user on the aim on the geoheritage conservation in Malaysia

b) Geoeducational Sites

One of the main aims of this database construction is an 'outreach' to wider audience on the awareness of geology in Malaysia. Digital technologies such as website and smartphone are notably indispensable tools to achieve this target (Li et al., 2015). Therefore, this database was constructed based on the VGI approach as a two way

communication to ensure that this database is not only meant for inventory purposes, but also as an information portal on geosites in Malaysia for the end users. As for the geo-educational purpose, this database is linked to the geopark websites in Malaysia and also to some geo-educational sites that were created based on a story map approach (Figure 4). The authors hope that with the listing of these geoeducational sites, they can be part of environmental education activities to increase awareness among the public to protect nature (Ilies et al., 2017). Story maps are also known as geovisual stories which refer to data-driven story telling practices in journalism and geovisual analytics (Berendsen et al., 2018). Maps can be a powerful medium to convey a 'story' which in the past was perceived in oral or textual forms (Strachan & Mitchell, 2014). One of the ways to entice people to read more on factual subjects is to construct a storyline. This study uses the story map approach by ESRI to construct a storyline depicting geological facts. Story map is a tool that is equipped with simple, non-technical interface and combined with dynamic web maps as well as other story elements that makes them an ideal technology for education (Strachan & Mitchell, 2014). The ESRI story map tool is complete with satellite imagery which this study uses fully to create a map. Marta & Osso, (2015) pointed out that map-based storytelling is a very useful tool to communicate knowledge focusing on 'where' the stories happened.

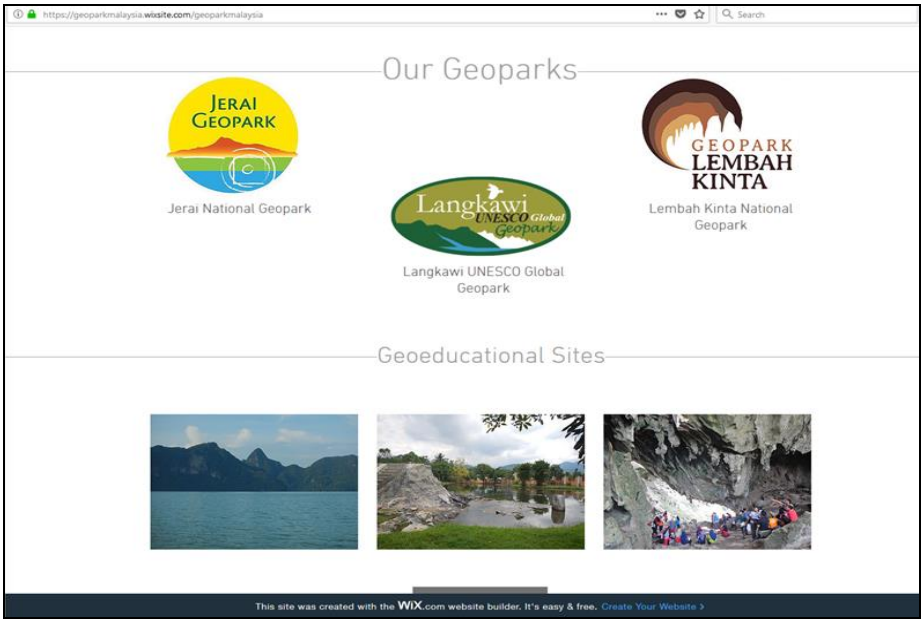


Figure 4. Links to other geoparks in Malaysia and also to some of the story maps that were constructed for public education

Therefore, story based on maps is very effective and easily implemented with GIS, web maps and mobile apps are now readily reachable to almost everyone. This study has designed two story maps in English for public education. A brief description for each story map is given as follows:

i) Through the Lens: Rocks under a Microscope

This story map showcases detail petrographic studies that were carried out to determine physical changes that occurred in a rock when in contact with igneous intrusion. Rocks were collected from different distance from the contact zone. The size,

shape, type, and the appearance of minerals under the microscope were identified and the changes were recorded as rocks getting closer to the contact zone. In the story map, the name of minerals, shape, size, and appearance are stated (Figure 5).

ii) *Geoheritage Evaluation of the Hulu Langat Geothermal Geosites, Selangor, Malaysia*

The second story map portraying the different geothermal sites in the district of Hulu Langat, Selangor. Various information can be obtained from this story map such as the lithology, the location of the geothermal sites, and also other general information that are useful for visitors (Figure 6). This story map also provides some information on the main chemical elements in each of the geothermal sites.

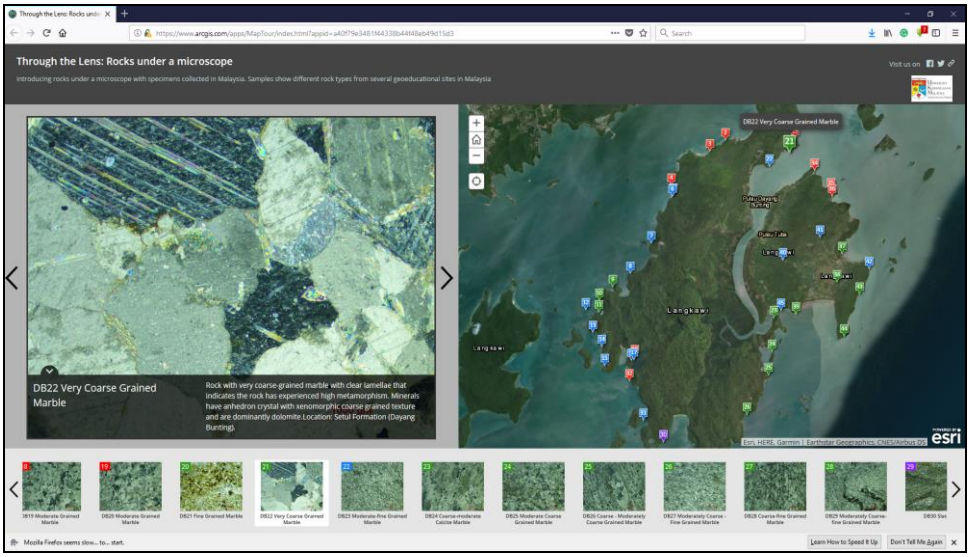


Figure 5. Besides geological information, this story map educates the public on rock features under a microscope

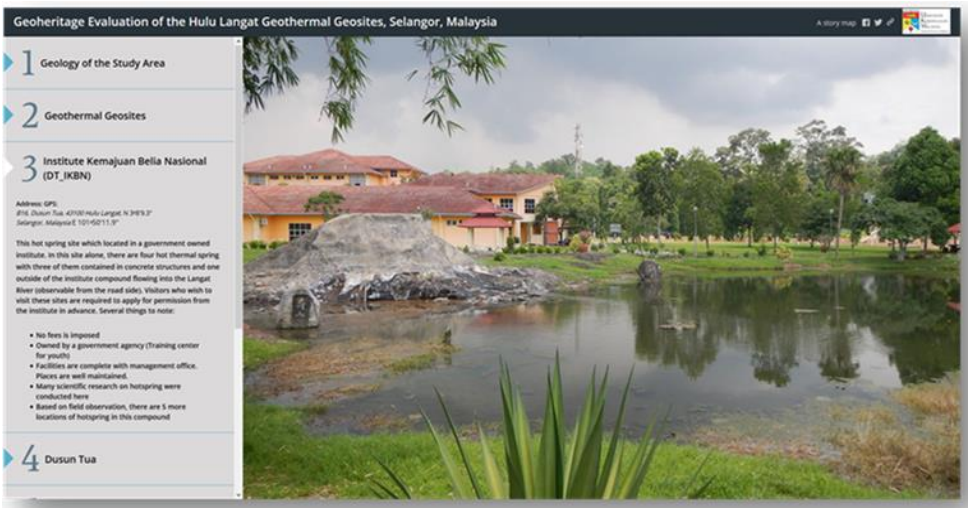


Figure 6. Information on geothermal sites portrayed in a story map (Source: background map based on ESRI 2017)

c) Maps on Potential Geosites

The study uses satellite imagery from Google Maps and Google Earth to show the locations of potential geosites around Malaysia. The locations so far only cover parts of the three states in Malaysia, namely, Kedah, Perlis and Perak. These maps provide an interactive environment for users of wider background which may lack of geospatial knowledge. Non-technical map for non-technical users are important for greater participation of communities in decision making process (Ellul et al., 2009).

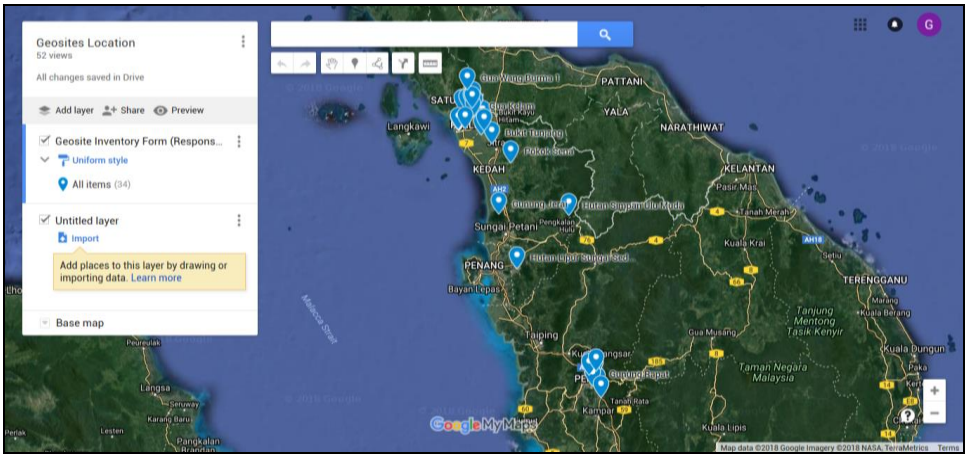
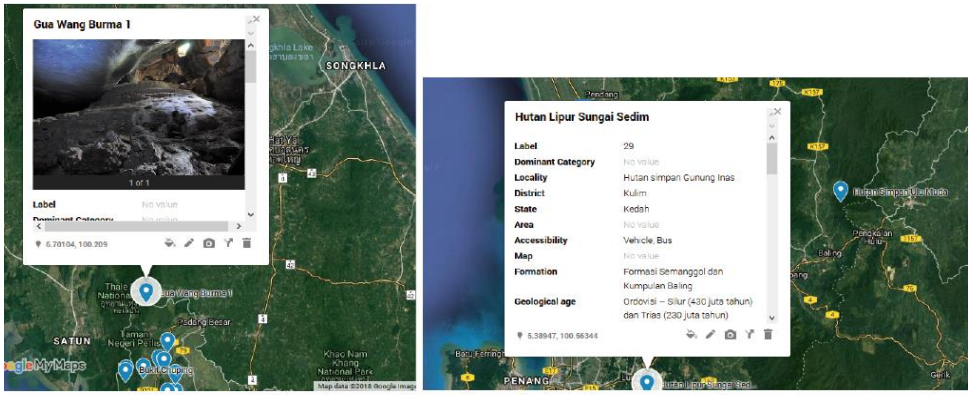


Figure 7. Some of the potential geosite locations as mapped on Google map (Source: background map based on Google Map 2018)



(a) (b)

Figure 8. Useful functions in Google Map (a) Display pictures embedded together with the point location (b) Attributes of the locations can be displayed once a user clicks on any point locations (Source: background map based on Google Map 2018)

Google Maps and Google Earth are selected to display the locations because both of these tools are commonly used to find places, display maps, query and have numerous functions that are freely available to users. Figure 7 shows some of the potential geosite locations as mapped on the Google map and Figure 8 (a) and (b) displays some of the functions available in Google Map such as displaying picture and information when a user click on a point location. Apart from Google Map, this study also uses the capability of

Google Earth to display information on potential geosites in the database (Figure 9 a & b). Other than using the tools from the internet, this study also fully utilises the geodatabase (ArcGIS) capability to provide visual on the distribution of geosites in Malaysia.

d) Inventory and Data Keeping

As mentioned in the methodology section, there are three categories of question in the inventory form and each category has its own sub-questions (Table 3). The general category consists of questions that describe the potential geosite with regards to its locality, GPS location, area, and accessibility. Information required in the geosite characterization category are mostly geological in nature such as the name of the geological formation, detail explanation on the dominant geological category, the level of ranking, and uniqueness. Finally, the geosite management category covers issues on the current preservation status of the area, its level of vulnerability to damages, current functions, and legislative provision.

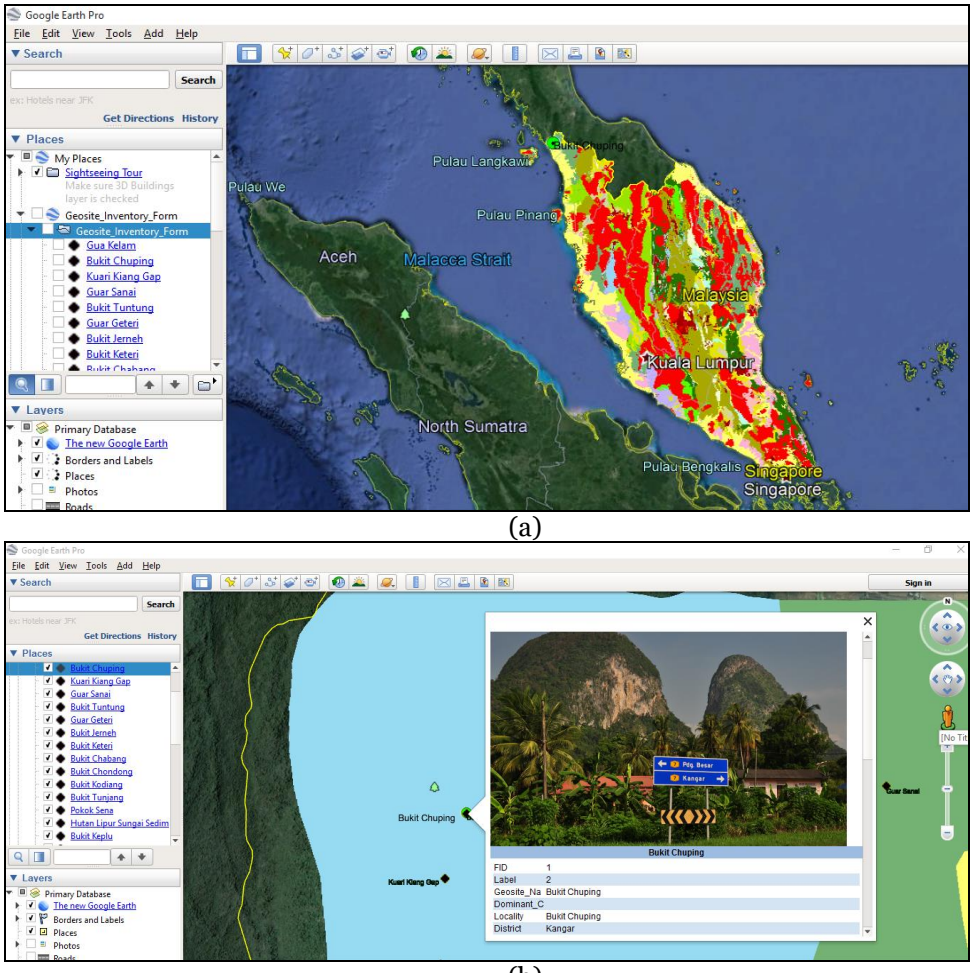


Figure 9. Some available functions that can be used to display maps that are useful for this study (a) Geological map embedded on Google Earth (b) Picture together with the information for a potential geosite appears when a user clicks on the point location of the potential geosite (Source: background map based on Google Earth Pro 2018 & geological map from the Director General of Geological Survey of Malaysia 1985**)**

Table 3 Items in each category of the inventory form

General Category	Geosite Characterization	Geosite Management
Label Geosite name Land owner Locality District State Area (m2) Map/picture Accessibility • *Vehicle* • *Bus* • *4WD* • *Boat* • *Others* Coordinate • *Latitude* • *Longitude* *Geodiversity* • *Rock* • *Mineral* • *Processes* • *Geohazard* • *Geomorphology* • *Landscape* • *Fossils* • *Primary structure* • *Secondary structure*	Formation Geological age Geoheritage value (Explanation in detail) • *Scientific value* • *Aesthetic value* • *Recreational value* • *Cultural value* Ranking • *Local* • *National* • *Regional* Uniqueness • *Unique* • *Rare* • *Common* Dominant geological feature/s (Explanation in detail) • *Rock* • *Mineral* • *Processes* • *Geohazard* • *Geomorphology* • *Landscape* • *Fossils* • *Primary structure* • *Secondary structure*	Current status of conservation • *Not preserved* • *Within preservation area* Currently function as • *Cultural/religious site* • *Recreation* • *Education* • *Research* • *Tourism site* • *Residential* • *Others* Geoheritage level • *National* • *Global* Legislative provision Levels of vulnerability • *None* • *Vulnerable* • *Highly vulnerable* • *Details* References of geosite Other remarks

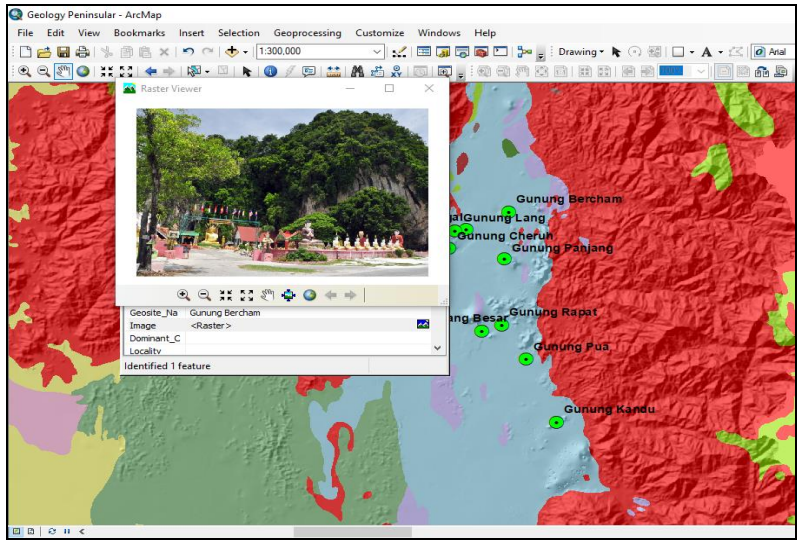


Figure 10. Visualisation of geosites distribution using geodatabase
(Source: Geological map from theDirector General of Geological Survey of Malaysia 1985**)**

A snapshot of the inventory form designed to collect information is presented in Figure 11. The data entered by users will be automatically recorded in a Google Sheet that

is kept in the google drive. Each of the columns in the Google Sheet contain information for each of the questions asked in the inventory form (Figure 12).

Besides Google Sheet, geodatabase tool in ArcGIS software is also used to keep the data permanently. However, conversion is needed to enable the data from the Google Sheet to be usable in ArcGIS; this is done by converting the Google Sheet data to Microsoft Excel file and later to '.shp' extension. The geodatabase also has the capability to display data with picture and attributes of a site (Figure 10). The purpose of keeping the data in a geodatabase is for GIS analysis in the future.

e) Administrator Responsibility

The administrator is responsible to organise and manage the data entered by users. Data examination is done in a meeting with experts in the geoheritage field because some of the data might not have correct interpretation and also may contain errors due to different devices used to capture the information (Senaratne et al., 2014). Other reasons might be that the information entered is sensitive or disclosing the information is prohibited by law and copyright.

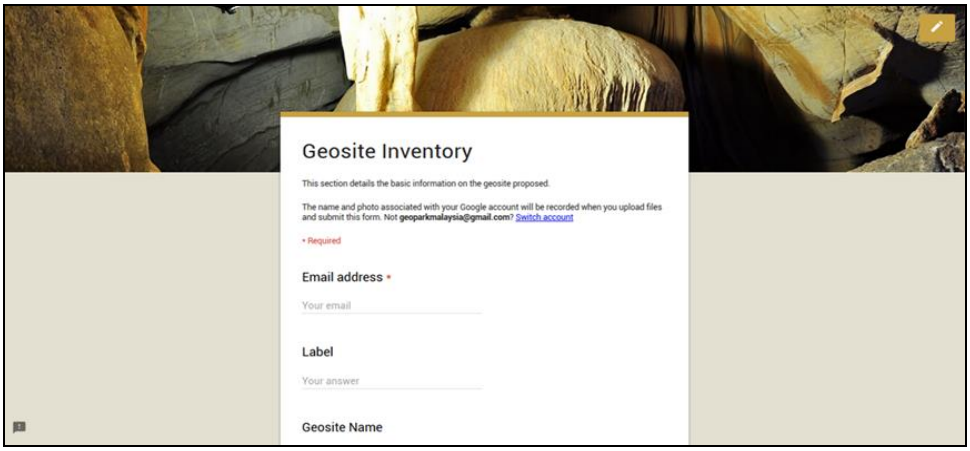


Fig. 11. The layout of the inventory form for data collection

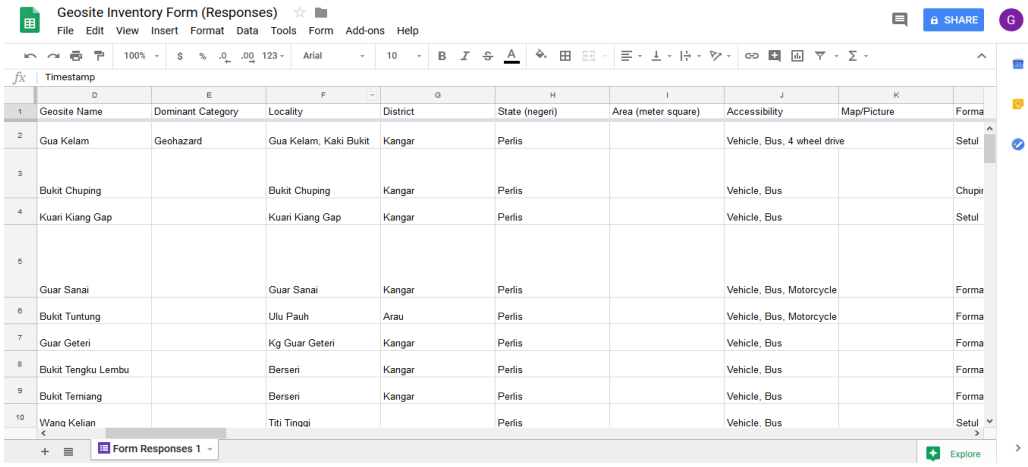


Figure 12 Data in a Google Sheet with each row representing
a different location and each column represents a question given in Table 3

f) Smartphone Compatibility

One of the requirements of this study when developing the database in a form of a website is to make sure that it can be displayed on a smartphone. This is because, smartphone can accelerate information sharing which is vital in geoeducation (Li et al., 2015). Figure 13 shows how the database is displayed on a smartphone.

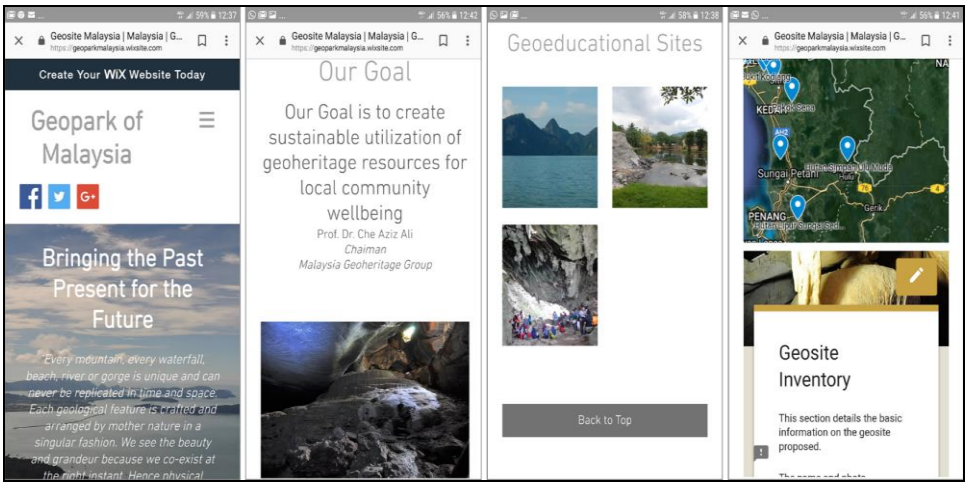


Figure 13. The database layout as displayed on a smartphone

CONCLUSION

The aim of this study to construct a database based on crowdsourcing and VGI approaches can be considered successful. The system was constructed successfully using different tools that are available online. These tools such as Google Form, Google Earth, Google Map, and Wix.com are free tools, thus, there is no cost involved in the construction of the database. The system was constructed with the objective that the user and the administrator of the database do not need intensive training to get familiar with the system. The database is now keeping around 45 potential geosites throughout three states: Perlis, Kedah, and Perak. Certainly, there will be more data to be added in the future. For the geoeducation purpose, the story maps tool was used to create a web-mapping storyline for two potential geosites in Malaysia.

The story map tool was used because it is user friendly, easy to scroll, clear in terms of presentation and description, equipped with a map, and interestingly designed to entice the public to learn more about geology. Overall, the database system produced in this study is satisfactory and can be browsed using both computers and smartphones.

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THE APPLICATION OF MARKET APPEAL-ROBUSTICITY MATRIX: A CASE STUDY OF THE ARCHAEOLOGICAL HERITAGE OF LENGGONG VALLEY, PERAK, MALAYSIA

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Abstract: As one of the important World Heritage Site – the Archaeological Heritage of Lenggong Valley, Malaysia, cultural tourism should be promoted along with heritage tourism by developing a number of linked sites as a heritage trail. For helping the development of such, this study evaluates the applicability of the market appeal—robusticity matrix on heritage tourism development, by assessing the potential for tourism in Lenggong Valley. Methods used were based on literature research, site observation and questionnaire survey. The detailed explanation on selected sites represent high and low levels of grading in terms of market appeal and robusticity, and hence suggesting different asset conservation and management options. The findings indicate the matrix is effective to evaluate the assessment of the heritage tourism potential because it instantaneously determines the importance of two major considerations for both tourism industry and heritage management—the attractiveness of the assets and its ability to cope with tourists. This assessment is essential to protect culture heritage assets through suitable legislation and framework for better informed planning decisions in the future. The distinctive features of the sites, their extent and, for the future, their conservation, will facilitate an improved appreciation of cultural heritage assets as part of the community.

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Key words: cultural tourism, Archaeological Heritage of Lenggong Valley, tourism potential, market appeal, robusticity

* * * * * *

INTRODUCTION

Cultural tourism can be defined as "a form of tourism that relies on a destination's cultural heritage assets and transforms them into products that can be consumed by tourist" (du Cros & McKercher, 2015, p. 6) and has been recognized as a special interest tourism segment by the United Nations World Tourism Organization (UNWTO) since 1976. The cultural tourism, a special interest form of tourism may be a less unfavourable and extra sustainable form of tourism (Bucurescu, 2013). It caters to the desire of tourists to learn about the history and lifestyle of a destination. It exploits both tangible and intangible cultural assets, such as the physical embodiment of cultural values in the form of historic buildings, monuments, arts and crafts, local ways of life, social customs and cultural celebrations and crafts to name a few (Li & Lo, 2004). On the other hands, cultural landscape (Cappucci & Zarrilli, 2008) and their relationship with environmental components and their development are topical issues in many countries since they represent a new way of building the relationship between people and nature, and can create new insights for tourism development of a territory.

Many recent studies in several regions of the world are engaged with the research theme that investigates the strong relationship between the environment and the cultural heritage (e.g Panizza & Piacente, 2008; Alexandrowicz et al., 2009; Kavčič & Peljhan, 2010; Bujok et al., 20015; Goemaere et al., 2015) and the relationship between geoheritage and tourism (e.g. Dowling & Newsome, 2010; Vdovets et al., 2010; Piranha et al., 2011; Fassoulas et al., 2012; Endere & Prado, 2014; Ólafsdóttir & Dowling, 2014; Sellier, 2016). The importance of developing studies linking geology, geomorphology and cultural heritage can be traced in Gordon (2012); Moroni et al. (2015) and Coratza et al. (2016). According to McKercher & du Cros (2002), the assessment of the tourism potential of a heritage asset involves not only an examination of its market appeal, but also the consideration of its ability to cope with tourists - its robusticity by using an audit model known as the market appeal—robusticity matrix (du Cros, 2001). The assessment for attractiveness includes the market appeal and product design needs, i.e. the visual appeal and setting, evidence of technical or innovative processes, tourism activity and their accessibility together with the availability of facilities and amenities. Assessing cultural heritage management should involve two major steps: examining the cultural significance of the assets and evaluating the robusticity, i.e. the assets' ability to cope with increased visitation. In addition, the assessment of aesthetic, historic, scientific, and social values as well as their rarity and representativeness is important for understanding the assets' cultural significance.

Any proposed use of the assets should be appropriate to the result of the cultural significance assessment that will determine the assets' tourism potential. In this process, market appeal assessment determines whether the heritage assets have features appealing to tourists and therefore must be correlated with a robusticity assessment that determines the degree to which visitation does not compromise the assets' cultural values (Li & Lo, 2004). In contrast, Bucurescu (2013) claimed, while the assessment on the images and promotion of tourism potential in historical town is crucial, the assessment of their robusticity- their capacity to resist and absorb the negative impacts from tourism, is considered a secondary issue that can be solved afterwards, if some problems appear. The Lenggong Valley can be considered as a natural laboratory (Hall, 2010; Sfenthourakis &

Triantis, 2017) for the study of the relationship between the cultural components of the rich heritage of the archaeological, geological and geomorphological context in which they are located. Until recently, Lenggong Valley had very few economic activities and was among the least populated districts of Perak State. These activities include agriculture, carpentry, deer farming, handicrafts and fishing as small-medium industries. Starting from 2012, the Lenggong Valley has been targeted for tourism development after its inauguration as a UNESCO World Heritage Site known as the Archaeological Heritage of Lenggong Valley (AHLV), after a series of ground breaking discoveries, especially the unearthing of the illuminant Perak-Man, on top of the discovery of a meteorite impact site and numerous prehistoric tools and open workshop sites (Department of National Heritage, 2011). Therefore, efforts have been made to market the unique local heritage and activities to tourists. AHLV has rich geological and archaeological heritages which exceptionally bear witness to the long prehistoric and geological activities within this area. The AHLV is located in the northern part of Perak State, Peninsular Malaysia (Figure 1).

Figure 1. Location map of the study area. Lenggong Valley is located in the upper part of Perak state, Malaysia

For instance, the Department of National Heritage is responsible to initiate, coordinate and control the activities on matters relevant to the proper management of

this area. Meanwhile, research institutions such as the Centre for Global Archaeological Research (CGAR) from University Sains Malaysia (USM) is undertaking the work to facilitate, promote and whenever feasible, engage in research and development including scientific and educational studies within the site with local or international research institutions under the supervision of the Department of National Heritage. Research scope will be broaden and not be restricted to only archaeology but cut across an array of wide-ranging disciplines which include geotourism, climate change, habitat evolution, botanic, global tectonic and etc. The major purpose of this paper is, therefore, to evaluate the applicability of the market appeal— robusticity matrix on tourism potential assessment in the context of cultural heritage management by assessing the potential for tourism development in the AHLV. This study focuses on 12 heritage assets of AHLV (Figure 2).

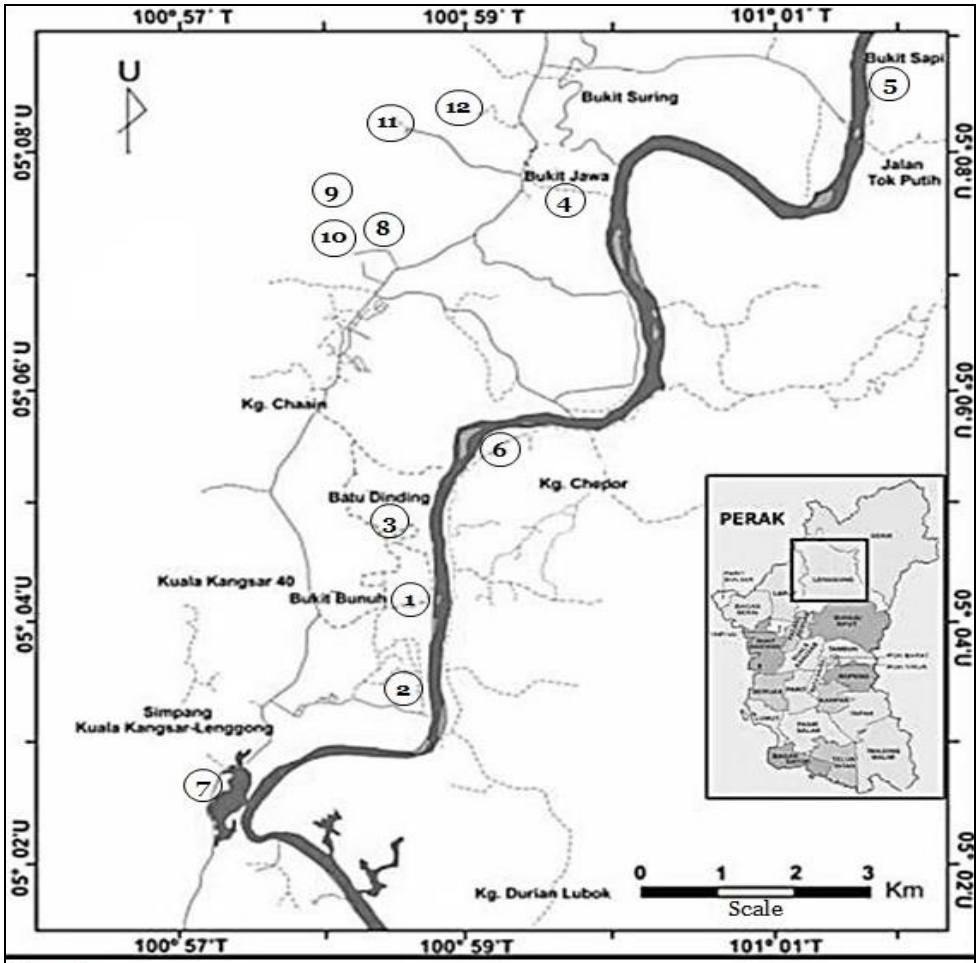

Figure 2. The heritage assets in AHLV are selected for this study
Source: Dossier of Archeological Heritage of Lenggong Valley (2012)

It is an extraordinary organically evolved cultural landscape (Cappucci & Zarrilli, 2008) that bears evidence of a continuous human occupation from the Early Palaeolithic to the recent past. The AHLV contains a myriad of caves and one of the largest numbers of in situ Palaeolithic open sites in Southeast Asia. All these open sites are located on ancient lakeshores, the remnants of which can still be seen today. The valley also holds important record of geological events that have affected ancient prehistoric society. One of these events is the meteorite fall about 1.83 million years ago. The other is a record of a volcanic eruption of Toba in Sumatra, Indonesia approximately 74,000 years ago. These two geological events have provided important samples for scientific dating of Palaeolithic sites in the Lenggong Valley. In addition to the open sites, the AHLV contains numerous cave rock shelter sites which were occupied by the inhabitants of the valley during late Palaeolithic when both geological and climatic conditions created habitable floors in the cave. There are a total of five limestone massifs, containing cave and rock shelters within the core and buffer zones of the nominated property. Human remains and artefacts with varying dates from 13,000 to 2,000 years ago have been recovered from two cave sites of Bukit Kepala Gajah and Bukit Gua Harimau. The human remains include the Perak Man, one of the oldest most complete human skeletons in Southeast Asia which has been dated to 10,120 years ago. The other burial provides evidence of a presence at the site during Neolithic and Metal age. Perak Man is the only prehistoric evidence in the world of a congenital deformity known as *Brachymesophalangia* type A2. The Perak Man provides a rare insight into Palaeolithic burials, diseases, beliefs and various aspects of life at that time.

METHODOLOGY

Literature study, site observation and questionnaire survey were the three major research techniques used. Literature study consists of relevant literature to collect background information for assessing the cultural significance of the assets and investigating the carrying capacity that constrain heritage tourism (Cappucci et al., 2015) development. The sources included government research and planning documents, academic literature on Culture Heritage Management, Conservation Management Plan, Special Area Plan and tourism planning. Site observations in the study area were essential in completing the assessment process, during which the researchers recorded such information as the accessibility, the fragility of the assets, and the availability of the on-site sightseeing information, the provision of signage and tourist facilities. In many situation, site observation is the most appropriate method for data collection. The questionnaire survey was to collect on the scientific and additional values of the assets (Rapidah et al., 2016), the availability of the tourist information, and the provision of the amenities. The respondents consisted of mostly the active researchers on the AHLV as well as the students who are conducting their fieldtrip to the AHLV (including international and local students) during the site observation were carried out. The researchers applied a market appeal—robusticity matrix based on du Cros's (2001) model to analyse the research data. The matrix contains a grading system of sub-indicators (see Table 1) that suggest the elements for assessing the two major indicators: a heritage asset's market appeal and robusticity. It will provide macro indicators about how assets could be managed in order to optimize the relationship between tourism and cultural heritage management (du Cross, 2001).

Of the two continua of the matrix (see Figure 3), robusticity is of most interest to heritage managers to obtain the ability of that location to cope with the possible negative effects of tourism development to the cultural values of the heritage place, while market appeal is of greatest concern to determine the level of attractiveness of the particular site and its potential to be developed and promoted to the tourism industry for its

representation of a heritage place's worthiness as a tourism attraction (Li & Lo, 2004).In this study, each selected asset was assessed in detail and graded according to each sub-indicator (Table 1) by utilizing a scaled point system. Each sector's sub-indicators was given sixty points as the maximum possible score. Once all the grades had been assigned to all indicators in each subset, an asset could be plotted on the matrix with regard to its position in relation to either continuum. There are different implications depending on the location of the asset in the matrix. A1 and A2 represent high market appeal and high to moderate robusticity, ideal for significant tourism activity because they have features to attract tourists and can endure the use in a significant level.

Table 1. Cultural heritage tourism sub-indicators and ranking score
(modified after du Cross, 2001; McKercher & du Cros, 2002; Li & Lo, 2004)

Tourism sector				
Market appeal				
1.	Ambience and setting			
	Excellent 5	Good 4	Adequate 2–3	Poor 0
2.	Well-known outside local area			
	Quite well 4–5	Somewhat 2–3	Not at all 0–1	-
3.	National or important icon or symbol			
	Yes 4–5	Has some potential 1–3	No, nor likely to be 0	-
4.	Can tell a "good" or "interesting story" – evocative place			
	Yes 4–5	Has some potential 1–3	No, nor likely to be 0	-
5.	Has some aspect to distinguish it clearly from nearby assets or attractions			
	Excellent 5	Good 4	Adequate 2–3	Poor 0
6.	Appeals to special needs or uses that would also attract tourists (e.g. festivals, sports)			
	Yes 4–5	Has some potential 1–3	No, nor likely to be 0	-
7.	Complements other tourism products in area/region/destination			
	Yes 4–5	Has some potential 1–3	No, nor likely to be 0	-
8.	Tourism activity in the region			
	High 4–5	Somewhat 2–3	Not at all 0–1	-
9.	Destination associated with culture or heritage			
	High 4–5	Somewhat 2–3	Not at all 0–1	-
Product design needs				
10.	Access to asset's features			
	Access to all features 3–4	Limited access 1–2	No access allowed 0	-
11.	Good transport/access to assets from population centres			
	Access excellent 3	Easier to reach 1–2	Very remote/ difficult 0	-
12.	Proximity to other heritage assets/attractions			
	Walking distance 3	Easier to reach 1–2	Very remote/ difficult 0	-
13.	Amenity (washrooms, parking, pathways, refreshments, availability of information)			
	Excellent 5	Good 3–4	Adequate 1–2	Poor 0
For the tourism sector *Low appeal=0–20 Moderate Appeal=21–40 High Appeal=41–60*				
Cultural heritage management				
Cultural significance				
14.	Aesthetic value (including architectural value in the case of buildings)			
	High 2	Medium 1	Low 0	-
15.	Historical value			
	High 2	Medium 1	Low 0	-
16.	Educational value			
	High 2	Medium 1	Low 0	-
17.	Social value			
	High 2	Medium 1	Low 0	-

18.	Scientific value/Research potential			
	High 2	Medium 1	Low 0	-
19.	Rare or common heritage asset type at the destination			
	Unique 3	Rare site type 2	Less common site type 1	Common site type 0
20.	Representativeness (good example of type) at the destination			
	Excellent 4	Good 2–3	Poor 1	-
Robusticity				
21.	Fragility of the asset			
	Not fragile 4	Quite fragile 2–3	Very fragile 0–1	-
22.	State of repair			
	Excellent 4	Good 2–3	Fair 1	Poor 0
23.	Management plan or policy (Western or traditional) in place			
	Yes 5	In preparation 1–4	No 0	-
24.	Regular monitoring and maintenance			
	Excellent 5	Good 3–4	Fair 1–2	Poor 0
25.	Potential for ongoing involvement and consultation of key stakeholders			
	Excellent 5	Good 3–4	Adequate 1–2	Poor 0
26	Possibility of negative impacts of high visitation on:			
	(a) fabric of the asset(s)			
	Low possibility 5	Medium possibility 2–4	High possibility 1	-
	(b) lifestyle and cultural traditions of local community(ies)			
	Low possibility 5	Medium possibility 2–4	High possibility 1	-
27.	Possibility of modifications (as part of product development) to have negative impacts on:			
	(a) fabric of the asset(s)			
	Low possibility 5	Medium possibility 2–4	High possibility 1	-
	(b) lifestyle and cultural traditions of local community(ies)			
	Low possibility 5	Medium possibility 2–4	High possibility 1	-
For cultural heritage management sector Fragile/low cultural values=0–20 Moderate=21–40 High=41–60				

B1 and B2 represent high to moderate market appeal but low in robusticity so the management approach is to ensure that visitation will not damage the cultural values of the asset. Low robusticity indicates the physical fabric of the assets is fragile or that its cultural value is extremely sensitive to significant impact from incoming visitors. Tourists may show strong interest to visiting these places but, because of their fragility, they have limited ability to cope with intense use. C1 and C2 represent high to moderate robusticity but moderate market appeal. Because the assets in this category are robust, they may be able to withstand greater visitation levels than their current market appeal would suggest. Therefore the market appeal of the heritage asset should be optimised while the conservation and visitor management programmes are put in place. D1, D2 and D3 represent low market appeal signifying that the assets are unlikely to attract significant visitation unless the assets are modified to such an extent that its intrinsic values would be almost totally sacrificed (McKercher & du Cros, 2002). These types of asset should be managed for some reasons other than tourism. The biggest challenge may be to convince asset managers about their limited appeal. By applying this grading system, the researchers hoped to achieve a comprehensive investigation of the tourism potential of the tangible heritage assets in the AHLV.

RESULTS AND ANALYSIS

The following section presents a detailed assessment of the tourism potential of three assets, out of the twelve being studied, by using the matrix. The three— Bukit Jawa site, Bukit Sapi and Gua Gunung Runtuh—are selected for presentation in this

paper because they are the most ideal sites to be showcased to tourist and, most importantly, represent high and low levels of grading in terms of market appeal and robusticity, and hence suggesting different asset conservation and management options. The presentation of each asset follows the order of "market appeal", "product design needs", "cultural significance" and "robusticity", to show the correlation with each sub-indicator within the grading system (Table 1).

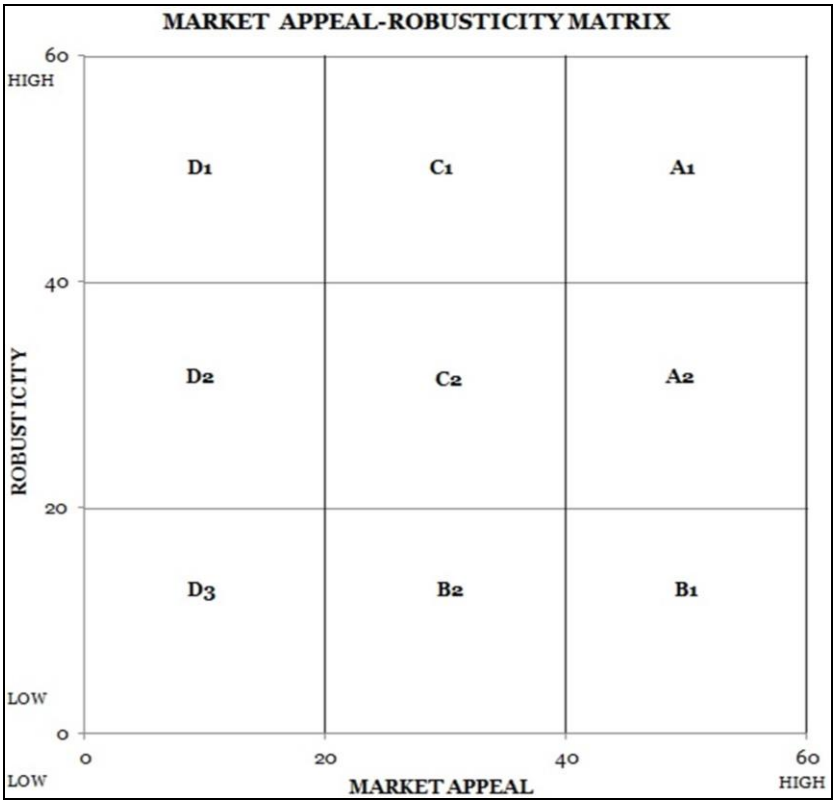

Figure 3. Matrix indicating the relationship between
the continuums of Market Appeal and Robusticity, (Source: du Cros, 2001)

Bukit Jawa Site

Bukit Jawa site (Figure 4) was discovered during a Kota Tampan palaeoenvironmental reconstruction by a team of researchers from University Sains Malaysia (USM) in 1999. Evidences of early human activities dating back 200,000 to 100,000 years ago come from the discovery of stone tools workshop that used river gravels from the ancient Perak River to produce pebble and flake tools by using anvils, cores and hammerstone, and that are crowded with thousands of debitage in the form of chunks, flakes and chips (Saidin, 1993; 2007a; 2007b; Saidin & Jeffrey, 2007).

From the market appeal assessment indicates that this site has an excellent historical ambience with well-preserved original historical setting. The Bukit Jawa site has been interpreted as a Palaeolithic tool workshop site on the shores of an island in a palaeolake now long desiccated. The site is generally undisturbed with the cultural layer protected by a thick overburden. It is well-known outside Lenggong Valley and become

the main attraction especially for national and international researchers. It has high potential to tell an interesting story about how the Palaeolithic population practised a similar lithic technology through time and probably settled on this site because it was a source of raw materials. This area does compliment the whole Lenggong valley as it had been determine from data that any location that is at least 72 meters above sea level and contains river gravel deposits is a potential archaeological site (Saidin, 2007a; 2007b; Saidin & Jeffrey, 2007). In terms of product design needs, transport accessibility is not difficult and tourists are allowed access to all features of the asset. It is located close to other heritage assets of the area. In terms of amenities, it has sufficient tourist facilities such as parking, gathering space that is capable to accommodate 8-12 persons at one time and information boards. However, pathways around the existing gallery are needed.

Figure 4. (A) Location and association of in-situ artefacts in Bukit Jawa,
(B) Abundant quartz as raw material in making stone tools

The cultural value assessments suggest that Bukit Jawa is high in historical, educational, social and scientific values, and has considerable aesthetic value. First, in-situ Palaeolithic sites extremely rare in the world because over time, natural process and human activities would disturb the original context and erase the cultural record. Undisturbed in-situ Palaeolithic stone tool workshops are located on the shores of palaeolake and ancient river gravel beds and dated in a long chronological sequence. Second, the technique of tool making using anvils and hammer stones was similar to but not as technologically developed as that uncovered at Kota Tampan. The completed tools appear to be prototypes of Kota Tampan. Generally, they were mostly from quartz, large and crudely produced with large flakes, and reminiscent of middle Palaeolithic tools. Some are so massive as to require holding with both hands. Furthermore, the tools were cruder and there was less understanding of stone lithology, these sites had to be older than Kota Tampan. From a consideration of the stratigraphy and the morphology of the finished products, it was concluded that Bukit Jawa could be relatively dated to 200,000-100,000 years ago (Saidin, 2004; 2007a; 2007b; Saidin & Jeffrey, 2007). In terms of robusticity, Bukit Jawa is physically not fragile and it was primarily designed for visitation, even though the gallery was only capable to accommodate 8-12 persons at one time. This site is now protected as an exposed representative of the Bukit Jawa cultural layer by the National Heritage Department and there has been management plan and regular maintenance and monitoring promises the gallery in a good state of repair. High visitation has very low negative impact on the asset as it is a very stable asset structure. The possibility of negative impact on the local lifestyle and culture tradition of local community is also very

limited. In general, the assessment revealed that Bukit Jawa should be placed into square "A1" in the matrix, suggesting high market appeal and high robusticity. It is the most ideal site to be showed cased to tourists because its archaeological and attractiveness values are highly significant while its fragility is not a major issue. Some development measures may be required to enhance high tourism potential such as camping site with public toilet, hall, electricity supply, real excavation sites and tools to attract primary to secondary school students, university students as well as international schools.

Bukit Sapi Area

Bukit Sapi area (Figure 5) which is located at the eastern side of the Perak River was characterised by Toba mega-colossal volcanic eruption that occurred approximately 74,000 years ago. The market appeal assessment indicates that this area has a historical ambience with a fairly well maintained original physical setting. Bukit Sapi area is probably one of another well-known area in the AHLV among national and international researchers as it is the only observable outcrop of volcanic ash deposit in the region. This area has national important icon to symbolise a wide spectrum of storytelling assets such as natural history, archaeology, culture and science. The beautiful multiple layers of white volcanic ash are the most prominent marks distinguishing from nearby heritage assets and it has some potential to attract tourists and does complement other assets in the AHLV area. The assessment of product design needs indicates that, although the area is a little remote from the other heritage assets and adequate in terms of amenities (information board and wooden pathways), it has convenient accessibility. The on-site tourist facilities such as parking, directional signage and washrooms are lacking.

Figure 5. (A) Exposed outcrop of Toba ash deposition in Bukit Sapi area,
(B) Information board and wooden pathways are the only amenities provided

The assessment of cultural significance suggests that Bukit Sapi area has high historical, educational and scientific values, and has considerable aesthetic and social values. Its educational, historical and scientific values are significant to the catastrophic events, the Toba mega-colossal eruption dated by optically stimulated luminescence (OSL) to at least 70,000 years ago, had mingle its volcanic ash with the lithic artefacts recovered at AHLV especially at Kota Tampan and this mixture has suggested the 74,000-year date for the lithic workshop sites here (Gatti et al., 2013). The excavation work at Kota Tampan in 1987 proved to be a rare and thus significant in-situ workshop from the Palaeolithic period whose cause and date of abandonment are known (Zuraina, 1989). Its high values contribute to its

conservation value and research potential which may help in sharing the information about the Toba mega-colossal eruption and the extinction of prehistoric community in this area. In addition, the area is exemplary in AHLV for its unique heritage asset type.

In terms of robusticity, Bukit Sapi area is quite fragile because it is primarily originated from natural phenomena - lava ash that contains of small pumice fragments, glass shards and few of crystals fragments (Zakiah, 2008). This light material is mostly in the fine sand to silt size range. Even though it is fair in state of repair, heavy visitation and modification could have medium possibility to the fabric of the asset, whilst very low possibility to the lifestyle and cultural tradition of the local community. Fortunately, as AHLV was designated as World Heritage Site, all of the area is formally protected under the UNESCO and managed by local key stakeholders such as Lenggong District Office and National Heritage Department. Its protection and conservation plan is in place and excellent access makes it easier for regular monitoring and maintenance. As a result, the assessment suggests that Bukit Sapi area should be placed in "A2" position in the matrix, suggesting moderate to high market appeal and moderate robusticity. It has been well restored for at least 74,000 years ago and has attracted national and international researchers due to its uniqueness and cultural significance. Although the area has been relatively well-known by researchers, it needs further marketing assistance to actualise the high tourism potential.

Figure 6. (A) Excavation location of Perak Man at Gua Gunung Runtuh,
(B) Preserved original skeleton of Perak Man can be seen in Lenggong Archeological Museum

Gua Gunung Runtuh

One of the most distinguished sites in AHLV is Gua Gunung Runtuh (Figure 6) which is located in Bukit Kepala Gajah Complex, approximately 10 kilometers away from Lenggong Town. This cave is part of small hamlet, Kg Gelok, where the Perak Man skeleton, a key icon in Malaysia archaeology, which remained almost intact for more than 11,000 years, was found. It has excellent historical ambiance and very well-known outside Lenggong Valley. The discovery of Perak Man is an important icon and have pinned this area in the world's scientific and archaeological map. It also can tell a good and very interesting story where Perak Man is the only prehistoric skeleton in the world born with a deformity known as *Brachymesophalangia* type A2 (Zuraina et al., 2005). He is also the oldest most complete skeleton in SEA. This cave does offer some potential to compliment other assets of the area such as Teluk Kelawar Cave which give an extraordinary and unique insight into the cultural habits of the prehistoric nomadic hunter-gatherer

(Zuraina et al., 2005). With reference to product design needs, tourists are allowed limited access with guided tour to its features. Written permission to enter is needed as it is currently monitored and maintained by the National Heritage Department since the declaration of Lenggong Valley as the World Heritage Site. It is accessible by a footpath that takes half an hour to traverse and then a 15-minute of climb. The provision of complementary facilities is adequate as there are only pathways and information board about the history of the cave and some upgrading is necessary especially in terms of accessibly. The cultural significance assessment indicates that the cave is rich in historical, educational and scientific values, and has considerable aesthetic and social values. First, Gua Gunung Runtuh located approximately 124 meters above the sea level and 75 meters above surrounding secondary rainforest. There are three entrances to the cave, of which the most convenient approach is through the south entrance.

This cave has 3 chambers. The main chamber opens to the north-east. Two smaller openings to the west and south-east have been blocked by rock falls. Gua Gunung Runtuh is dry and the cave is lit by sunlight coming through the north entrance. Boulders of various sizes and fragments of stalactites and stalagmites lie scattered on the cave floor (Zuraina, 1996; Zuraina et al., 2005). Second, the Perak Man survived for such a long period of time mainly because he was buried in a well maintained original physical setting with a relatively cool and constant temperature of 24°C and dry slightly alkaline soil condition that was suited for bone preservation. In addition, the dryness of the cave interior has slowed down natural deterioration caused by plant growth and rock slides, and kept the population reduced. The trench from which Perak Man was excavated remains in place and has not been back-filled so as to be a record its original location (Saidin, 2005). In 2008, the Perak Man was inscribed as a National Heritage Object in the National Heritage Register (Gazette No. P.U [B] 235), followed by the site of Gua Gunung Runtuh (Gazette No. P.U [B] 494) as a National Heritage Site in 2009. This can be expected to lead to adequate management and conservation. In terms of robusticity, the condition and structure of this cave is very fragile, and has a high risk to the asset and visitors. It is also not designed for heavy visitation and can accommodate 1-25 visitors at a time. High visitation may cause negative impacts to the cave due to its fragility of coping with intense use. Fortunately, it is formally protected under the World Heritage Site law, no alteration is allowed and basic regular maintenance consists of underground trimming, trash collection and clearing of the access trail to the cave by the legal authority (National Heritage Department) promises the cave a good state of repair. In addition, the possibility of negative impacts on local way of life by visitation or modifications may not be high as the residents stay quite far. In general, Gua Gunung Runtuh should be placed in "C1" position in the matrix, signifying high robusticty and moderate to high market appeal. Physically, it is very sensitive to high visitation because of its fragility of the materials and structures. Major rock falls and cave-ins made this site unsafe for unsupervised visits. It is likely that this single heritage site will attract significant visitors as the main market only permitted for students and history buffs.

OVERALL ASSESSMENT

In addition to the detailed assessment of the three assets, Tables 2–4 are provided to show the assessed tourism potential of all the 12 heritage assets being studied—results achieved by using the same grading system. Besides, the Market Appeal—Robusticity Matrix for the heritage assets of Lenggong Valley is displayed in Figure 7. They indicate, in general, the heritage assets divided into two main groups: (1) with high market appeal and robusticity, and (2) with medium market appeal and robusticity.

Table 2. Results of scoring of AHLV's heritage assets after the assessment of tourism development potential

No	Site	Market appeal	Robusticity
1	Bukit Bunuh	51 (H)	44 (H)
2	Kota Tampan	41 (H)	45 (H)
3	Batu Berdinding	26 (M)	35 (M)
*4	Bukit Jawa	51 (H)	50 (H)
*5	Bukit Sapi	41 (H)	40 (H)
6	Sungai Perak	46 (H)	43 (H)
7	Lata Kekabu	45 (H)	41 (H)
8	Gua Kajang-Puteri-Asar	34 (M)	35 (M)
*9	Gua Gunung Runtuh	39 (M)	41 (H)
10	Gua Teluk Kelawar	30 (M)	32 (M)
11	Gua Harimau	31 (M)	33 (M)
12	Gua Badak C	32 (M)	32 (M)

Note: (L) = Low; (M) = Medium; and (H) = High
*= Heritage assets with detailed assessment in this paper

Table 3. Results of market appeal scoring of the heritage Assets in AHLV by using the market appeal-robusticity matrix

No	Site	Market appeal									Product design needs				Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	
1.	Bukit Bunuh	5	5	5	5	5	4	5	3	5	1	3	3	2	**51**
2.	Kota Tampan	4	4	4	4	3	1	3	1	5	3	3	3	3	**41**
3.	Batu Berdinding	3	2	3	3	2	1	1	1	3	4	1	1	1	**26**
4.	Bukit Jawa	5	5	5	5	5	3	3	4	5	3	3	2	3	**51**
5.	Bukit Sapi	4	4	4	4	5	1	3	1	4	4	2	2	3	**41**
6.	Sungai Perak	4	3	4	3	5	4	4	4	4	4	3	2	2	**46**
7.	Lata Kekabu	4	5	2	2	4	4	4	4	3	4	2	2	5	**45**
8.	Gua Kajang-Puteri-Asar	5	4	4	3	4	1	1	1	4	2	2	1	2	**34**
9.	Gua Gunung Runtuh	5	5	5	5	3	2	3	1	5	1	1	1	2	**39**
10.	Gua Teluk Kelawar	4	4	3	4	4	2	1	1	3	1	1	1	1	**30**
11.	Gua Harimau	4	3	3	3	3	2	3	1	3	2	1	1	2	**31**
12.	Gua Badak C	5	3	3	3	3	2	3	1	3	2	1	1	2	**32**

Table 4. Results of robusticity scoring of the heritage assets in AHLV by using the market appeal-robusticity matrix

No	Site	Cultural significance							Robusticity									Total
		14	15	16	17	18	19	20	21	22	23	24	25	26		27		
														a	b	a	a	
1.	Bukit Bunuh	2	2	2	2	2	3	5	2	0	5	3	5	2	4	1	4	**44**
2.	Kota Tampan	1	2	2	2	2	2	3	4	1	5	3	5	4	4	1	4	**45**
3.	Batu Berdinding	1	1	2	1	2	2	3	4	1	1	1	3	3	4	2	4	**35**
4.	Bukit Jawa	1	2	2	2	2	3	4	4	1	5	3	5	3	5	3	5	**50**
5.	Bukit Sapi	1	2	2	1	2	3	4	2	1	2	3	4	2	4	2	5	**40**
6.	Sungai Perak	2	1	1	2	2	2	3	4	3	1	3	3	4	2	5	5	**43**
7.	Lata Kekabu	2	1	1	2	2	2	2	4	3	1	3	4	4	2	5	3	**41**
8.	Gua Kajang-Puteri-Asar	1	2	1	1	2	2	2	2	1	5	2	5	2	3	1	3	**35**
9.	Gua Gunung Runtuh	1	2	2	1	2	3	4	1	2	5	1	5	1	5	1	5	**41**
10.	Gua Teluk Kelawar	1	1	1	1	2	2	2	2	1	5	1	5	1	3	1	3	**32**
11.	Gua Harimau	1	1	1	1	2	2	2	2	1	5	1	5	2	3	1	3	**33**
12.	Gua Badak C	1	1	1	1	2	2	2	2	1	4	2	4	2	3	1	3	**32**

The researchers put five of them into group 1 category - "A1" square, suitable to promote as a tourism attraction because archaeological and attractiveness values are highly significant while their fragility is not a major issue. For example, at Bukit Bunuh open site, a stone hand axe was recorded embedded in a suevite rock created during a meteorite impact dated to 1.83 million years ago. This discovery strongly influences current theories for the origin, migration and spread of humans through the world. Kota Tampan is the nearby open site where stone tools associated with volcanic ash from the Toba eruption. The physical appearance of these stone assemblages confirms that Kota Tampan is indeed a very rare in-situ stone tool workshop of some sophistication. They also record the cognitive processes in stone tools making. Kota Tampan may be the oldest precisely dated evidence for modern human outside Africa. Whilst the other five falls into group 2 - "C2" square, suggested they have moderate market appeal and robusticity because of their physical condition as they are quite fragile and poor in accessibility. High visitation has medium-high risk to the assets and also to the visitors. Due to the fragility of the sites especially the cave structure, site hardening is necessary to increase the physical carrying capacity as well as to ensure visitors safety. For example, the construction of boardwalks, hanging pathways or canopy walk could be carried out to increase the tourism potential.

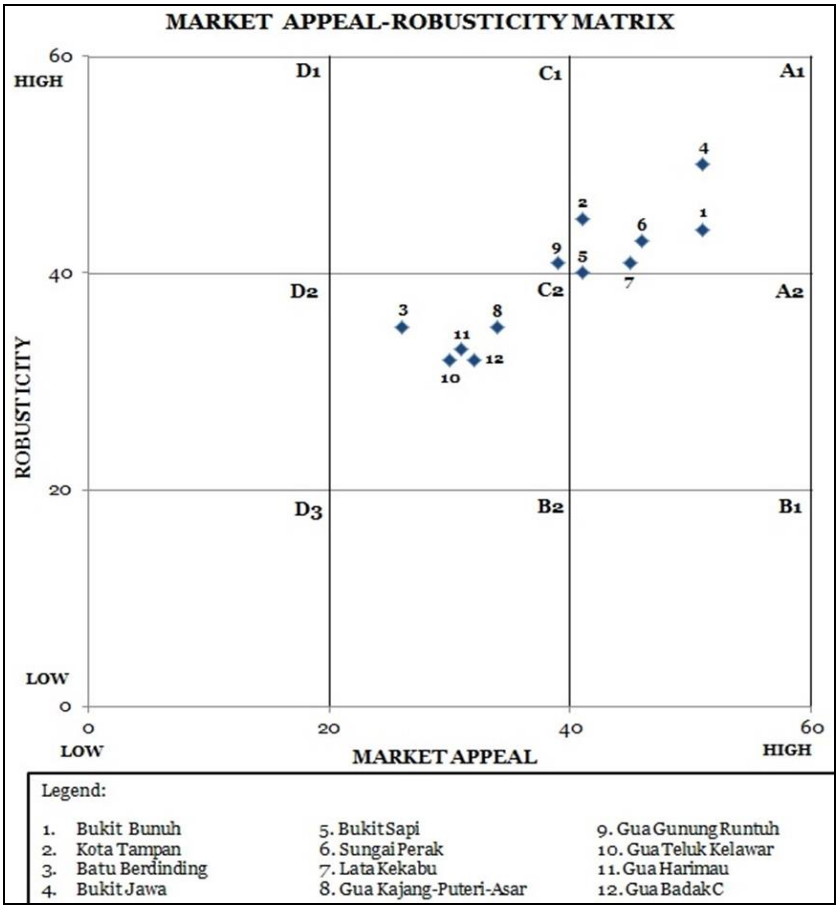

Figure 7. Market appeal – robusticity matrix for AHLV's assets

Their market appeal must be optimised, while conservation and visitor management programmes are maintained. One of the strategies, the researchers believe to develop Lenggong Valley as a natural laboratory associated with educational tourism. Although most of them may have relatively limited tourism potential, they are highly recommended to complement with the "A" grade assets in order to promote their educational and cultural values as interpretation and storytelling assets in natural history, archaeology, culture and science are crucial to the tourists experience. This strategy helps enhance the iconic character of Lenggong Valley, create a heritage theme for the area, and encourage visitation to the area, in which the historical and geological site, the surrounding environment and even the neighbourhood are protected.

DISCUSSION AND CONCLUSION

Against this background, it should be highlighted that AHLV is an iconic site from the perspective of archaeological conservation which fully deserves its World Heritage Site (WHS) inscription. In a comprehensive study of the impacts of WHS listing on tourist arrivals, Hall & Piggin (2003) revealed that while WHS inscription added value and could generate more tourist arrivals, most of the listed sites studied had been enjoying high tourist arrivals and would continue to flourish even without WHS listing. In this context, the AHLV has yet to make it into Malaysia's list of top tourism destinations although its potential of being part of an attractive tourism corridor stretching from Kuala Kangsar to Royal Belum has being recognized. As a tourism attraction, Lenggong Valley appeals to a niche market (mainly educational groups) in which interpretation and storytelling are crucial to the tourist experience. In addition, the fragility of the physical environment and artefact requires the enforcement of stringent visitor management guidelines based on the carrying capacity threshold limits.

As highlighted above, the AHLV is not suitable for mass tourism but should cater for niche market segments associated with educational tourism and heritage tourism (Vijulie et al., 2014; Cappucci et al, 2015). In this light, the carrying capacity threshold limits should be respected to protect the fragile archaeological resources and prevent mishaps and accidents to visitors. In applying the Market Appeal-Robusticity Matrix (McKercher & du Cross, 2005), the attractiveness of the sites from the perspective of the tourist experience is evaluated by factoring in indicators such as iconic value, interpretation and potential activities. This will determine the level of attractiveness or market appeal of the particular site and its potential to be developed and promoted as a tourism attraction. For instance, the site where Perak Man was discovered (Gua Gunung Runtuh) would enjoy a high iconic value or market appeal compared to other caves. Subsequently the attractiveness of the sites is matched against the robusticity values, which are measured using indicators such as fragility, state of repair and carrying capacity. In doing so, the evaluation showed that while Gua Gunung Runtuh may be iconic in terms of market appeal, the extremely fragile interior of the cave limits its suitability in accommodating a large number of tourists at any given time without posing a threat for their safety. This means that the carrying capacity is limited unless some form of side hardening is implemented such as the construction of walkways etc.

In conclusion, the assessment of the tourism potential of a destination and the ability of that location to cope with the possible negative effects of tourism development (its robusticity) can influence the whole process of development following it, with conflict situations appearing from this imbalance. For this reason, each area must develop a clear strategy concerning the way that tourism will be developed, especially the sites with cultural heritage asset and UNESCO tourism objectives, because there is often a considerable gap

between the real tourism potential and the on-going cultural tourism in terms of marketing. This correct assessment of the tourism potential at a destination, especially in cultural heritage places is necessary from the very beginning as a solution for planning sustainable tourism activity and appropriate conservation operations that ensure a long time protection of the heritage. This type of assessment is the first step to be taken into account, because it can reduce the risk that the cultural heritage assets suffer from tourism. It is essential that protection is stipulate through suitable legislation, yet to be provided, in order to produce a framework for better informed planning decisions in the future. The distinctive features of the sites, their extent and, for the future, their conservation, will facilitate an improved appreciation of cultural heritage assets as part of the community.

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ANALYSING THE URBAN ENVIRONMENT SUSTAINABILITY INFLUENCED BY TOURISM IN IRAN (DISTRICT 1 OF TEHRAN METROPOLIS)

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Abstract: Considering the goals and dimensions of development and the characteristics of different communities, sustainability should be pursued such as community-based development based on the strategic principles of the urban environment influenced by tourism with respect to the citizen's participation. Therefore, to meet these growing needs, the necessity of appropriate spaces and places in the urban environment for tourism is well identified and planned, and then the urban environment is screened through the necessary strategies, integrated local-level monitoring and management for the metropolis of Tehran. The purpose of this research is to analyze the status of quo and desirable development in the future of Tehran metropolitan in the field of altered environment through tourism activities. The methodology was developed within the framework of sustainable urban development influenced by tourism paradigms and by urban tourism perspectives. For this purpose, the data collection was conducted using the library, survey, and interviews with experts and authorities in the study area. The results showed that some indicators such as enjoyment of natural areas (83.13%), recreation and leisure activities (79.36%), observation of nature's exciting landscapes (72.71%), escape from daily stress (72.18%), gathering together, visiting and traveling with friends and relatives (67.72%), visiting natural areas and intact (67.62%), and urban stress relief (60%) had the most motivations for tourists to Tehran urban environment sustainability. Also, the results indicate that the amount of tourists Visit from the natural areas is equal to 56.96%, protection of plant species, 54.38%, protection of animal species and in the bird's parameter is 86 / 42%.

Key words: Urban Environment, Tourism, Sustainable City, Tehran

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INTRODUCTION

In the era of globalization and rapid communication, planning for a healthy and safe environment is a prerequisite condition for the cities sustainability and for the whole urban community. The environmental debate during the 1990s was on the international agenda, especially related to major international meetings and summits as the Earth Rio Summit (UNCED, 1992). World Education Forum in Dakar 2000, World Summit on Sustainable Development in Johannesburg, 2002, United Nations Decade of Education for Sustainable Development in 2005-2015. Global institutions, national governments, and local communities are also increasingly concerned on the environment future embracing the concept of "sustainable development" (Redclift, 2008). One classic case in point is the aforementioned 1973 ecological planning project for the new town of The Woodlands in Texas, the United States, by Ian McHarg and his colleagues from Wallace, McHarg, Roberts and Todd (WMRT)—the Philadelphia based architecture, landscape architecture and urban planning firm that were contracted for the project (Yang & Li, 2016). The changes that cities occur in land use caused discrepancies in Albedo, and this has important implications for the energy cost of a region (Jalalian & Pejouyan, 2009). In this way, the lungs of the ground are wrinkled and degraded, as well as lands that have been lost due to deforestation and excessive vegetation cover (for example, in parts of the coast), to the planted land, Albedo are higher (Faghfur, 2009). The mental and physical health of population are directly related to the quality of "diverse environments", that their elements from the household to the workplace are interacting on the international scale. On the other hand, the main problem is largely based on this fact that human progress in most cases affects the urban environment (Mies & Shiva, 2005). On the World Bank's agenda, the World Bank tries to prioritize a set of environmental problems in the cities of developing countries (World Bank, 2007). However, to reduce the people vulnerability to environmental hazards associated with urban tourism, they emphasize the support of local and national governments to curb the growth and strengthening of environmental sustainability laws and strategies (Leitman, 2010). Since, the Brent land Commission "Our Common Future" report in 1987, major discussions have focused on the sustainability of fundamental differences was published in the ideas of development, economic growth, social change and urban environmental issues (Rees, 2010, Lohamman, 2008). In recent years, there has been a widespread concern on the environment and its protection a global challenge. Hence, the extent and the diversity of urban environmental issues and their interchangeable interactions have made the need for urban environmental considerations more difficult (Abe et al., 2000; Rojeck & Urry, 2008).

LITERATURE REVIEW AND THEORETICAL BACKGROUND

The analysis of the concept of nature and man: The philosophy of Hegel's, nature unveils that; nature is a reasonable and logical consequence of the rational cause. Nature is the same intellect that have outsized the natural form (Foroughi, 1998). From Hegel's perspective, the man with intellect is the most complete biological species, and the only being possessed the soul or soul, which distinguishes him from a purely physical nature. In the Marx's view, humans, through their ordinary changes the environment, bring it to their service and dominate it. Marx paid a great attention to the problem of the need for the basis of the dialectical fuel and physical relations of man and nature. From Huberman's point of view, our only relationship with nature is the instrumental relationship that governs our productive and computational interests about how we can better utilize nature to meet our needs (Poulantzas, 1975). The environment consists of nature, human societies as well as human-made spaces, and the entire biological environment of the planet, the biosphere, is taught (Soltani, 2008). The environment refers to the environment and the place of our life and clearly includes humans and nature (Anderson, 2009:1). The notion of

human beings' enlightened self-interest is concerned with two fundamental questions in ecological practice—what should a "harmonious human condition" look like on the earth? How should it be pursued? In the belief that there exists a relationship of human-nature reciprocity (Berkes, 2012: 286–287), it states plainly that it is in human beings' self-interest—ethical, moral as well as material—to respect and appreciate the intrinsic value of all living and non-living beings on the earth (Berkes, 2012: 286–287; Cafaro, 2001:4-16). Leisure is a complex concept, considered both as mental and practical activity. Furthermore, leisure is synonymous with the free time of a person who can volunteer to perform activities such as recreation and circulation (Hall & Jenkins, 2015). The urban dictionary dictates the definition of leisure as follows: Leisure time is said to be a moment when no one has any obligation or responsibility to do anything, and on this basis, it is time for hobby and pleasure to be free (http://encarta.msn.com/thesaurus_/leisure; Xiang, 2014: 65–66; Yang & Li, 2016). As Hall (2002) mentioned, Dumasdir (2002) consider that leisure refers to three situations: firstly, it refers on, spending leisure time at times outside of work, education, and religion; in other words, leisure represents the free time of an individual. Secondly, leisure is a pleasure, and thirdly, leisure must be a provider of a rest, entertainment, and self-promotion of individuals. Recreation is a personal and collective activity that takes place in the pursuit of leisure and pursues goals such as enjoyment and pleasure from leisure time (Hall, 2002). Tourism is also referred to person act that travels more than a day and resides in a place beyond his lifetime for less than a year to trade and other purposes (Smith, 1995).

Table 1. Dimensions of nature-centered tourism definition with Urban Environmental Behavioral Approach

Authors	**Dimensions**			
Ingram et al., 1987	Environmental Behaviors	Subject	Tourism Goals	Features of the nature-centered tourism area
Wilson, 1988	Sustainable consumption of natural resources	Environment	Sustainable use of natural resources	Natural areas and activities in nature
Valentine, 1992	Protection and do not encroach	Natural effects	recreation	Nature, National Parks and Biological Reserves
Lusar et al., 1995	Maintaining natural phenomena	Natural events	Earn experience, watch and enjoy	Natural intact areas
Goodwin, 1996	Maintaining species and respecting local culture	Environment & Culture	Appreciation, research and enjoyment	Intact areas
Bair, 1997	Maintaining natural and cultural phenomena and sustainability	Environment & Culture	Appreciate and wise use of the environment	Areas and resources
Newom et al., 2002	Preserve natural phenomena	Environment	Education and enjoyment	Natural regions
Nature Tourism Center, South Carolina, 2002	Natural Protecting	Environment	Watch and recreation	Natural regions
Durin Society, 2002	Protectionand dimensions of sustainability	Environment & Culture	Appreciation, research and enjoyment	Environment & Sustainable Economic Activities
Ingram et al., 1987	Non-profit activities	Natural events	watch and enjoy	land Phenomena, animals, plants and air

A visitor traveling's to a place other than his own place of residence for less than 12 months and whose purpose is not to make money in the destination. A passenger is also one who travels between two or more places (World Tourism Organization, 1995). The

three major dimensions of nature-centered tourism are: experience (the style of a different trade of nature, the level of interaction, the social context, and duration of stay), style (different styles in payments and the length of time of tourism) and location (change of location in relation to access and degree of remoteness, development of partnership, ownership and elegance) (Hall & Jenkins, 2015). Ecological practice must therefore attend simultaneously the vast variety of intertwining social -economic relationships within the human and the nature. Yet, all of these relationships are characterized by high levels of complexity, wickedness, and in particular, context dependency (Xiang, 2013: 1–2; 2014: 66). This unique characteristic differentiates ecological practice from other social practices to ecological practice and potential advantages it can bring. The first commentary written by Steiner (2016) starts with Ian McHarg's design with nature theory presented in the essay by Yang and Li (2016) and comments on the later development of landscape ecology, urban ecology, and ecosystem services. One thing we can learn from the history is that those ecology-based theories have the potential of supporting ecological practice; to realize this potential to its fullest extent, however we must seek the guidance of wisdom, ecological wisdom. The second commentary by Liao and Chan (2016) builds upon the papers in this special issue, especially that by Xiang (2016) and calls for further research to answer two questions, "What is ecological wisdom?" and "How does ecological wisdom relate to ecological knowledge?" Although we may find manifestation of ecological wisdom in various projects, few have consciously paid attention to and intentionally sought for ecological wisdom in practice. In order to make ecological wisdom a more inspiring power that is informative and relevant to current and future generations these two questions need to be further studied and widely shared in the academic dialogues.

Sustainability of Urban Environment Affected by Tourism

Generally, the local wisdom emerges through the internal process and passed for a long time as a result of the interaction between humans and their environment. This long process of evolution would lead to the emergence of values system that crystallized in the form of common law, belief and local culture. Thereby, substantially local wisdom is the norm practiced in a society which is faithfully believed and become a reference in their daily life. Therefore, it is reasonable if Geertz (1973) says that local knowledge is an entity that is crucial for human dignity in the community (Ernawi, 2009). Participatory approach or community based development is one of strategies that can bridge the development interests which emphasize in paradigm of economic based with sustainable development (socio – ecological based) (Wikantiyoso, 2009). The indirect impact of tourism is much broader in its socio-economic nature. The reason for this is the effect of the multiplier, when the chain of "expenses - incomes" through tourism stimulates the development of economy and other related industries associated with it. If more tourists spend money at the place of the stay; the greater the amount of transaction "costs – income than the higher the indirect (multiplicative) impact of tourism (Ruslan, 2018). In geography, the concept of environment refers to all the local or regional features. In other words, the set of elements that cover the point of the phenomenon occurrence and the surrounding environment (Badrifar, 2015). In other word, nature tourism is considered as one of the best tourism destinations for sustainable development (Bomanian & Mahmoudineghad, 2016). Also, tourism is the desire to use space in leisure with different motives includinge a flow of capital and humanity, culture and interaction between them, which has different effects in the geographic context and therefore, in spatial processing patterns each of them has a specific spatial structure and function (Fanni & Rezazadeh, 2015). The growth of environmental tourism suggests that organizations and natural resource conservation groups have become more active in matters such as monitoring, promoting and even pursuing tourism activities with an emphasis on environmental protection, especially in

developing countries (Hall & Jenkins, 2015). Considering the environment and preserving, it is a culture as well as awareness of the human personality as a thinking being and his awareness (Tume, 2015). Therefore, environmental care is a necessary part of a cultural policy and a balance between the enjoyment of visitors and the protection of natural attractions (Iran Earth, 2016). In the literature of tourism, the environment (natural and artificial) is not only a main context for tourism, but also is an attraction in which create interactions between the environment and tourism activity (Bamanian and Mahmudineghad, 2016). Therefore, sustainable tourism meets the needs of tourists of the present and host societies, while expanding opportunities for the future and using resources in a way that simultaneously preserves cultural values, ecological processes, Biodiversity, and life support systems are responding to the economic, social and aesthetic needs (Gee, 2000). Hence, planning for sustainable urban tourism also includes three levels of market, urban growth and local communities (Faraji Rad & Nasiri, 2010). The form of community participation can also be seen from their initiative in designing and developing the tourist areas. Communities also conduct land management in mutual aid such as: strengthening the terracing with stone, planting grass, and fodder bank; division and arrangement of land boundary that become part of the group; as well as constructing inspection track some of which have been developed attraction tracks (Taufiqurrohman, 2014). Some of the principles of sustainable development and its relevance to the environment affected by tourism in accordance with the Earth Summit Conference in Rio de Janeiro, Brazil in 1992 include:

1. Understanding the environment value and the focus of human being in the focus of sustainable development goals.

2- Considering the longer horizons in planning.

3. Cooperation to eradicate poverty as a prerequisite for sustainable development.

4- Participation of citizens at appropriate levels and their participation in the decision-making process.

5. Considering the role of women in the field of environmental management and development and the need for their participation in sustainable development.

6. Supporting the identity of the culture and resources of indigenous people and local communities due to their traditional customs practices in environmental management and development (Movahed, 2017).

Rasehki (et al. 2015), in their research entitled "The Effect of Environmental Tourism: A Case Study for Selected Developing and Developed Countries", payed to the role of tourism industry as one of the most important factors in increasing global economic activity. The authors point to the scope of the tourism industry more than employment creation and its economic effects, and along with this, environmental issues of tourism have been always their concern. The critique of research results shows that the impact of tourism on the environment of developed countries is positive, while this effect is negative in developing countries. Distinction: A compilation study of the present study on the subject of urban environmental assessment and regional and neighborhood tourism in Iran.

Anna (et al. 2017), in a study entitled "Indigenous People and Tourism: Challenges and Opportunities for Sustainable Tourism", addressed a series of issues related to sustainable indigenous tourism. Researchers have argued that the capacity of indigenous tourism as an effective and prominent instrument for sustainable development has discussed the details of the realities of urban and native tourism for development. However, the critique implies that, despite the presentation of services provided to tourists, the main factors that attract tourists are not emphasized in the mainstream of native tourism and management, and these factors (tourism opportunities and strengths) are not as the characteristics of the tourist's travel, but also as the main drivers of tourism.

Florian (et al., 2015), in a study entitled "Sustainable Urban Quality in the Emerging City of Doha," examined the quality of urban sustainability in Doha. After introducing the basic framework as a model, the three dimensions Sustainability-environmental productivity, economic growth and social justice-have been analyzed in relation to the urban quality required for their production. As a result, researchers, in general, have emphasized the challenges posed by the creation of sustainable urban development mechanisms in Doha. In this research, although the triple environmental sustainability model has been used, the analysis has not been studied quantitatively.

Summiting it all after the Rio Conference in 1992, it turned out that the optimal alignment of heterogeneous goals of sustainable tourism (economic profits, preserving the social integrity of local communities, the affirmation of cultural identity of the receptive areas, environmental protection and satisfaction of tourists) is in reality like the attempt to square the circle. Due to problems of implementation of the concept of sustainable tourism, some authors (Fennel, 2009; Tribe, 2009) invite for another interpretation of this concept. Taking into account the fact that the objectives of a sustainable development can be equally difficult to implement, because of the conflicting interests of the participants in the tourist economy, the emphasis should be placed on the adoption of norms and principles, particularly the ethical, which would be respected by all stakeholders in tourism. The key challenge for planning sustainable tourism development, nevertheless, which never seems to emerge, is the limitation of the human perception of time. It is extremely difficult to keep a long-term time-horizon in mind in our day-to-day behavior, and in our short-term and even long-term decision-making (Lew, 2010). Development of urban tourism based on the preservation of the environment cannot be separated from the element of empowerment. Successful development can be measured through three main aspects i.e. economic aspects to measure its added value in the economy of the community, social aspects to measure the community as stakeholders in managing tourism urban, and environmental aspects to measure impacts of tourism in the perspective of environmental conservation (Nugroho, 2010). Therefore the adoption of tourism as a development strategy is commonly based on the benefits that tourism potentially brings to local people in destinations. One of the most frequently reported benefits of tourism is the generation of employment not only for those who live in the localities but also for those in surrounding areas or who temporarily immigrate in search of tourism income (J Carlos, 2013).

Research goal and question

This research aims at analyzing and improving the status quo and development of the future situation of District 1 of Tehran metropolitan in the context of the environment affected by urban tourism with respect to the sustainable urban development process and using the LYKERT collaborative spectrum to analyze the situation using points of strength, weakness, opportunity and threats in the region. Therefore, planning for a healthy safe environment for the sustainability and health of the city is a prerequisite for Tehran's metropolis development, and should be considered in every urban community. Therefore, the main question of this study is that the assessment of the urban environment affected by tourism, how can it contribute to sustainable urban development in the city of Tehran?

STUDY AREA

Tehran province is one of the 32 provinces of Iran, with a total area of 12981 km². It is located in the north of the central plateau of Iran, spanning over 34° to 36°5´N and 50° to 53°E (Fig. 1). Its population is approximately 13,281,858 million and the province is composed of ten cities. Tehran province is the richest province in Iran as well as it contributes approximately 29% of the country's GDP (Gross Domestic Product). Furthermore, it houses approximately 18% of the country's population (Figure 1). It is the

most industrialized province in Iran and 86.5% of its population resides in urban areas while the remaining 13.5% resides in rural areas. Tehran province has over 17,000 industrial units employing 390,000 people, 26% of all units in Iran.

The province contains 30% of Iran's economy, and comprises 40% of Iran's consumer market. The metropolis of Tehran is the capital city of the province and of Iran. Tehran, with a population of more than 7 million, is ranked amongst the 20 most populous metropolitan cities of the world already suffering from all the illnesses of large metropolises such as air, noise and scenery pollution and over- crowding (Tehran City Planning and Study Center, Detailed Planning Region 1, 2006). The area of Tehran's metropolis has many touritic attractions. The sustainable tourism strategy in a today's world is a comprehensive approach that seeking the long-term growth in the tourism industry without threatening the natural habitats. It emphasizes that in the tourism development, it will also be able to identify certain aspects of the environment in a positive direction (Papoli Yazdi, 2015) (Figure 2).

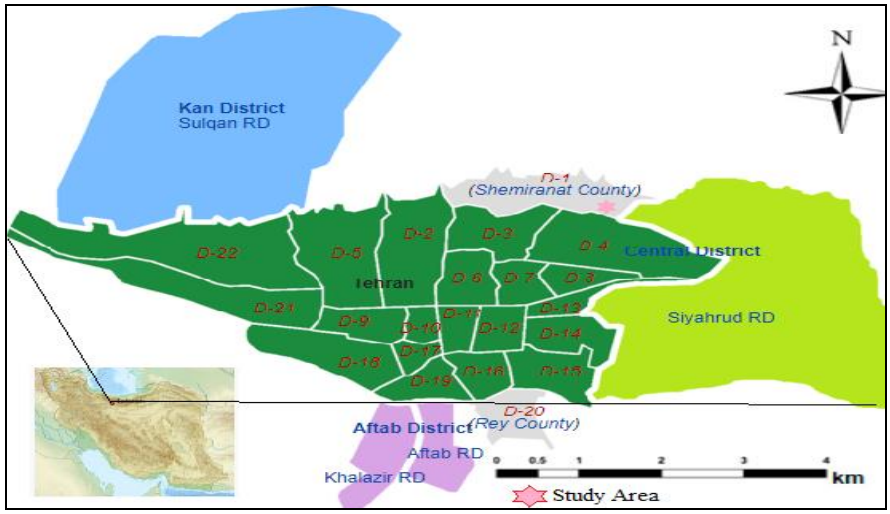

Figure 1. The study area

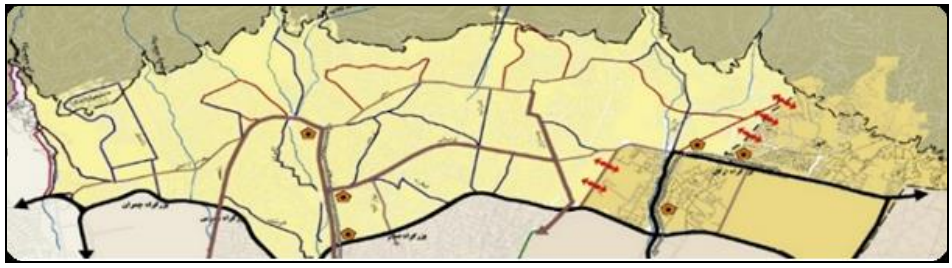

Figure 2. Sketch pattern of District 1 and its neighboring areas
(Source: Tehran City Planning and Study Center, Detailed Planning Region 1, 2016)

MATERIAL & METHODS

Basically, the samples of the present study consist all residents of two neighborhoods Velenjak and Darakeh in District 1 of Tehran metropolitan. In addition, we studied the characteristics and capacities of the urban environment of District 1 at the macro level and then historical, natural features, human inhabitants of neighborhoods of this district in Tehran metropolis in the micro level. The total statistical population of this

District according to the latest results of the census of the Iranian Statistical Center in 2016 has been 439467 thousand (Statistics Center of Iran, results Census of 2016). The methodological background is designed to identify and to explore the capacities, and the potentials of the environment and urban tourism to plan and to develop the urban environment of exploration (due to the new aspect of the subject and the combination of both descriptive-analytical methods and field method) and in terms of content and nature, it is based on descriptive-analytical-developmental method. The methodology of research has been developed within the framework of sustainable urban development paradigm influenced by tourism. Research hypothesis is that considering the issues and environmental approaches influenced by urban tourism, the existence of an increasing partnership in reducing conflicts between visitors' activities and urban environmental health, from important analyzes and evaluations in the formation of integrated environmental management and promotion Sustainability of tourism and health of the urban community is within the boundaries of a metropolitan area of Tehran.

FINDINGS AND RESULTS

Shemiranat Region, (very close to both study neighborhoods), that is located in the north of Tehran province, politically is considered as a separate city, but in terms of its physical, cultural and socio-cultural dimensions, cannot be separated from Tehran. As a result, the physical conjunction of Tehran and Shemiranat has transformed these two cities into a single body that is strongly influenced by each other. Significant parts of the natural and human attractions of the province are also located in this area.

Table 2. Types of incentives for tourists to visit the District 1 (Particularly Darakeh and Velenjak) using the LYKERT model

Interest Motivation	Velenjak	Darakeh	Velenjak	Darakeh	Velenjak	Darakeh
	V H	V L	L	M	H	*V H*
Recreation and leisure	81	196	81	196	81	196
Meeting, meeting and traveling with friends and acquaintances	88	136	88	136	88	136
Enjoy natural areas	101	209	101	209	101	209
Use of local food and drinks	61	92	61	92	61	92
An opportunity to learn and grow consciousness	71	80	71	80	71	80
Experience a new way of life	82	75	82	75	82	75
Visit of ancient monuments	72	82	72	82	72	82
Buy local souvenirs	50	67	50	67	50	67
Buying and selling goods (trade)	36	65	36	65	36	65
Meet the artistic and cultural attractions	54	51	54	51	54	51
Familiarity with the culture of local residents	56	83	56	83	56	83
Possibility to visit tourists from different places	58	77	58	77	58	77
A Chance to Call and Exchange Cultural	69	68	69	68	69	68
Visit the virgin and intact areas	95	142	95	142	95	142
See the exciting landscapes of nature	105	183	105	183	105	183
Earning fame and honor	53	72	53	72	53	72
An opportunity for adventure	58	99	58	99	58	99
Participate in sports	56	81	56	81	56	81
Participation in birding competitions	78	82	78	82	78	82
Getting rid of overwhelming work and reducing the stresses of urban living	58	135	58	135	58	135
Escape from stress	98	142	98	142	98	142
Vacation and away from busy environments	93	141	93	141	93	141

Data analysis through the LIKERT model: The motivations of tourists in the study district can be structured in three broad categories: high, mid and low motivations. According to the surveyors from the Dreka area, the most motivations for tourists were enjoyment of natural areas (83.13%), recreation and leisure activities (79.36%, observation of nature's exciting landscapes (79.35%), privacy selection and avoidance of crowded environments (72.31%), escape from daily routine (72.18%), gathering together, visiting and traveling with friends and relatives (67.72%), visiting pristine and untouched natural areas (62.67%), and urban stress relief (60%). Studies show that the least incentives in this area were recorded in activities such as buying and selling goods (37.43%), visiting cultural and artistic attractions (41.77%), and buying local souvenirs (43.78%), and other activities (such as visits to historic monuments, familiarity with the culture of local residents, visits to various tourists, participation in competitions, the use of local cuisine, etc.) are at a moderate level of tourist incentives. On this basis, the nature, the basis of tourism incentives, and trade, are the least incentive for people in the Darakeh neighborhood.

This was also studied in Velenjak area. The results showed that the most motivations for tourism were enjoyment of natural areas (81.35%), recreation and leisure (81.32%), observing nature's exciting landscapes (78.20%), getting rid of unpleasant work and urban life stresses (70.74%), escaping from the routine (70%), and attending birding (17 / 61%), and the least incentives were related to activities such as buying and selling goods and business (35.2%), buying local souvenirs (43.17%). Accordingly, the assumption of broad participation in the reduction of conflicts between visitors' activities, which is one of the important analyzes and evaluations in the formation of integrated environmental management and the promotion of tourism sustainability and the health of the urban community in the District 1 of Tehran metropolis, is confirmed.

Table 3. The extent of tourists' participation in the development of tourism in the region of a Tehran metropolis (special to Darakeh and Velenjak) using the LYKERT model

Subject	Tourist Participation in the Velenjak						Tourist Participation in the Darakeh					
	none	V L	L	M	H	V H	none	V L	L	M	H	*V H*
Nature conservation	32	16	22	40	30	46	68	26	38	48	64	*88*
Protecting plant species	30	22	22	26	50	28	62	18	34	86	116	*62*
Protect bird and animal species and damage	52	24	20	14	36	22	68	22	46	84	65	*63*
Planting seedlings in the area	78	22	24	22	16	10	170	12	60	68	28	*16*
Feeding domestic animals and birds	62	24	26	8	28	16	112	26	52	94	26	*30*
Preservation of Historical, Bastat and Cultural Monuments	24	8	28	46	43	26	61	29	38	89	36	*45*
Shooting, filming or painting of nature	28	12	18	36	42	32	36	23	50	48	56	*81*
Clean the water resources of the area	26	24	26	8	52	47	34	25	27	69	48	*97*
Keep nature clean	26	9	26	25	49	58	53	32	38	85	28	*83*
Respect for people and local culture	19	21	13	26	45	58	30	25	42	59	56	*98*
Compliance with the rules and regulations	18	22	19	25	48	44	31	22	39	58	71	*92*
Nature conservation	28	23	29	41	32	28	84	22	30	82	21	*49*

Analyzing the extent of tourists' participation through the LIKERT model: Based on the evaluations, the rate of tourists' participation in the protection of Darakeh area was 56.57%, conservation of plant species 59.15%, protection of animal species and birds 54.08%, planting of seedlings in the region 83/29%, feeding of domestic animals and birds with 21/39%, preservation of historical, archaeological and cultural heritage of 73/49%, shooting, filming or painting of nature and species of the region, 95/60%, cleanup of rivers and water resources of the region 64.2%, keeping nature clean, 55.8%, respecting people and local

culture by 64.22%, compliance with moral principles 65.1%, and supporting the works of art Ray, souvenirs and local handicrafts (for example, their purchase) are also 63.65 percent. On the basis of this, it can be admitted that the highest participation of tourists in the Darakeh area was due to respect for the people and local culture, respect for local laws and regulations, and photography, filming and painting of the nature, while the lowest level of participation in activities such as planting and feeding on domestic animals and birds are recorded. Also, the results show that the rate of tourists' participation in Velenkak neighborhood in the protection of nature is equal to 56.95%, protection of plant species 54.38%, protection of animal species and birds 42.46%, planting of seedlings in the region 07 / 29%, feeding of domestic animals and birds 35.61%, preservation of historical, ancient and cultural monuments 57.6%, shooting, filming or painting of nature and species of the region, 62.67%, clean water for rivers and water resources 34 / 59%, nature conservation 64.45%, respect for local life and traditional culture 0.66%, adherence to moral principles 62.16%, and souvenirs and local handicrafts are also 15/52 percent. In Velenjak area, the highest participation rate of tourists was in activities such as nature conservation, respect for people and local culture, and adherence to ethical principles, while the lowest level of participation in activities such as planting seedlings in the region, feeding domestic animals and birds, and the protection of animals and birds in the area and have not been harmed by them. Therefore, the assumption of a broad participation in urban environmental health, which is one of the important analyzes and evaluations in the formation of integrated environmental management and the promotion of tourism sustainability and the health of the urban community in the area of a Tehran city, is confirmed. In sum, the results of the inquiries indicate the participation rate of 74.73% of tourists in the Darakeh and 53.02% in the Velenjak areas.

Information infrastructure through the LYKERT model: With surveys conducted in the Darakeh area, it was found that the level of satisfaction of tourists with access to telecommunication networks was 40.48%, Internet access 46. Percentages, access to bankers, 39.08 percent, access to newspapers with a massive rate of 43.04 percent, access to information centers by 47.52 percent, antithetical radio and television stations 41.2 percent, and mobile phone antithetic status 53/48 percentages. The statistics indicate that the level of satisfaction of tourists from the information infrastructure in this area is low and that communication facilities need to be strengthened. This was also studied in the Velenjak area. The survey showed that the satisfaction of tourists from access to telecommunication networks was 45.52%, internet access was 47.86%, access to bankers was 43.03% Roster is the most widely advertised newspaper, 46.6%, access to information centers, 49.58%, the antithetical status of radio and television 48.5%, and the mobile phone antidote status is 48.08%. In the Velenjak area, the satisfaction of tourists from the information infrastructure is at a low level and it is necessary to plan appropriately in this regard. However, both assumptions of increasing participation in reducing conflicts between visitors' activities and urban environmental health in the formation of integrated environmental management and promotion of tourism sustainability within the boundaries of Tehran metropolitan have been approved.

CONCLUSIONS AND SUGGESTIONS

Today, the environmental crises in cities and the issues such as air pollution, water, soil, water scarcity and the use of non-renewable land, global warming and climate change, etc., has caused these problems become social issues. However, in recent years, growing concern for protection of the environment has caused that urban tourism become one of the main issue that is being discussed around the world. An increasing participation in the reduction of conflicts between visitors' activities and the improvement of environment is one of the important analyzes and evaluations in the formation of integrated

environmental management, the promotion of tourism's sustainability and the health of the urban community in the District 1 of Tehran. On the basis of this, it can be admitted that the highest participation of tourists in the Darakeh was due to respect for the local habitants and their traditional culture, respect for local laws and regulations, and photography, filming and painting of the nature, while the lowest level of participation was in activities such as planting in the region, and feeding on domestic animals and birds are recorded. Therefore, the assumption of a broad participation in urban environmental health, which is one of the important analyzes and evaluations in the formation of integrated environmental management and the promotion of tourism sustainability and the health of the urban community in the area of a Tehran metropolis, is confirmed. In sum, the results of the inquiries indicate the participation rate of 74.73% of tourists in the Darakeh area and 53.02% in the Velenjak area. However, both assumptions of participation in reducing conflicts between visitors' activities and urban environmental protection in the formation of integrated environmental management and promotion of tourism sustainability within the boundaries of Tehran have been proved. Therefore, the suggestions and strategies necessary to achieve the goals of this research are as follows:

- In order to plan for the restoration and rehabilitation of worn-out tissues, factors such as tight passages that make transport difficult, and the problems of municipal solid waste disposal and wastes, are among the problems that must be identified and appropriate solutions presented.
- The use of new energies including solar, tidal, and nuclear energy to replace fossil fuels and reduce pollution
- Low-cost housing policy by the government for low-income groups and preventing the phenomenon of marginalization around cities.
- Formulating sustainability criteria and strategies for the environment and providing solutions for their realization, and identifying and reviewing environmental laws and regulations in relation to tourism-affected cities.
- To study the environmental impacts of projects and estimate the cost of national environmental protection, including conservation costs, elimination of pollution and destruction and other related tourism-related costs.

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ASSESSMENT OF LANDSCAPE-RECREATIONAL CAPACITY OF NORTH KAZAKHSTAN REGION

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Abstract. The article is concerned with the study of landscape and recreational capacity of North Kazakhstan Region (NKR). The paper presents the results of landscapes studies of North Kazakhstan Region with regard to their suitability and degree of recreation favorability. Here were studied recreational conditions and resources of the regional landscapes, as well as features of their territorial distribution and possibility of use for the recreational purposes. Recreational assessment of the region's landscapes was carried out on the basis of the developed system of criteria and their properties. The calculations were carried out taking into account the significance (weight) of each selected criterion and indicator using the method of scoring. The assessment was carried out within the boundaries of landscape areas. The obtained results made it possible to perform zoning of the territory of the region in terms of recreational capacity level, degree of favorability and possibility of organizing recreational activities of the population.

Key words: landscape-recreational capacity, assessment, landscape, recreational conditions and resources.

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INTRODUCTION

The study of recreational conditions and resources of the living environment of the population is a special area of comprehensive medical and geographical study of the territory. Along with economic, social, environmental conditions, the availability of

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recreational resources, the possibility of organizing recreational activities of the population, recreation and improvement of the population is one of the factors in the formation of public health (Prokhorov & Ryaschenko, 2012). The majority of recreational activities of the population is reduced to recreation within or near the place (region) of permanent residence, and short-term outside trips for recreational and tourist purposes. In this regard, the main attention should be paid to the study of local and regional natural recreational resources, their availability, suitability and degree of favorability to meet the recreational needs of the population. At the regional and local level, the object of such research concerns landscapes (Nikolayev, 2003). In this case, landscapes are considered not just as geographical complexes and their corresponding combinations of natural conditions that make up the living environment of the population, but also as objects of recreational use. An important aspect of this kind of research is the definition of recreational capacity of landscapes, identification of recreational conditions and resources, assessment of their quality and availability, the possibility of using for recreation, health and treatment of the population (Vedenin & Miroshnichenko, 1969; Preobrazhenskiy, 1975; Ilieş & Wendt, 2015; Gozner et al., 2016).

The purpose of the study is to assess the landscape and recreational capacity of the NKR territory. The object of the research concerned landscape (physical and geographical) areas of NKR, the subject of the research is their recreational conditions and resources, recreational capacity.

RESEARCH MATERIALS AND APPROACHES

Theoretical and methodological basis of the study included the approaches and research results of domestic and foreign scientists in the field of medical and recreational geography (Keller & Kuvakin, 1998; Ilies et al., 2014; Prokhorov & Ryaschenko, 2012; Vedenin & Miroshnichenko, 1969; Mukhina, 1973; Preobrazhenskiy, 1975; Eringis, 1975; Kotlyarov, 1978; Mowforth & Vunt, 1998; Nikolayev, 2003; Ryaschenko et al., 2008; Meade & Emch, 2010; Chizhova, 2011; Herman & Wendt, 2011; Ungureanu et al., 2015). Literature and cartographic sources, statistical and reference materials for the period 2000-2016, the results of field landscape and geographical research of 2016-2017 were used as the initial materials. The study used various methods: comparative-geographical, cartographic, mathematical and statistical, expert approach, method of scoring, field methods, GIS, etc.

The study of the subjective perception and the results of the local population assessment of the recreational capacity of natural complexes and the degree of their favorability for recreational activities were carried out using the method of questioning. The results of the survey are also used to perform a collective expert evaluation to determine the factors of significance of the selected criteria. In total, more than 100 respondents took part in the sociological survey. The questionnaire was developed taking into account the selected evaluation criteria and regional landscape and geographical features of the study area. When determining the criteria and developing a scale for assessing the recreational capacity of landscapes we used methods and approaches of recreational geography, some components of the methods of recreational research of natural-territorial complexes and their components (Prokhorov & Ryaschenko, 2012; Vedenin & Miroshnichenko, 1969; Mukhina, 1973; Nefedova et al., 1973; Eringis et al., 1975; Frolova, 1994; Kochurov & Buchatskaya, 1997; Bredikhin, 2003; Ryashchenko et al., 2008; Ilieş, & Josan, 2009; Chizhova, 2011). In addition, the selection of criteria and parameters of evaluation took into account the medical and geographical study position of the recreational conditions and resources as a factor in public health formation.

The assessment consisted of several stages. At the initial stage, the previous experience and results of landscape and recreational research, methods and approaches

for assessing the recreational capacity of the territory were studied. Further, we have collected and processed the necessary data and materials, inventory analysis and systematization of natural and anthropogenic recreational facilities of the region, performed field landscape studies, studied the recreational conditions of the region. An important step was the definition of assessment units, assessment criteria, conducting a survey and expert assessment and determining the significance (weight) of the selected criteria, the development of the assessment scale. At the final stage, we carried out the assessment itself and identified the areas with the greatest recreational attractiveness and recreational capacity. As assessment units we have adopted physical-geographical, landscape areas with the boundaries determined by the physical and regional geographical zoning, developed by V.A. Nikolayev (Collection of Maps of Northern Kazakhstan, 1970). We singled out the following areas within the region: 1. Petropavlovskiy; 2. Presnovskiy; 3. Bulayevskiy; 4. Yavlenskiy; 5. Chapaнevskiy; 6. Maryevskiy; 7. Karasuskiy; 8. Shagalalinskiy; 9. Ulkenkaraoyskiy; 10. Kyzyltuyskiy; 11. Ayirtauskiy; 12. Imantauskiy; 13. Kamennobrodskiy; 14. Kokshetauskiy; 15. Yesil-Akkanburlukskiy; 16. Seletinskiy; 17. Seletytenizskiy (Figure 1).

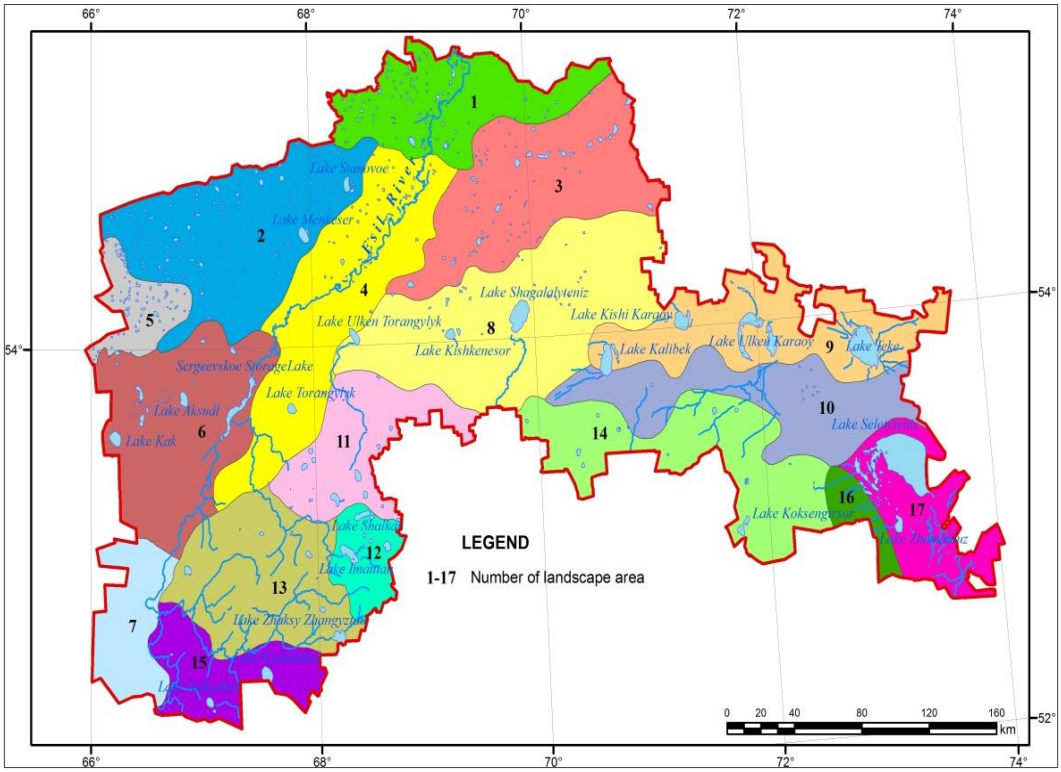

Figure 1. Map-Chart of Landscape areas of North Kazakhstan Region
(Landscape areas are named in the text hereof)

A number of criteria and properties which were combined into several groups have been defined for the assessment:

1. Comfortability of climatic conditions determined mainly by the number of days with favorable weather conditions for outdoor recreation during the year (the number of days of sunshine, the sum of temperatures above 10°C).

2. The terrain structure (altitude, surface slope and density of terrain dissection).

3. Natural and aesthetic appeal, expressiveness of the landscape was determined on the basis of visual assessment of the landscape of the dominant tracts and the diversity of landscape elements.

4. Natural attractions (the number of unique natural objects per area unit, their diversity).

5. Cultural and historical monuments (number per area unit).

6. Water bodies (availability of lakes, rivers, their number, area).

7. The nature of vegetation (species diversity of flora, the degree of forest cover).

8. Therapeutic value (availability of therapeutic mineral waters and mud deposits).

9. Commercial and recreational value (species diversity of commercial animals and birds, number of species of mushrooms, berries).

10. Landscape diversity (the coefficient of landscape diversity (inhomogeneity)) (Pozachenyuk, 2015; Sokolov, 2016; Collection of Maps of Northern Kazakhstan, 1970).

11. Availability of special nature protection areas (number, occupied area, %).

12. The existing recreational infrastructure and arrangement of the territory (number of stationary establishments for rest and tourism, availability of tourist routes).

13. Suitability of the landscape for placement of recreational objects and convenience of their engineering arrangement (degree of economic development and use of the territory, %).

14. The degree of anthropogenic transformation; transformation of natural landscapes was determined on the basis of the anthropogenic transformation indicator (Kat).

15. Safety from the point of view of geomorphological, hydrochemical, landscape-epidemiological risks: dangerous natural phenomena – high waters, floods, strong winds, etc. (number of reported cases, duration in days); natural-geochemical anomalies (area, %); natural focal diseases (number of cases).

Table 1. Scale of landscape and recreational capacity assessmentof North Kazakhstan Region (fragment)

No. п/п	Significance, K	Indicators	Parameter Range				
1	2	3	4				
Environmental Conditions							
1	5	Sunshine duration, hours per year	2100	2050	2000	1950	1900
2	5	Accumulated temperatures over 10°C, degrees	2400	2300	2200	2100	2000
Terrain structure							
3	4	Absolute altitude, m	>1000	-	500-1000	-	<500
4	3	Surface slope, degrees	>12	-	12-6	-	<6
...	...	...	...	...	...	...	...
7	5	Natural and aesthetic appeal of the landscape, points	5	4	3	2	1
...	...	...	...	...	...	...	...
13	4	Forest cover, %	>10	10-8	7-5	4-2	<2
...	...	...	...	...	...	...	...
17	4	Degree of landscape diversity, unit fractions	1	0.9-0.7	0.6-0.4	0.3-0.2	0.1
...	...	...	...	...	...	...	...
		Assessment, points	5	4	3	2	1

The selected criteria and their properties were measured in absolute units and converted into relative or provisional ones (points). In order to convert absolute values into relative units, we have adopted a five-point system: the lowest score (1) characterizes the minimum value of the indicator or its absence, the highest (5) means the maximum. The value of points was determined taking into account the absolute values of each criterion considered. The highest value and criterion property is assigned the highest score.

A fragment of the assessment scale is shown in the Table 1.

The calculations took into account the significance (weight) of the selected criteria by introducing the significance factors (K), which were identified on the basis of expert and survey evaluation. Points on all analyzed criteria were summed taking into account the factors of their significance. Scores on indicators of anthropogenic transformation, the degree of economic development and use, safety of landscapes were subtracted from the total score. The integral estimation is calculated according to the formula modified for this study and based on the methods presented in the works of (Arkhipova, 2006; Stulyshapku, 2006):

$$Rp = \frac{C_1K_1 + C_2K_2 + C_3K_3 + ... + C_nK_n}{n}, \qquad (1)$$

where Rp – integral estimate (average point) of recreational capacity, C – estimates of the i^{th} criterion in scores, K – significance factor of the i^{th} criterion, n – number of criteria.

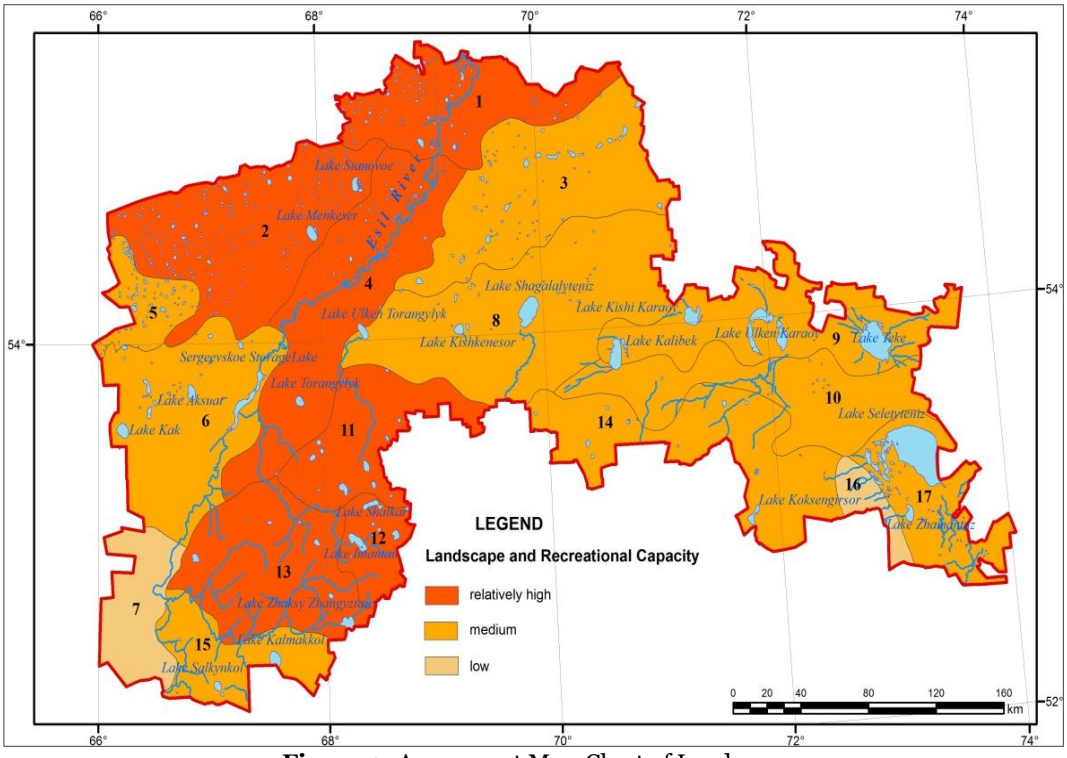

Figure 2. Assessment Map-Chart of Landscape and Recreational Capacity of North Kazakhstan Region

The calculations were carried out for each landscape area. The obtained weighted average scores allowed to assess the landscape and recreational capacity of the region under study and to identify landscape areas with high, medium and low recreational capacity and attractiveness. The map of assessment of recreational capacity of landscape areas of North Kazakhstan region can be found in Figure 2.

RESULTS AND DISCUSSION

The highest value of scores was identified for the districts of Imantau (15,0), Petropavlovsk (14,5), Ayirtau (13,7) and Presnovka (13,3). The areas of attractive recreation also included Kamennobrodskiy (10,3) and Yavlenskiy (10,1) districts. Within these areas there is concentrated a significant variety of natural, cultural and historical recreational facilities. Natural complexes can be characterized by significant recreational capacity and aesthetic appeal. The state and development of recreational infrastructure has a high enough level to meet the recreational needs of the population.

The lowest scores were received by districts of Seletynskiy (4,9) and Karasuskiy (3,6). In these areas, there is a limited number of objects of recreational importance. They have low level of development of recreational infrastructure and arrangement of the territory for the population recreation. All stated above adversely affects the recreational attractiveness of the areas. Bulayevskiy, Chapayevskiy, Maryevskiy, Shagalalinskiy, Ulkenkaraoyskiy, Kyzyltuyskiy, Kokshetauskiy, Yessil-Akkanburlukskiy, Seletytenizskiy areas have the value weighted average of scores varying in the range of 5,0-9,3 and are referred to the group of medium recreational capacity and recreational appeal. In general, these areas are characterized by favorable landscape and geographical conditions for recreation. The limiting factor for recreational activities is rather high agricultural development of the territory.

CONCLUSION

The assessment of landscape and recreational capacity by means of scoring method is rather objective upon availability of the extensive basic material (archive, statistical and cartographic data, materials of field landscape researches, etc.).

The used method of assessing the landscape and recreational capacity of the North Kazakhstan Region or its individual approaches can be used for recreational research in other regions. The conducted research allowed determining the territory within the North Kazakhstan Region with the most favorable landscape and geographical conditions and a sufficiently high recreational capacity for recreational activities and recreation. The results can serve as an information basis for further research on the creation of a regional program for development of the recreational industry and improvement of tourist and recreational attractiveness of the region.

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THE EVOLUTION OF HOTELS IN JOHANNESBURG 1890-1948: A CASE OF HISTORICAL URBAN TOURISM

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Abstract: Urban tourism is attracting a growing international scholarship. The aim in this paper is to address the limited focus on historical aspects of urban tourism. Using a range of historical documentary sources this paper analyses the evolution of hotels in Johannesburg from the period of the establishment of the gold mining settlement to the period of the late 1940s. The methodology made use of primary historical data from a range of archival sources. The results reveal certain similar findings to those of other historical research on hotels, most notably the role of city's top tier establishments as foci for the adoption of new technologies and of Johannesburg's leading hotels as nodes of elite sociability. Nevertheless, in terms of interpretation, the most distinctive characteristic of the early hotel economy of Johannesburg was the subordination of the supply of accommodation services to the sale of liquor.

Key words: urban tourism, hotels, historical tourism, Johannesburg, South Africa

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INTRODUCTION

Debates about urban tourism continue to attract an expanding corpus of international academic scholarship (Ashworth & Page, 2011; Colomb & Novy, 2016; Pasquinelli, 2015; Pasquinelli & Bellini, 2017; Pinkster & Boterman, 2017; Rogerson & Rogerson, 2014, 2017). During the 1980s with the occurrence of deindustrialization, accompanying economic recession and widespread distress across many cities of the United States and Western Europe there was a surge of interest in tourism promotion (Law, 1992, 1993). In a context of urban economic crisis and decline policy makers sought out new activities to resuscitate their weakened city economies (Beauregard, 1998; Judd, 2015; Law, 1993). Several cities which previously were centres of production have been re-constructed and re-invented as centres of consumption in particular through the

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building of "an infrastructure of play" in order to support tourism growth (Judd, 2015). By the 1990s Beauregard (1998: 220) could state that in the United States many of the country's large cities "list tourism as one of their most important economic sectors". Arguably, in Europe as well as in North America, tourism "is now a virtually ubiquitous element of urban regeneration policy" (Aksoz & Bâc, 2012: 8). The promotion of urban tourism in association with the making of post-Fordist cities is not merely confined, however, to North America or Western Europe. Currently, there is a burgeoning urban tourism scholarship that deals with similar issues in cities of Eastern Europe (eg. Cudny, 2011, Dumbrovská & Fialová, 2014; Iwanicki & Dłużewska, 2015; Zamfir & Corbos, 2015), the Middle East (eg. Henderson, 2006, 2014, 2015), Asia (eg. Henderson, 2017; Horita, 2018; Li & Bihu, 2013; Shi et al., 2017) and sub-Saharan Africa (eg. Rogerson, 2010, 2012, 2014a, 2014b; Rogerson & Rogerson, 2014; Rogerson & Visser, 2007, 2011, 2014).

Within the vibrant international scholarship surrounding urban tourism several different strands of writing can be identified. The variegated themes of urban tourism research are critically discussed in recent reviews by Ashworth & Page (2011), Pasquinelli (2015) and Rogerson & Rogerson (2017). This said, Murillo et al. (2011: 4) observe that whilst tourists visiting cities represent one of the earliest forms of travel "it was only during the last decades of the twentieth century that many cities became aware of its economic potential and embraced it as a key sector inside their economies". Undoubtedly, city tourism is not a new activity; it has existed and evolved from the earliest days of civilization following the establishment of cities (Karski, 1990). The historical growth of urban centres encouraged people with discretionary means and inclination to tour and to experience cities as focal points of national culture, art, music, literature, architecture and design (Cohen & Cohen, 2015). In addition, cities as the anchors for economic and political power in national territories became established as destinations for travellers arriving for an array of different purposes (Rogerson & Rogerson, 2017). Notwithstanding the long tradition of cities as tourism destinations it is apparent that the growing body of international works on urban tourism is dominated overwhelmingly by contemporary thematic issues which often are linked to policy issues. Very little concern is manifest for analysis and excavation of historical aspects of urban tourism. The most notable exception is, perhaps, Cocks (2001) seminal study of the growth of urban tourism in American cities at the turn of the twentieth century and classic works on the Manhattan hotel economy (Baum & Mezias, 1992).

Among other scholarly contributions addressing dimensions of past urban tourism must be noted investigations on Poland (Klodzinski, 2013), Romania (Badieli et al., 2018), Spain (Urtasan & Gutiérrez, 2006) as well as South Africa (Bickford-Smith, 2009; Rogerson, 2017). Against this backdrop of limited historical research, the objective in this paper is to investigate one facet of the evolution of tourism in Johannesburg, South Africa's largest city. The paper focuses on the hotel sector as one critical underpinning for tourism expansion in Johannesburg.

The article examines the making of the accommodation infrastructure for tourism in Johannesburg, which is currently South Africa's second most important urban tourism destination (Rogerson & Rogerson, 2017). More specifically, attention is on the evolution of the early hotel sector which is acknowledged as pivotal for the development of any city as a tourism destination (Cirer-Costa, 2012). As Timothy & Wall (1995: 65) assert "hotels are the purest and most visible manifestations of tourism in the city". The time period covered by this investigation is from 1890 – shortly after the founding of Johannesburg as a gold mining settlement in 1886 – to 1948 a critical year in South African history as it marks the election to power of the National party which introduced the programme of apartheid policies. Primary data sources used in this study are the

historical papers collections held both at Johannesburg Public Library (Harold Strange Collection) and the University of the Witwatersrand (William Cullen Historical Papers); tourism business directories, industry press and local newspapers; and, material from the collection of the South African Railways and Harbours.

HOTELS AND HISTORY

James et al. (2017) point out that it has been almost a century since scholars from various disciplines first became interested in hotels. A distinction is often made between research on hotels which is undertaken from a hospitality management as opposed to studies from a social science perspective (Rogerson, 2013). From a hospitality management viewpoint most existing scholarship concentrates on the business management side of hotels with research questions about marketing (including social media), human resources, facilities, guest satisfaction, reservation and information systems, housekeeping, or catering (Timothy & Teye, 2009). Beyond hospitality studies the research 'take up' on hotels is much less pronounced. Indeed, although hotels are at the heart of the tourism economy, the actual research on hotels constitutes only a minor theme within broader tourism scholarship (Rogerson, 2013; Timothy & Teye, 2009). In reviewing extant international scholarship on hotels three critical points must be made. First, that the majority of writings are through a hospitality management lens which leaves a number of knowledge gaps concerning the understanding of the establishment and organization of hotels in relation to the expansion of tourism (Timothy & Teye, 2009). Second, the largest group of writings on the hotel industry relate to the global North with only a small amount of research investigations on hotels in the global South. The mass of international scholarship on hotels focuses mostly on North America, Western Europe and Asia. In relative terms Latin America and Africa are the most neglected global research locations in relation to hotel research (Rogerson, 2013). Three, as is the case of urban tourism research as a whole, there exist only a limited number of studies that interrogate hotel development from a tourism historical perspective (Cirer-Costa, 2012; Timothy, 2012).

Arguably, following James et al. (2017: 108), it must be acknowledged that "the field of hotel history is in comparative infancy". The key findings of a number of valuable investigations must be noted, however, in order to provide a context for this exploration of early hotel development in South Africa. Historical tourism research has utilised a wide range of methodologies including micro-histories, hotel biographies and a supply and demand approach linked to innovation (Bowie, 2018; McNeill & McNamara, 2009; Yilmaz et al., 2017). In Europe and North America scholars draw attention to the origins and different trajectories of hotel development in these regions (Bowie, 2016, 2018; James et al., 2017). The importance of inns in the provision of early accommodation services in Europe and North America was challenged from the late eighteenth century. Across Britain and North America 'hotels' superceded inns; in some cases this was the result of inns simply changing their names but, more importantly, it was the outcome of the opening of entirely new establishments as hotels (James et al., 2017). Bowie (2016) alerts us to different pathways for the evolution of hotels in continental Europe as compared to Britain. The major differences are observed, however, in the context of North America where the small inn was replaced by the growth of large hotel establishments. Bowie (2016) stresses the large-scale of hospitality provision in the context of new hotel openings and the ready adoption of new technological advances and management systems in North American hotels. It is emphasized that American hotels pioneered new building technologies and offered new levels of comfort to visitors through "providing elevators, hot and cold running water, chandeliers lit by gas, 'indoor plumbing, steam heat, call bell systems, patent locks' and complex equipment to mechanise kitchens and laundry processes" (Bowie, 2016: 161).

In Britain inn-keeping in the 18th century offered a rudimentary form of accommodation services which was transformed radically only during the nineteenth century. It is argued that behind this transformation was "the accumulation of a wide range of different innovations which combined to transform the system of hospitality at that time" (Bowie, 2018: 314). Hotels were at the cutting edge for the adoption of new technologies (James et al., 2017). Of critical importance in transforming the character, scale and structure of the hospitality services was the adoption of several socio-technological innovations. These included the concept of a 'hotel' as a superior form of accommodation for travellers than the inn, the emergence of railway hotels linked to the transport revolution of the 19th century, the adoption of American building processes applying the technology of commercial architecture, and of management practices, most notably the so-termed American plan which "comprised fixed daily tariffs for rooms and meals, the requirement for customers to register and pay for the lodging/food upon arrival and pre-determined times for dining" (Bowie, 2018: 319). The change that occurred as a consequence of these innovations was that the "amateur inn-keeping regime was replaced by more professional hotel management" (Bowie, 2018: 322). In addition, the new order of accommodation services comprised larger, modern hotels, with enhanced facilities, incorporating contemporary technologies, higher quality restaurants and improved levels of professional management (Bowie, 2018). Overall, these major shifts in the character and practice of hotels could be interpreted as manifestations of broader economic and social processes including "the growth of cities, the industrialisation of production and the growth of complex business forms" such that "hotels were sites of modernisation and modernity" (James et al., 2017: 93).

The role of hotels as sites of modernisation was particularly evident in colonial South-East Asia and in Africa. Among others the works of Peleggi (2005) and Goh (2010) highlight that the building of grand luxury hotels such as the Hanoi Metropole, Raffles in Singapore or the Eastern and Oriental in Penang was a vital component of the expansion of transnational capitalism. James et al. (2017: 109) stylize them as "nodes of sociability at the local level and nodes within wider networks of circulation – of people and capital – at the imperial level". The colonial luxury hotel was a principal locus for technological diffusion as well as for the reproduction of metropolitan cultural style (Goh, 2010; Peleggi, 2005). McNeill and McNamara (2012: 151) argue that such hotels "were often early adopters of the latest technologies in terms of building systems (lifts, plumbing, electrical lighting and heating) and communication systems (telegrams and telephones) and showcased the latest architectural styles". In particular, the colonial hotel assumed a special role for local elites who required "an address that could host banquets, society events, trade fairs, and provide suitable accommodation for travelling business people" (McNeill & McNamara, 2012: 151). Certain characteristics of colonial hotels in South-East Asia find parallels in the record of the early development of hotels in South Africa. Nevertheless, there were also many highly distinctive features of the initial landscape of hotels as revealed by the study of Johannesburg.

EARLY HOTEL DEVELOPMENT IN JOHANNESBURG

The turbulent period of the 1880s discovery of gold and urbanisation of the Witwatersrand saw extraordinary social, political and economic change in and around the mushrooming mining settlement which, prior to the mineral finds, was merely an area of bare and open veld. The early social and economic history of Johannesburg and the lives of its 'ordinary people' in the rapidly expanding gold mining locale are richly documented in studies by van Onselen (1982). During the hectic years of bursting growth of Johannesburg as a mining settlement as well as the city's early phases of industrialisation

it was a magnet for new arrivals and business entrepreneurs both from within South Africa and around the world (van Onselen, 1982). The expanding urban population inevitably created a market for accommodation services of various types, most especially of commercial boarding houses. One other dimension of accommodation services was the appearance from the 1890s of hotel establishments, the growth of which continued into the early decades of the 20th century (Cole, 1988). Indeed, in many respects, the period from 1890 to 1920 laid the foundations for the Johannesburg hotel economy to satisfy the hospitality requirements of early travellers and tourists to the city.

By 1920 Johannesburg, with an estimated population of 250 000, was the most prosperous settlement in South Africa and, as the chief seat of the gold mining industry, justifiably was styled 'the golden city'. City marketing in the early 1920s promoted Johannesburg as "the commercial heart of South Africa" and "the most interesting place in a country of fascinations" (Municipality of Johannesburg, 1924: 1317). In addition, with the possibility of attracting visitors it proclaimed "go to Johannesburg for health, business and enjoyment" (Municipality of Johannesburg, 1924: 1317). Official figures to track the expansion in the numbers of hotel establishments in Johannesburg are unavailable. The 1920-21 Illustrated South African Hotel Guide for Travellers and Tourists, however, listed a total of 67 hotels in the city (The Union Publishing Agency, 1921). The vast majority of these establishments were situated in the city's downtown area and immediate surrounding suburbs. With limited automobilities at the time large numbers of hotels in Johannesburg were located in close proximity to railway stations. Indeed, in advertisements, hotels marketed themselves in relation to access to the railway station. For example in the 1936 Illustrated Guide to Hotels in South Africa the Hotel Elgin described itself as Johannesburg's newest hotel "conveniently situated close to Park station", Linton's Hotel was promoted as "next railway station" and Hotel Clarendon was "Opposite the tram Centre…Five minutes from Station" (South African Railways & Harbours, 1936: 105). Many city hotels also offered the service of porters to meet all trains for potential hotel guests. The two most prestigious hotels in the city also actively marketed to potential tourists but not on the basis of location. The Langham sought to attract visitors with its '30 new rooms', 'spacious lounge', 'large banqueting hall', 'well-known dinner' as well as entertainment offerings with an orchestra (The Union Publishing Agency, 1921: 130). This advertising was outshone, however, by that of the Carlton which highlighted that it was a hotel 'de luxe', 'par excellence' and with over 300 bedrooms proclaimed itself as "one of the most luxuriously furnished and equipped in the world" (The Union Publishing Agency, 1921: 122).

A national survey of hotels in South Africa which was conducted by Norval (1936) revealed for 1935 a total of 76 licensed hotels in Johannesburg. Although inevitably between 1920 and 1935 there must have been a churn of establishments – with the closure of certain hotels and openings of others – the broad picture was of a hotel sector in the city that was little changing during this period. One report on Johannesburg hotels for 1935 determined that "the greater proportion of Hotels in Johannesburg have been in existence for the past 30 to 40 years" (Norval, 1936: 249). Examination of the size structure of Johannesburg hotels indicates that the largest share of establishments were significantly small hotels with only between 10 and 24 bedrooms (Table 1). The physical condition of the majority of Johannesburg hotels was a matter of concern and described as "a very unsatisfactory state of affairs" (Norval, 1936: 249). It was argued that the hotel stock by 1935 had seen minimal change since initial construction, and was "without any substantial alteration being made to the buildings apart from minor repairs and renovations from time to time" (Norval, 1936: 249). Of the 76 hotels in 1935 it was recorded that only 18 or 23.7 percent offered their patrons running hot and cold water; this said, even the available bathrooms were on a shared basis with an average of 3.6 bedrooms for each available bathroom (Norval, 1936: 234).

Table 1. The Size Structure of Hotels in Johannesburg, 1935 (Source: Author based on Norval, 1936)

Size of Hotels	No.	% Total Hotels
10-24 bedrooms	29	38.2
25-49 bedrooms	28	36.8
50-99 bedrooms	12	15.8
Over 100 bedrooms	7	10.2
TOTAL	76	100

Highly critical reports appeared in local newspapers of the poor conditions in Johannesburg hotels. Comparisons were drawn between the quality standards of shops, theatres, apartment blocks, motor-cars or furniture available in Johannesburg during the 1930s, which were seen as comparable to the best in other parts of the world, and "the relative backwardness of the hotels in Johannesburg" (Rand Daily Mail, 30 October, 1935). Indeed, it was observed in negative fashion that the city's "hotels have to be placed in a class of their own" (Rand Daily Mail, 30 October 1935).

One partial explanation for the generally poor state of city hotels in Johannesburg relates to the "limited demand for high-grade hotel accommodation in South Africa as compared to other countries" (Norval, 1936: 226). For the 1920s and early 1930s international tourism numbers were low for South Africa as a whole as the country was remote from the main currents of tourism traffic and at this time most international arrivals continued to be by ocean steam liners arriving in Cape Town (Saunders & Barben, 2007; Bickford-Smith, 2009). Accordingly, with "the paucity in the demand for high quality accommodation" the hotel stock of Johannesburg was geared mostly to the less demanding market of the domestic travelling public of South Africa and only "to a very limited extent for those of visitors from overseas" (Norval, 1936: 227). By the 1930s Johannesburg was emerging as a destination for domestic travellers and particularly so at Easter time when the city hosted a major agricultural show as well as several sports events. Although Johannesburg could never match the leisure attractions of South Africa's coastal destinations, including Cape Town, Durban, Port Elizabeth and East London, the city began to identify and market certain leisure attractions. Johannesburg's attractive climate was given a focus and marketed as "a sunshine city built on gold" (Johannesburg Publicity Association, 1931). Another national guide issued in 1932 drew attention to the "unique" sight of the great goldfield, the city's "exhilarating" climate and that "as a holiday resort there is much to commend the city to those in search of sport and pleasure, motoring on good roads, numerous excellent golf links and other interests" (South African Railways & Harbours, 1932: 85). The city's parks, Zoological Gardens, horse racing and cricket events were identified as special attractions for visitor enjoyment (South African Railways & Harbours, 1932: 86).

The unsatisfactory state of hotel facilities in Johannesburg could not, however, be explained simply by factors of domestic demand. The most distinctive feature of the Johannesburg hotel economy by the 1930s was its strong dominance by liquor interests. The origins of the liquor industry's associations with the South African hotel industry can be traced back to the 1890s, the earliest days of Johannesburg, when the so-termed 'tied house' system was introduced into the country by local brewing companies. Under the tied house system a producer or wholesale merchant in liquor could ensure that its tied hotels sell exclusively only particular types of beer or other forms of alcohol (Rogerson, 2011). Licensees were tied to breweries as a result of lease, sub-lease or loan agreements. Starting in the 1890s this system of tied houses spread and became deeply entrenched in the South African hotel industry such that breweries controlled sales of alcohol in hotels. It was described as follows: a "hotel-keeper is bound to purchase all his beer requirements or the

bulk thereof from a particular brewer and his wine and spirits from a particular wine and spirit merchant" (Norval, 1936: 251). One consequence of this dominance exercised by liquor companies over the hotel trade was that the sale of alcohol became a more important focus for hotel keepers than the provision of accommodation (Rogerson, 2011; Walker, 1977).

By 1935 it was calculated that 64 percent of Johannesburg hotels were tied to breweries (Norval, 1936: 252). In terms of hotel personnel the implications of the tied houses were instability in terms of the licensees of hotels and the overriding dominance of hotel management by individuals with little focus on the actual supply of accommodation services. Norval (1936: 230) explains that the personnel situation in the hotel sector was characterised by "gross instability and lack of continuity" with widespread evidence "that the hotel industry has become one into which people of diverse origin and profession stray at odd times, hoping to find therein some lucrative source of income". Correspondingly, it was recorded that the numbers of people who enter the South African hotel industry "in the prime of their life, or who follow their parents in this line of business, intending to make it a career and taking a pride in making an hotel to which visitors will be glad to return must under present conditions be taken as negligible" (Norval, 1936: 230). The control of the hotel trade in South Africa by liquor companies – and especially the country's brewing enterprises – was further consolidated by legislation passed in 1928 which required all licensees of existing bars in urban areas to provide a minimum of 10 bedrooms to retain a liquor licence (Rogerson, 2011). Arguably, it was apparent that "the conditions that the licensees had to meet were largely physical, with little regard being given to the service aspect, and all new licensees carried the obligation to build an 'hotel" (Walker, 1977: 9). The 1928 legislation created a basic change in the character of South African hotels – which persisted until the mid-1960s - that the major focus of the hotel industry was on liquor-sales rather than the supply of quality accommodation services. The existence of this legislation provides a basis for understanding the high proportion of small hotels in Johannesburg, especially in the city centre, which offer the "bare ten rooms" as required by the legislation in order simply to secure the license for liquor sales. The quality of hotel buildings and provision of accommodation was of minimal concern as most of the stock of early Johannesburg hotels by the mid-1930s were nothing but thinly disguised bars (Rogerson, 2013). A decade later at the close of the Second World War the essential character and problems of the hotel industry in Johannesburg were little changed. The precarious economic situation of most hotels in terms of reliance on the bar for profits had been exacerbated by the introduction in 1939 of controls on price increases that hotels could enact. As Walker (1977: 10) argues for well-run hotels tariffs for accommodation services "were fixed too low to yield a return attractive enough in relation to the effort required". With no control on the tied-house system or amendment of the legislation that subordinated the hotel industry to liquor interests, hotel accommodation standards were continually under fire. The situation for the majority of Johannesburg hotels refracted the national situation of being "far from being ideal and there was scope for much improvement" (Rand Daily Mail, 1 March 1944). Newspaper reports in 1944 recorded that hotel-keepers were viewed as "a suspicious and even predatory character" (Rand Daily Mail, 27 October 1944). One consequence of the controls on accommodation tariffs was to bolster poor management of the hotel industry as a whole (Crocker, 1950; Walker, 1977). Overall, the mass of the liquor-dominated hotel establishments in Johannesburg continued to offer unsatisfactory standards of accommodation as well as poor "standards of service, civility, cleanliness and cuisine" (Maggs, 1949: 17).

The major exceptions to this depressing picture of Johannesburg hotels were a small group of the city's most fashionable hotels, some of which could be compared in quality and function with the classic colonial hotels of South East Asia (Rogerson, 2018).

Cole (1988) reports that the Grand National, which opened in 1890, was Johannesburg's most fashionable establishment of the time being advertised as in "the healthiest part of town with "three splendid drawing-rooms facing the three principal streets, ladies sitting rooms as well as hot and cold baths" (Cole, 1988: 7). This hotel was a feature of Johannesburg social scene until 1939 when the downtown site was so valuable that the hotel was demolished in order to make way for shops. The offerings of Heath's, North Western Hotel, and the Grand Central Hotel, with a dining room "adorned by handsome mirrors" also placed these hotels for a short period amongst the preferred destinations of Johannesburg elites. Other upper echelon hotels enjoyed a longer history. For example, the Langham Hotel, established in 1905 (and surviving until 1972) was described by Benjamin (1979: 23), as representing "something special in the social fabric of Johannesburg" as the hotel "had grace, charm and solid old-world comfort". It was a rendezvous for rich mining magnates, local and international celebrities, including royalty, and considered as "expensive, discreet, smaller and less flashy than the Carlton which was opened not long afterwards". Above all, the Carlton Hotel was Johannesburg's showcase and most distinguished hotel (Rogerson, 2018). Rosenthal (1972: 32) writes of Johannesburg's "great hotel" that taste "is the keynote of the decorative scheme, as comfort is the motive of the building's design". He continues: "From the lowest basement to the topmost story there is visible no single garish feature, no architectural effect with which the most hyper-critical visitor could possibly find fault". Overall, the hotel was endowed with plush interior appointments, the latest innovative technologies, including in the basement a "full-scale Turkish bath and massage establishment, with a marble swimming pool" (Benjamin, 1979: 10). As documented by both Rosenthal (1972) and Hughes (1983) for many years the Carlton remained the most prestigious address in Johannesburg, a central meeting place for important events and for gala social functions in a manner that exhibits certain parallels with those described for colonial imperial hotels.

CONCLUSION

The topic of urban tourism continues to generate an impressive and expanding scholarship (Colomb & Novy, 2016; Pasquinelli, 2015; Pasquinelli & Bellini, 2017). As argued earlier, the bulk of writings is contemporary in focus and mainly concentrates on developments around urban tourism in the global North. This article offers a modest contribution to examining historical aspects of urban tourism in the less well researched cities of the global South by interpreting the character of the early hotel industry of Johannesburg, South Africa's largest centre. The analysis discloses certain similar findings to those of other investigations, most notably the role of city's top tier establishments as foci for the adoption of new technologies and of the leading hotels as nodes of elite sociability. This said, the most distinctive characteristic of the early hotel economy of Johannesburg was the dominance of liquor interests through the tied house system and the legislative requirement that linked access and retention of a liquor licence to the provision of ten rooms for basic accommodation. The modernization of the Johannesburg hotel industry and a refocusing on accommodation provision rather than liquor selling was delayed until the mid-1960s (see Rogerson 2011).

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CONSERVATING THE TRADITIONAL CELLARS OF SALACEA, BIHOR COUNTY, ROMANIA

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Abstract: This paper argues for the enhanced utilization of the built heritage in the case of the unique cellars of Salacea, Bihor Country which is called „the village of 1000 cellars„. The research analysis of the cellars includes field investigations, study of existing bibliography, air-photo interpretation. For examining the

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architectureal plans, facades and volumes use was made of software such as: Archicad 22 R1 INT version 22.0.0.3006, Artlantis (2017) 6.5 version 6.5.2.14, Adobe Illustrator CC (2017) version 21.1.0 and Adobe Photoshop CC (2015) version 16.1, and for processing the photos Adobe Lightroom version 6.12. Cartographic materials have been processed in 3D Studio Max, Corel Draw and Corel Photopaint. The use of spatial data allowed identification and analysis of important aspect for understanding the territorial reality. The study identifies two authentic models of cellars that could be exploited for their heritage potential for tourism development and a source of income for the local area.

Key words: cellars, cultural landscape, heritage monuments, Salacea, Romania

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INTRODUCTION

Sălacea commune is located in the north-western part of Romania in the northern extremity of Bihor County, between the Ierului Plain and Sălacei Hills (Figure 1). The altitude of the landscape varies between 100 and 160 m. The areas landscape evolution is the result of climatic-tectonic oscillations and the uninterrupted action of the Ier River and its tributaries (Posea, 1997). The climate is moderate temperate-continental plain, with Panonic tones, western and northern influences. This, in turn, is reflected directly in the soil types and crops that are suitable for agricultural purposes. Viticulture has been a long established tradition in this area and the traces of this occupation are manifest in the cultural landscape in the physical form of the cellars.

Several previous works refer generally to the cultural landscapes (VÁTI KHT - Budapest Compilation, 2000; Ilieș et al., 2014, 2015, 2016, 2017, 2018; Gozner, 2010), with special regard to the landscape in Transylvania (Benedek, 1996); photographic work Sofalvi, 2004) and monographic works (Kéri & Kántor, 2009; Iren, 2003); Other research address opportunities for touristic capitalization of the oenological and gastronomic tradition (Hava, 2015; Gozner et al., 2016, Gozner & Avram, 2010). Of note also is a biodiversity study in Salacea wetland (Interreg project, pre-feasibility study, 2017), albeit with no emphasis on Salacea cellars.General works exist referring to the cellars on the hills of Oradea (Dincă et al., 2012; Linc et al., 2017; Tatar et al., 2017). It is the aim in this paper to analyse the architecture and traditional cellars of Salacea and argue that they potentially represent an opportunity for the enhanced utilization of built heritage in this part of Romania. The following discussion is presented as a description of the Salacea cellars as cultural heritage, the methodology results and discussion of different models of cellars, and conclusions.

THE SALACEA CELLARS

The origins of the Salacea cellars relate to the long tradition of viticulture which has been practiced for hundreds of years in this area. For the inhabitants of Ierului Valley wine production was not only a source of income but also provided status in the local society. The historical evidence suggests that all quality farmers have a patch of vineyard (Benedek, 1996, 101; Hava, 2015). Most of the cellars are concentrated in Sălacea commune, which is known as the “village of the 1000 cellars”. Kéri G. and Kántor A. (2009, 104) in their study stated that they found evidence of a total of 956 cellars.

Local residents say, however, that this total is an underestimate as each household would have at least one cellar. As is shown on Figure 2 most of the cellars

are concentrated in groups or rows, in the urban part of the locality (7 rows). It has been observed that the cellars are "an extension of the household at the border of the villages, the expression of a way of life as a result of their adaptation to the environment and also as an argument in favor of a profession that provided people with a chance to make money" (Chiriac, quoted in Sofalvi, 2004). Figure 3 shows the oldest cellar in the village of Sălacea which dates back to 1807 (Iren, 2003) this is evidenced by the inscriptions on the facades of the cellars.

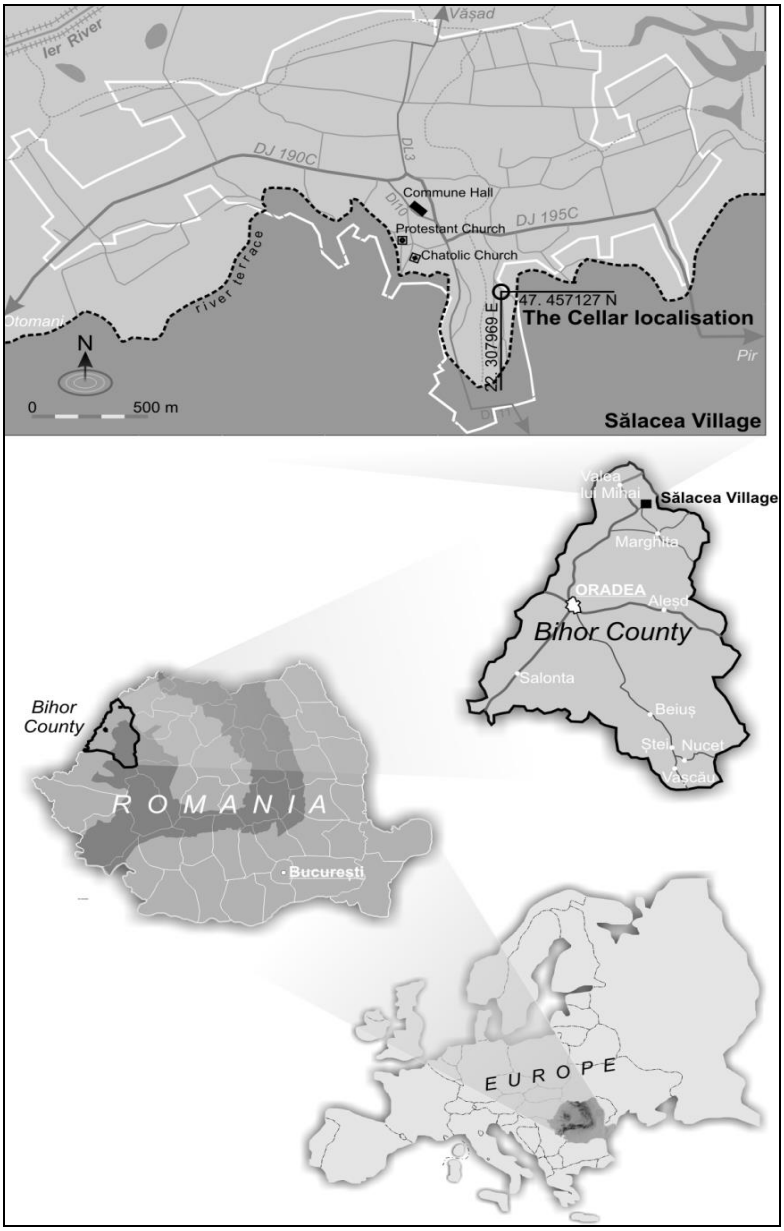

Figure 1. Geographical outline of Salcea, Bihor County, Romania

Figure 2. Village street with the row of cellars, Salacea village

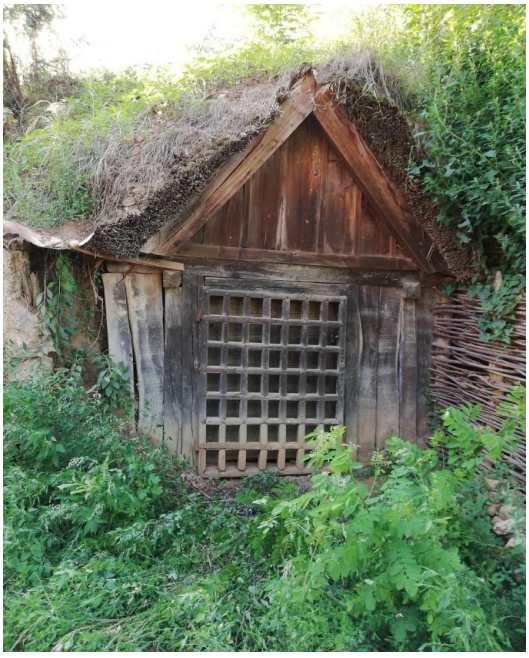

Figure 3. The cellar from 1807, considered to be the oldest on the territory of Salacea village, Bihor county

Figure 4. Specific lock to a cellar form Salacea

Despite their distinctive architecture and important contribution to the cultural landscape the cellars are not yet listed in the national cultural heritage list (albeit there have been some failed attempts). Figure 4 shows the distinctive architecture of the facades which can be admired, in terms of iron or oak doors, with the specific locks. The importance of the cellars has been described as follows: "they have the role of structuring the space to which they belong, the villagers consider them objects that delineate a space and implicitly its isolation or the preservation of a threshold from the exterior-interior and vice versa, with the meaning that marks a property in the intimacy of which the joys and the difficulties of generations succeed naturally; they are real objects of art, made and promoted by the craftsmen of the past, but also by the passage of time; they are distinguished by sobriety resulting from the use of wood and iron and classical assembly techniques" (Chiriac, quoted in Sofalvi, 2004). Besides the historical and aesthetic values of the monuments, they are important also because they "transmit the knowledge and feelings, develop tastes, educate and learn to appreciate our culture" (Kéri & Kántor, 2009, 8 and 116).

Overall it has been argued that the cellars play an important role in defining the cultural landscape in this area (Ilieş, 2007). The location and configuration of cellars are the result human adaption to the particularities of the natural environment. As already observed the area is suitable for vineyard growing from a topo-climatic point of view, but it is located on route between Transylvania and Pannonia, contributing to the development of both the production capacities of the wine and that of storage. These cellars are dug into a layer of clay starting from the upper part of the Ier River Terrace. The amount of sand in the clayey layer has determined and limited the dimensions of the excavated galleries. The most common is between 1.25 m wide and 1.80 m high with arched ceiling in the shape of a circular arch. Cellar chambers were long due to width and height limitations. The existence of the impermeable clay layer is the proof of resistance to water infiltration and contributes to the inner microclimate. Obtaining a suitable shelter for keeping the wine was also based on the predominantly northern orientation of the river's terrace, and on the fact that the line marking the edge of the terrace has a very sinuous route with a ratio of 1 to 3. On the thalweg of some perpendicular valleys on the edge of the terrace a few concavities developed, greatly increasing the working area.

The configuration resulted in similar arrangements to inner courtyards, with cellars close to or around or in front of each other. The cellars are dug in the upper part of the river's terrace, between the altitudes of 130-140m, in direct harmony with the horizon corresponding to the clayey layer. In some sectors, the thickness of the clayey horizon and the altitude difference between the valley talweg and the terrace floor allowed a number of cellar rows to be excavated on several levels on altitude. Practically, the cellar dimensions are tailored to the natural features of the area, being probably the result of longer-lived local practices. They have strongly influenced the structure of households, even villages (besides the social life of local people) (Ilies, 2007). The cultural landscape of Salacea (Gavra, 2013) graphically demonstrates the long tradition of wine production in this region of low hills and river valleys. The intricate pattern of vineyards, farms, villages, with their historic networks of deep wine cellars, illustrates every facet of the production of the wines (VÁTI KHT – Budapest Compilation, 2000).

METHODOLOGY

In terms of methodology a range of approaches were used. A study of existing bibliography, field investigations, and air-photo interpretation was performed. For the understanding of plans, facades and volumes we used software such as: Archicad 22 R1 INT

version 22.0.0.3006, Artlantis (2017) 6.5 version 6.5.2.14, Adobe Illustrator CC (2017) version 21.1.0 and Adobe Photoshop CC (2015) version 16.1. For the processing of photos we used Adobe Lightroom version 6.12. The particularities of the territory were analyzed by the spatial correlation of data stored on the layers, information from topographic and geological maps, orthophotoplans, PUGs (General Urbanistic Plann), publications and field surveys.

Figure 5. Wooden oak doors reinforced with wrought iron, Salacea cellars, Bihor

Being a low-altitude, slightly waved area, all land details have been used: abandoned meanders, recent river basins, river terraces, land elevations, toponyms, current roads and old roads, and hydrotechnical facilities. Cartographic materials have been processed in 3D Studio Max, Corel Draw and Corel Photopaint. Spatial data interference has allowed for the identification and analysis of important aspects for understanding this territorial reality.

RESULTS AND DISCUSSION

Figures 5 to 7 provide an illustration and evidence of the different forms of cellars which occur at Salacea. Using the methodologies as described above Figures 8 to 13 prenent our analysis of the architectural design of the cellars. It is evident that most of the cellars are made of burnt brick, but there are also other types which are made of wood or mud brick with a reed roof. Because the area consists of low-lying fluvial-lake deposits, there are no hard rocks, which is why they do not appear in the cellar construction. All the other materials are found in the local horizon, being more than a differentiation depending on the level of processing, that is, the mud brick or brick, both made of clay. As shown according to Figures 8 to 11 their layout comprises: a hall in which, if the surface permits, the grapes are pressed and the wine is produced. This is followed by the room called by the locals as the "neck", which is the passage to the cellar room where the various goods are stored. Here the most valuable pocessions of the family were stored, namely: food and wine. The mayor of the Salacea commune stated as follows: "The size of cellars represented the measuring unit of family wealth. The bigger the cellar, the more wealthy the family" (B. Horváth, Mayor of Sălacea commune 2018).

Figure 6. Brick cellar Salacea

Our analysis shows the existence of two distinct cellar models in the area. The first authentic cellar model found in Sălacea commune is built of burnt brick, completely covered with earth, leaving only the façade visible. The brick is apparent, not plastered.

The façade can be crowned with a gable of different shapes and decorated with different patterns of the brick (Figures 6, 8, 9, 10). The second authentic model of the cellar identified is made of wood, mud brick and reed, and it is also covered entirely with earth.

Figure 7. Wooden cellar and reed Salacea

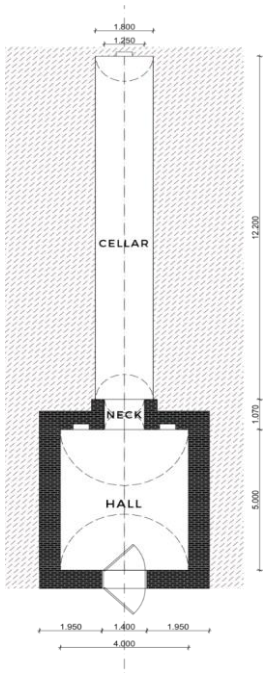

Figure 8. Brick cellar plan, Salacea

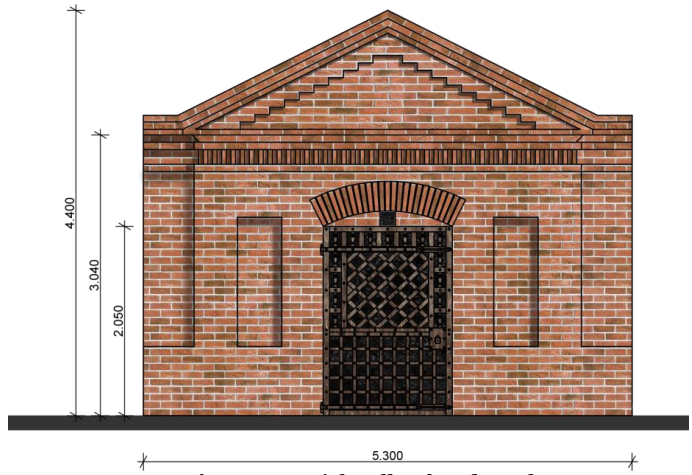

Figure 9. Brick cellar facade, Salacea

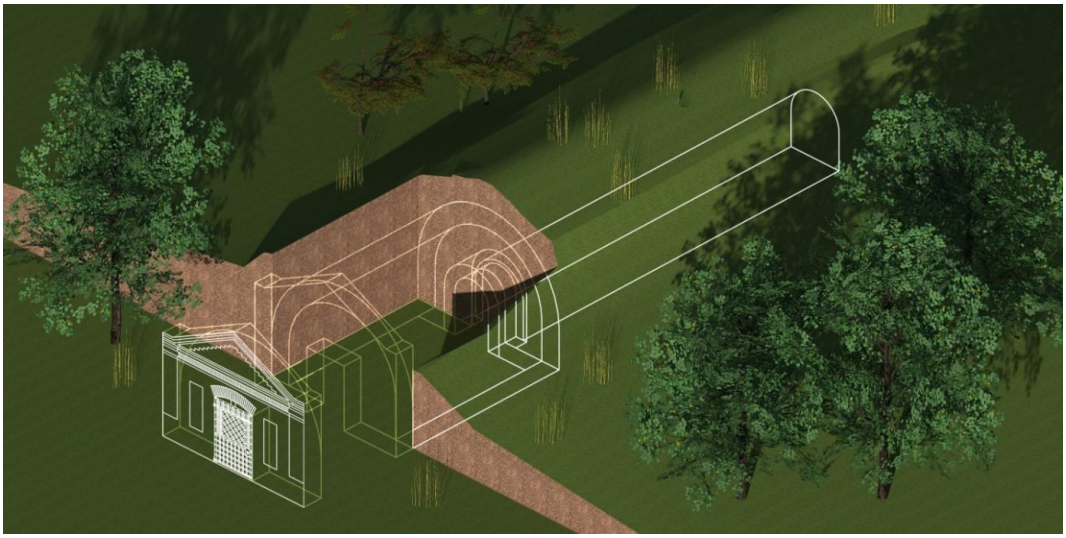

Figure 10. Brick cellar volume, Salacea

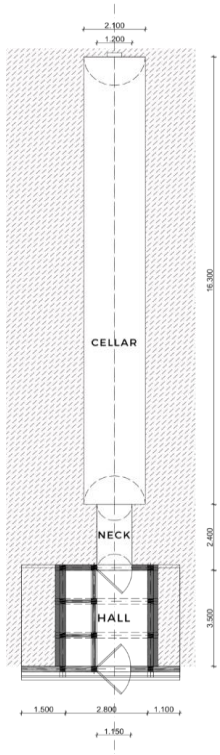

Figure 11. Plan of wooden, mud brick and reed cellar, Salacea

Figure 12. Facade of wooden, mud brick and reed cellar, Salacea

The façade is entirely made of oak wood and is not decorated (Figure 7, 11, 12, 13). In both cases the cellars are dug at a depth of about 2-3 m deep. Both facades have as

their main central point the door which is made of oak and wrought iron (Figure 5). They play an important role in creating a unitary set. They are specific to these types of cellars and, together with the special locks, they create an identity. The locks open through various secret combinations by means of oversized keys.

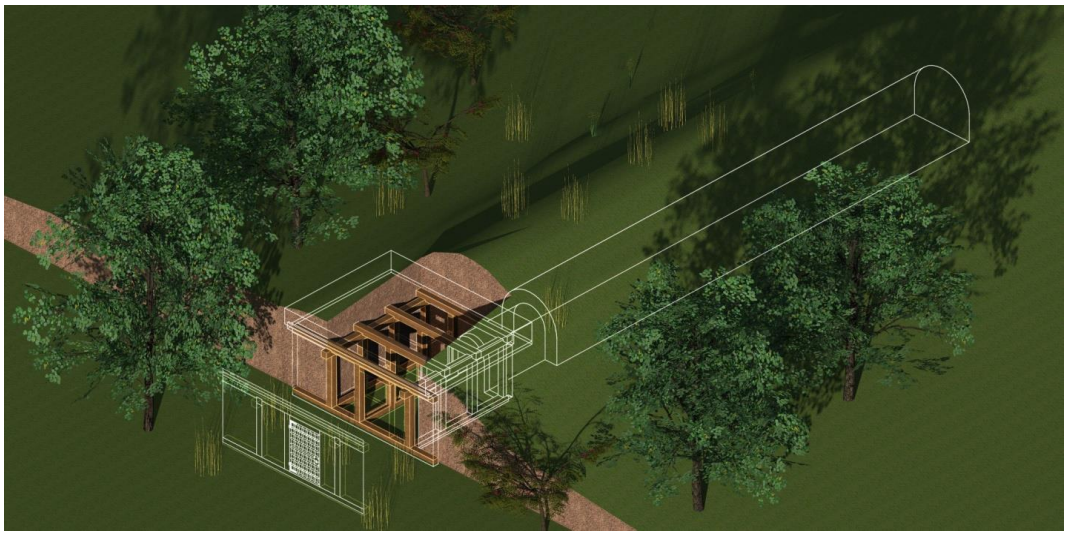

Figure 13. Volumetric analysis of wooden, mud brick cellar, Salacea

CONCLUSIONS

The analysis which is undertaken here of traditional wine cellars of Celcea Romania, highlights their importance in the traditional cultural landscape and their potential as heritage resources which might be maximized for the benefit of the local community. It has been argued that these cellar ensembles are living testimonies of traditions and habits about historical viticulture. They have a specific character and are remarkable as heritage values. It is noted that the cellars are not included in the List of Historical Monuments of Romania. From our analysis we consider that the cellars have historical-architectural value, and that their great density, the special personality justifies their recognition as important local monuments which can be of interest for local tourism as well as regional and international visitors. In terms of territorial planners the identification of different types of authentic cellars identified can support local authoritis planning in particular in terms of restoring and rebuilding some of the cellars which are at risk of falling into disrepair.

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COMPETITIVENESS ANALYSIS OF TOURISM IN THE EUROPEAN UNION AND IN THE SLOVAKIA

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Abstract: In the last three decades, tourism has become one of the most dynamic sectors in many countries, providing significant benefits to their economies. Consequently, countries are interested in developing this sector with the aim of increasing tourists and visitors inflow in to their countries and the corresponding financial contribution to the national budget and other economic benefits this would attract. The main objective of this study is to analyse the competitiveness position of tourism in European Union (EU) countries for the period of 2015 and 2017 based on the Travel & Tourism Competitiveness Index (TTCI). The study also identifies the factors that impacts countries' competitive positions with a focus on Slovakia. Using cluster analysis for three selected macroeconomic indicators - tourism revenues, tourism expenditures and gross domestic product per capita in tourism – the study also includes an analysis of the competitiveness of the EU countries based on own assessment. Results shown that the TTCI is not influenced by revenues, expenditures or gross domestic product in tourism. So, Slovakia should focus on improving such factors as efficiency of legal framework in settling disputes; the effect of taxation on incentives on work hiring and firing practices; government prioritization of travel and tourism industry and effectiveness of marketing and branding to attract tourists.

Key words: Tourism competitiveness, European Union, Slovak Republic, Travel & Tourism Competitiveness Index, Cluster analysis

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INTRODUCTION

Tourism has become one of the largest contributors to the world and European economy with increasing impacts at both national and global levels. Measuring the competitiveness of tourism using specific defined factors originated at the beginning of the 21st century and created the possibility of inter-country comparisons. Competitiveness monitoring of the national economies within the international tourism market is executed by the World Economic Forum (WEF), the Organization for Economic Cooperation and Development (OECD) and the European area is monitored by the European Union Statistical Office (Eurostat). The WEF began to process the tourism competitiveness data of individual countries in 2007. The Travel & Tourism Competitiveness Index (TTCI) was created to measure travel & tourism competitiveness and it is published every two years. The OECD uses its own indicators to measure the tourism competitiveness. The several differences are between these indicators. The main differences consist in the number of evaluated indicators, but primarily in the pursue objectives (World Economic Forum, 2018; Organization for Economic Co-operation and Development, 2018; European Union Statistical Office, 2018). So, the main objective of this study is to analyse the competitiveness position of tourism in European Union (EU) with a focus on Slovakia countries for the period of 2015 and 2017 based on the TTCI.

LITERATURE REVIEW

At present, the issue of tourism competitiveness occupies a key niche in economic research in many countries. This is, because competitiveness is still one of the key performance assessment criteria for economies. In the past 20 years travel & tourism have proven to be significant drivers of economic growth, contributing over 10 % to global GDP and accounting for 1 in 10 jobs on the planet according to international institutions (the World Economic Forum, 2018; the Eurostat, 2018). The goal of achieving a sustainable and inclusive travel & tourism industry is very actual now, and this industry has been proactive in its commitment to set targets (to increase financial contribution to the national budget and to increase number of tourists and visitors inflow into country). Analysis of global trends also confirms significant progress in travel and tourism globally. Despite slow economic growth in advanced economies, growing global competitiveness and interdependence, and political tensions in many regions, the travel & tourism sector still accounts for a large part of the global economy (the World Economic Forum, 2018).

Many empirical studies have evaluated countries' tourism competitiveness based on international indexes (Cibinskienea & Snieskieneb, 2015; Hanafiah et al., 2014; Nica, 2015; Xing et al., 2014; Krstic et al., 2016) with a number of these studies focusing on the key determinants of competitiveness in the tourism sector (Kolosinska et al., 2018; Barbosa et al., 2010). An alternative view to analysing tourism competitiveness was proposed by Gabor et al., (2012). According to the paper, the rule in attracting tourists as well as domestic tourism development and support are based on microeconomic strategies and especially on national strategies in the tourism sector. Socio-economic and government policy differences were highlighted based on world countries ranking and the authors explore the statistical significance of these differences. Statistical analysis showed that there exist significant similarities and differences among EU countries. In another study, Cvelbar et al., (2015) measured total tourism contribution to GDP per employee in tourism - in order to examine country competiveness. Study findings demonstrated that tourism specific factors, such as tourism infrastructure and destination management, are the major competitiveness drivers in developing countries, while destination competitiveness in developed countries depends on tourism specific factors such as general infrastructure, macro-environment and business environment. In another study,

Kubickova & Li (2017) investigate the role of government in tourism competitiveness, exploring the interrelationship between the two based on the Tourism Area Life Cycle model. They argued that tourism competitiveness is influenced not only by the governments' decisions but also by the stage of tourism development of the country. Countries characterized as "tourism-dependent" demonstrated higher levels of government engagement than those less dependent on tourism. Khan et al. (2017) carried out a more in-depth analysis of the individual indicators of TTCI. They examined the impact of air transportation, railways transportation, travel and transport services on international inbound and outbound tourism in a panel of 19 tourists - oriented countries. Regression results showed that the presence of air transportation, railways transportation, and trade openness positively affect inbound tourism index, while travel and transport services negatively affect tourism competitiveness index. The study also emphasized the importance of the transportation sector in promoting tourism worldwide. In a similar study, Krstić et al. (2016) focused on analyzing the determinants of competitiveness in the travel & tourism sector in Central and Eastern European (CEE) countries. The stated aim of the study was to explore the critical determinants of competitiveness in the travel & tourism sector in these CEE countries.

Indicators such as cultural resources and business travel, air transport infrastructure, natural resources, ground and port infrastructure, and tourist service infrastructure were indicated as priority areas for improvement in the CEE countries competitiveness. According to Butnaru & Niţă (2016), the potential of the Travel & Tourism sector stems from its contribution to the achievement of strategic EU objectives such as: sustainable development, economic development, human resources development, economic and social cohesion. The Travel & Tourism sector is closely linked to many others economic sectors such as retailing, agriculture and construction, and therefore has significant potential to generate positive externalities on the remainder of the economic system (Kadiyali & Kosová, 2013; Li, et al., 2016) and hence on the GDP (Čerović et al., 2016). According to Baiburiev et al. (2018), the economic contribution of tourism is felt in direct (production) routes, indirect (jobs) routes and induced (taxes) routes. Tatar, et al., (2018) also emphasis the tourist guides' role - as a mediator between demand and supply, as well as between tourist and local collectivities in the support of local economy and sustainable tourism development.

TOURISM COMPETITIVENESS

Tourism competitiveness is a complex issue and includes a wide range of objective and subjective factors. The identification of key factors representing countries' competitiveness of tourism has been realised by many authors. The measurement of the tourism competitiveness is complicated process. For that reason, various organizations are devoted to tourism competitiveness evaluation. In the next section of this study we mention two organizations that are devoted measuring tourism's competitiveness - assessment of the WEF based on the TTCI indicator and the OECD index based on own assessment tools.

The Travel & Tourism Competitiveness Index (TTCI)

The WEF has edited the national tourism competitiveness data since 2007 in the Travel & Tourism Competitiveness Report published every two years. There are several partner institutions working together to develop this index, including the United Nations World Tourism Organization (UNWTO), the World Travel & Tourism Council (WTTC), the International Air Transport Association (IATA), the International Union for Conservation of Nature (IUCN), and others private companies. The aim of the TTCI "is to provide a comprehensive strategic tool for measuring the set of factors and policies that enable the sustainable development of the travel & tourism sector, which in turn,

contributes to the development and competitiveness of a country" (The Travel & Tourism Competitiveness Report, 2017). The WEF regularly updates this index to respond to changing conditions. In the last revision, the number of sub-indexes and indicators increased. The latest TTCI indicator consists of 14 pillars, merged into 4 sub-indexes comprising of 90 indicators distributed among the different pillars (Figure 1).

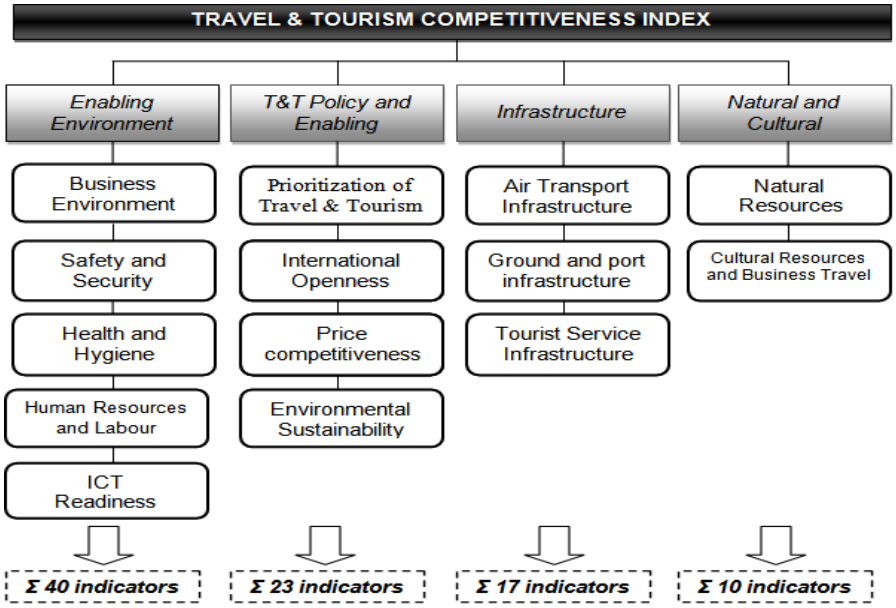

Figure 1. The Travel & Tourism Competitiveness Index 2017 framework
(Source: WEF, The Travel & Tourism Competitiveness Report, 2017)

Two-thirds of the data set for the TTCI indicator are statistical data from international organizations, with the remaining third based on survey data from The World Economic Forum´s annual Executive Opinion Survey which is used to measure concepts that are qualitative in nature carried out among over 15,000 business executives and business leaders annually in all the economies included in assessment. Data are ranked in scale 1 to 7, where 7 means the best performing. The standard formula for converting each hard data indicator to 1 to 7 scale is as follows (WEF, The Travel & Tourism Competitiveness Report, 2017):

$$6\,x\left(\frac{\text{country score} - \text{sample minimum}}{\text{sample maximum} - \text{sample minimum}}\right) + 1$$

The sample minimum and sample maximum are the lowest and highest scores of the overall sample, respectively. The values of individual indicators comprise of such calculated data. The total pillar value is calculated by the arithmetic average of the indicators and the sub-indexes value is determined by the arithmetic average of all pillars in the given sub-index. The overall TTCI indicator is calculated as the arithmetic average of all sub-indexes.

OECD Index

The OECD's work identifies a set of indicators that can be applied within an overall framework to assess countries' competitiveness. The OECD approach creates a limited set of meaningful and robust indicators useful for governments to evaluate and measure tourism competitiveness of their countries over time and to guide them in their policy

choices. The aim of the framework is not to produce an index or a ranking of the most competitive countries, but to provide a tool guide for countries to analyse tourism competitiveness and inform policy (Dupeyras & MacCallum, 2013). The OECD places emphasis on the implementation of tourism policy and makes it possible to assess current policy and highlight opportunities and weaknesses. Regular measurement of tourism competitiveness can also help to prevent tourism risks and to indicate the fulfillment of long-term strategic aims. The OECD rating system also includes the view of tourists. The measurement framework comprises three types of indicator that can be applied to measure competitiveness in tourism - 11 core indicators and 9 additional indicators (5 supplementary indicators and 4 future development indicators). Countries should use the basic indicators for specific evaluations, including additional indicators if absolutely necessary. The overview of all indicators is shown in Figure 2 below.

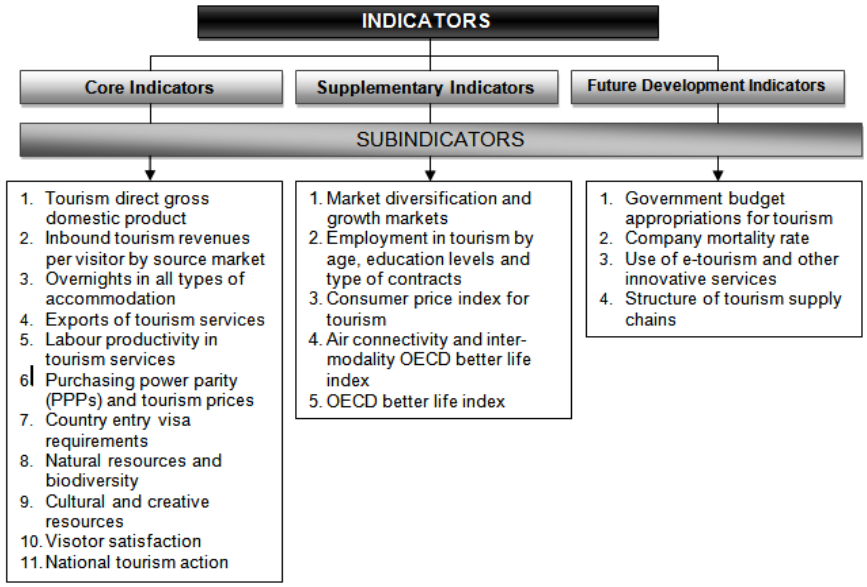

Figure 2. List of indicators for measuring competitiveness in tourism
(Source: Dupeyras & Mac Callum, 2013)

In comparing both competitiveness indexes, the main difference is found in the aim methodology. While the aim of the TTCI index is to provide a ranking of countries from the most competitive to the least competitive, the OECD indicators serve as a tool for governments to analyse strengths and weaknesses of the competitiveness in tourism. Another difference consists in the number of indicators that indexes consist of. The TTCI index consists of 90 indicators and the OECD index consist of 20 indicators, 9 of which are not compulsory. The last difference is the fact that OECD indicators are exclusively focused on economic output in while TTCI indicator is not.

CURRENT CONDITIONS IN TOURISM

The position of tourism development within the EU is monitored by the Eurostat. The Statistical classification of Economic Activities in the European Community, abbreviated as NACE, is applied as a classification of economic activities within in EU. Eurostat uses classification of economic activities called NACE Rev. 2, according to which the following sections correspond to tourism (see Eurostat - Methodologies and Working Papers, 2008):

- Section H - Transportation and storage,
- Section I - Accommodation and food service activities,
- Section N - Administrative and support service activities.

The Tourism Satellite Account (TSA) monitoring by UNWTO is based on the cooperation of international organizations that set standards to identify the industry's real contribution - and is used to measure the overall economic contribution of tourism. The TSA's main outputs include employment in the tourism industries, share of gross domestic product, the relationship between tourism and capital investment and the impact on the country's balance of payments. Since 2000, the European Commission has launched a number of initiatives to encourage Member States to compile TSA, but this activity is not compulsory. The Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) disbursed three rounds of grants and the Member States and EFTA (European Free Trade Association) member countries (Iceland, Liechtenstein, Norway and Switzerland) were invited to submit available TSA data in 2010, 2013 and 2016. TSA indicators were voluntarily submitted by 19 countries in the latest edition (2016) - 17 Member States and 2 EFTA countries. Compared to the previous edition (2013), fewer countries participated — in particular some larger countries such as Germany, Italy and the UK are missing. For this reason, the results cannot be deemed representative for the EU as a whole (Tourism Satellite Accounts in Europe, 2016).

Economic tourism asset can be monitored by using Eurostat balance of payments and structural statistics. The balance of payments monitors the ratio of international travel & tourism revenues to gross domestic product (GDP). In 2016, the highest ratio was identified in Malta (15.39 %) and Croatia (10.21 %), while Slovakia recorded an indicated ratio of 2.41 %. The EU's average scored rank 4.90 %. In absolute numbers, Spain had the highest income (54,660 million EUR), followed by the UK (37,413 million EUR) and Italy (36,358 million EUR). In 2016, the tourism revenues in Slovakia amounted to 2,483 million EUR (The Travel & Tourism Competitiveness Report, 2017).

According to WEF, in 2016, Europe was once again the region with the strongest overall Travel & Tourism competitiveness performance, attracting 620 million of the 1.2 billion international visitors (representing more than 51 % of all international arrivals). While the region continues to improve, it does so at a slower rate than other less mature destinations. However, to date, Europe remains the largest Travel & Tourism market, the second largest and rapidly growing market and the most visited destination all over the world (The Travel & Tourism Competitiveness Report, 2017). The results of the TTCI 2017 indicated that Spain maintains the 1st place globally in the global Travel & Tourism competitiveness index. In all, Europe boasts 6 of the 10 most competitive countries in the Travel & Tourism sector (within all 136 economies covered this year) - Spain, France, Germany, United Kingdom, Italy and Switzerland). The other four European countries are placed in the second ten and other five European countries are sustained in the third ten of the best evaluate countries. The country with the least ranking is Romania at the 68th position (Table 1). From Table 1, a comparison of rankings in 2017 to those in 2015 indicate that Cyprus had the most significant decline in position (from 36th to 52nd rank), representing a decrease of 0.23 points. Finland, had the 2nd highest decline in position, moving to the 33rd position, down 11 positions from 2015 (i. e. from 22nd to 33rd rank), representing a decrease of 0.07 points. Conversely, Greece made the most impressive climb, moving 7 places (from 31st rank to achieve the 24th position) in the global ranking; representing an increase of 0.15 points. Bulgaria recorded the 2nd best improvement in position (from 49th to 45th rank) - a 0.09 points increase, according to the TTCI indicator.

According to the WEF data (based on data of TSA, UNWTO, OECD, Eurostat, WTTC) in 2016, Slovakia recorded an overall of 6,316,000 international tourist arrivals.

Table 1. Ranking of EU countries according TTCI indicator 2017 within around the world (136 economies) (Data source: processing according The Travel & Tourism Competitiveness Report, 2017)

Country/ Economy	TTCI score	Rank	Change since 2015	Country/ Economy	TTCI score	Rank	Change since 2015
Spain	5.43	1.	0	Denmark	4.43	31.	-4
France	5.32	2.	0	Croatia	4.42	32.	1
Germany	5.28	3.	0	Finland	4.40	33.	-11
United Kingdom	5.20	5.	0	Estonia	4.23	37.	1
Italy	4.99	8.	0	Czech Republic	4.22	39.	-2
Austria	4.86	12.	0	Slovenia	4.18	41.	-2
Portugal	4.74	14.	1	Bulgaria	4.14	45.	4
Netherlands	4.64	17.	-3	Poland	4.11	46.	1
Norway	4.64	18.	2	Hungary	4.06	49.	-8
Sweden	4.55	20.	3	Cyprus	4.02	52.	-16
Belgium	4.54	21.	0	Latvia	3.97	54.	-1
Ireland	4.53	23.	-4	Lithuania	3.91	56.	3
Greece	4.51	24	7	**Slovak Republic**	**3.90**	**59.**	**2**
Luxembourg	4.49	208.	-2	Romania	3.78	68.	-2

Table 2. Evaluation of Slovakia according to TTCI Report in 2015 and 2017 (Data source: Study results based on The Travel & Tourism Competitiveness Report, 2017)

Sub-indexes (1 – 4) and Pillars (1 – 14)	TTCI score 2015	Rank 2015	TTCI score 2017	Rank 2017	Change since 2015
1. Enabling environment	**5.14**		**5.24**		↑
Business Environment	3.92	25.	4.01	27.	↓
Safety and Security	5.55	23.	5.61	23.	-
Health and Hygiene	6.42	10.	6.50	9.	↑
Human Resources and Labour Market	4.75	20.	4.70	27.	↓
ICT Readiness	5.05	20.	5.37	20.	-
2. T&T Policy and Enabling Conditions	**4.23**		**4.45**		↑
Prioritization of Travel&Tourism	4.04	27.	4.08	27.	-
International Openness	3.89	23.	3.91	22.	↑
Price competitiveness	4.51	8.	4.96	6.	↑
Environmental Sustainability	4.49	17.	4.84	14.	↑
3. Infrastructure	**3.65**		**3.43**		↓
Air Transport Infrastructure	1.78	27.	1.75	27.	-
Ground and Port Infrastructure	4.22	21.	4.19	19.	↑
Tourist Service Infrastructure	4.94	22.	4.34	26.	↓
4. Natural and Cultural Resources	**2.36**		**2.48**		↑
Natural Resources	3.31	12.	3.43	11.	↑
Cultural Resources and Business Travel	1.42	25.	1.53	26.	↓
TOTAL	**3.84**	**27.**	**3.90**	**27.**	**-**

International tourism inbound revenues was 2.363 million USD. Travel & Tourism industry GDP value was 2.034 million USD; representing 2.4 % of the total economy The Travel & Tourism industry employment share in the total economy was 2.5 %, which, represents 58,876 employees employed in tourism in 2016. Slovakia ranked 27th position

among the EU 28 member countries according to TTCI 2017 ranking (value of TTCI at level 3.90). In comparison to 2015, this is an increase of index value by 0.06 points (3.84). Despite this, Slovakia still remains at an unsatisfactory position. Results for individual sub-indexes and individual pillars for Slovakia are shown in Table 2.

In Slovakia, the framework pillar with the highest ranking, according to Table 2, is the Price competitiveness pillar (8th position in 2015 and 6th position in 2017), which falls under the Travel & Tourism Policy and Enabling Conditions sub-index. In addition, Slovakia also achieved very good results in subindex 1 (Enabling environment), within a pillar called Health and Hygiene. This was due, in particular, to the high percentage of people who have access to drinking water, the number of doctors per 1,000 inhabitants and the number of hospital beds (The Travel & Tourism Competitiveness Report, 2017).

The worst results were found within the indicators of the Business environment pillar (average 26th position), Prioritization of Travel & Tourism (last position in both monitored years) and Air Transport Infrastructure (last position in both monitored years) in comparison EU members countries. Slovakia has fallen behind within the Business environment pillar, in the following indicators - efficiency of legal framework in settling disputes; the time required to deal with construction permits; and the effect of taxation on incentives to work. The WEF identified shortcomings in many other indicators as well. Slovakia also scored the worst positions in the following indicators - hiring and firing practices; ease of finding skilled employees; government prioritization of the travel and tourism industry; effectiveness of marketing and branding to attract tourists; fuel price levels; aircraft departures; number of operating airlines, amongst others (The Travel & Tourism Competitiveness Report, 2017).

DATA AND METHODOLOGY

The main aim of this paper was to explore and analyse tourism competitiveness in EU member countries (28), with focus on Slovakia, based on the Travel & Tourism Competitiveness Index (TTCI) methodology; and to identify the factors that affect Slovakia competitive position in this ranking, and their specific impacts. Benchmarking of selected countries was realized for the period of 2015 and 2017. The study also includes an analysis of the competitiveness of the EU countries based on own assessment using cluster analysis and three selected macroeconomic indicators - tourism revenues, tourism expenditures and gross domestic product per capita in tourism. The secondary aim of this paper is to evaluate whether or not the ranking of EU members countries based on TTCI evaluation is influenced by selected macroeconomic indicators. This analysis was carried out using secondary data published by the WEF, the World Bank and Eurostat for the period of 2015 and 2017. Cluster analysis was carried out on data obtained in 2015 only as, data reported for 2017 did not cover the indicators of each EU country.

The linear relationship between the selected indicators was estimated using the Kendall correlation coefficient calculated thus (Kráľ et al., 2009):

$$r_K = \frac{n_c - n_d}{n(n-1)/2}$$

where: n - number of observations of pair of variables,

n_c - number of discordant pairs,

n_d - number of concordant pairs.

Integration processes of the production participants are considered to be a factor of economic development. Cluster (being an integration – network economic system) is recognized as an efficient tool for the development of production industry. The formation

and development of the tourist clusters are unique in comparison with the clusters in industries and other production spheres (Gritsay, Kulagina, Lukina, Proncheva, 2018). The individual countries in the EU are assigned to clusters/groups using the Ward method and the Euclidean distance among individual countries (Kráľ et al., 2009):

$$d_{ij} = \sqrt{\sum_{k=1}^{K} (x_{ik} - x_{jk})^2}$$

where K - number of variables,
x_{ik} - i-th coordinate in dimension "k",
x_{jk} - j-th coordinate in dimension "k".

The Kruskal-Wallis Test, as a non-parametric method, was used to assess whether samples originate from the same distribution. It is used for comparing two or more independent samples of equal or different sample sizes. In this study, the differences between created samples and tourism competitiveness of EU countries represented by TTCI indicator are monitored. The formula for the Kruskal-Wallis Test is (Kráľ et al., 2009):

$$KW = \frac{12}{n(n-1)} \sum_{i=1}^{I} \frac{T_i^2}{n_i} - 3(n+1)$$

where: n - number of observations,
n_i - number of observations in i-th group,
T_i^2 - total number of order in i-th group.

The quantified results were graphically represented by a correlation chart or a frequently used dendrogram (Adamišin et al., 2015). The statistical data processing was realized by using MS Excel, Statistica13 and Statgraphics.

RESULTS AND DISCUSSION

This section describes the results of the relationship between selected indicators within EU countries monitored by Kendall correlation coefficients. Results are shown in the Figure 3. Based on the correlation coefficient values among individual indicators, a statistically significant relationship was confirmed. The correlation coefficients presented varying correlation intensities. Medium linear correlation was confirmed between tourism revenues and tourism expenditures.

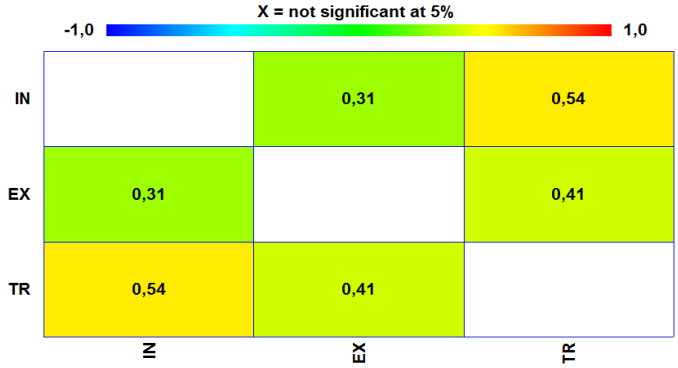

Figure 3. Results of correlation analysis among selected indicators within EU countries

where IN - tourism revenues per capita,
EX - tourism expenditures per capita,
TR - gross domestic product in tourism per capita.

A similar relationship was also confirmed between tourism expenditures and GDP in tourism. Correlation coefficients also confirmed statistically strong significant relationship between GDP in tourism and tourism revenues. All indicators relationships were identified at the significance level of $p < 0.05$.

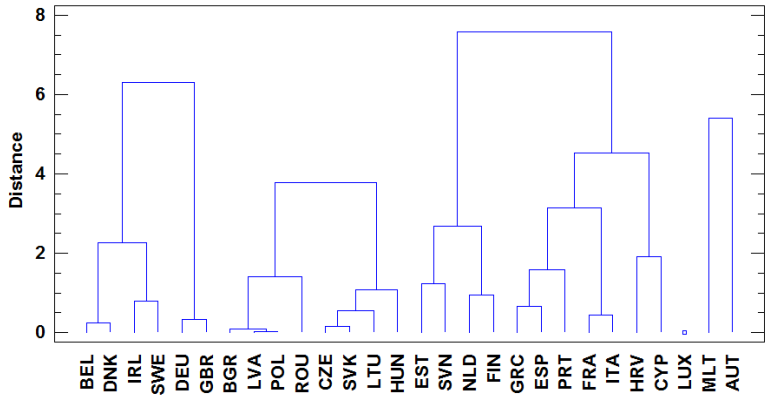

Figure 4. Dendrogram of EU countries in 2015

In the next section, results of the (more in-depth) cluster analysis of EU member countries are presented. In total, 5 clusters were generated by applying all the above-mentioned indicators (Figure 4). Based on a realized cluster analysis three significant clusters/groups of countries were created. They are:

a) Cluster 1 - "*Tourism balanced countries*" – which have all required values for all monitored indicators (including countries like Belgium, Denmark, Ireland, Sweden, Germany and the United Kingdom),

b) Cluster 2 - "*Tourism lagged countries*" – which have the lowest values for all monitored indicators (including countries like Bulgaria, Lithuania, Poland, Romania, Czech Republic, Slovakia, Latvia and Hungary),

c) Cluster 3 - "*Tourism receipted countries*" - with a marked positive score between country´s revenues and expenditures (including countries like Estonia, Greece, Spain, France, Croatia, Italy, Cyprus, Netherlands, Portugal, Slovenia and Finland). As the largest group/cluster was identified the 3rd cluster, that it is mainly characterized by low expenditures per capita. Centroids of individual clusters are shown in Table 3.

Table 3. Centroids of created clusters in 2015

Cluster	IN	EX	TR
1	844.13	1190.22	1199.86
2	365.49	246.03	301.31
3	1080.63	505.37	986.54
4	7041.82	5432.73	1686.21
5	2411.36	866.49	2729.54

Table 4. Results of correlation analysis among TTCI and selected indicators

	IN	EX	TOUR
r_K	0.0416	0.0260	0.0025
p-value	0.8288	0.8925	0.9898

Based on previous analysis (in section Current conditions in tourism), we can state that Luxembourg showed appreciably high tourism revenues and expenditures. This implies that this country cannot be assigned to the created clusters with regard of overall country results. The next part of this paper focuses on monitoring the relationship between selected indicators and the TTCI indicator used to measure countries' tourism competitiveness. The TTCI indicator does not correlate linearly with any of the selected indicators (Table 4). Based on correlations, it cannot be stated, whether the increase/decrease of the TTCI index causes linearly increase/decrease of tourism revenues, tourism expenditures or gross domestic product per capita in tourism.

Given that the linear relationship between TTCI indicator and the three selected macroeconomic indicators has not been confirmed. The next part of this study was devoted to analyses of tourism competitiveness within EU countries using 5 created clusters. The results are presented in Figure 5. Based on the graphical comparison and Kruskal-Wallis test results (Q = 1.278, r = 0.864), we can conclude that tourism competitiveness expressed by the TTCI index is not determined by the created clusters.

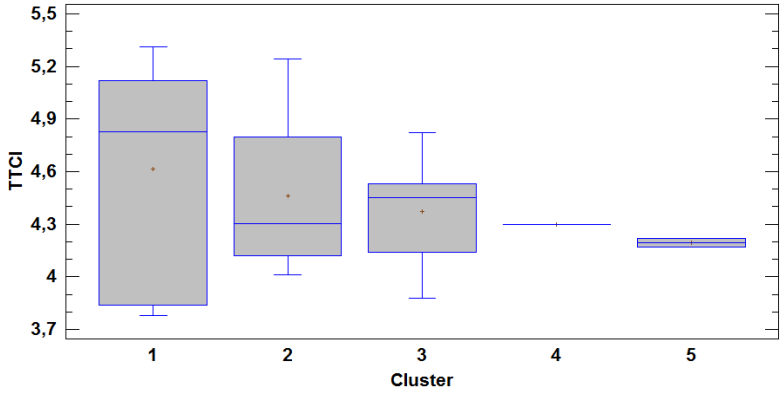

Figure 5. Comparison of TTCI within created clusters

CONCLUSION

Tourism is recognized as one for the key sectors for development in all countries; as well as a major source of income, jobs and wealth creation. It also plays a wider role in promoting the image and international perception of a country as well as influencing complementary domestic policies. This range of influence and importance creates challenges in measuring competitiveness in tourism (Dupeyras & Mac Callum OECD Tourism Papers, 2013). This study had several aims: the main aim was to analyze the tourism competitiveness of EU member countries (28), with specific focus on Slovakia, based on the TTCI indicator for the period of 2015 and 2017. The competitiveness reports in 2015 and 2017 confirmed that Europe is still regarded as the region with the highest number of the most competitive economies in the tourism sector. Based on the TTCI indicator' results in 2017, we concluded that Spain maintained the 1st place globally in the global Travel & Tourism competitiveness index. Europe boasts 6 of the 10 most competitive countries in this sector (within all 136 economies covered this year) - Spain, France, Germany, United Kingdom, Italy and Switzerland). Analyses also shown that four other European countries are placed in the second ten and other five European countries are sustained in the third ten of the best evaluate countries. Although UNWTO predicts that the share of international arrivals to Europe will decrease by 2030 (from the current 51 % to predicted 41 %), Europe as a competitive region will still attracts the visitors from around the world. In accordance to TTCI 2017 ranking, Slovakia scored 59th position among the

countries from around the world (136 economies). When comparing EU countries, Slovakia holds the 27th position. In spite of the positive change in ranking between the period 2015 and 2017 (an increase of index value by 0.06 points), Slovakia still remains in a dire position in this ranking. Based on the results of cluster analysis, we concluded that the best rated countries were Malta and Austria. Both countries scored the highest revenues per capita (with the exception of Luxembourg) and the highest values of tourism competitiveness indicator. A more in-depth analysis of the sub-indexes, pillars and indicators, which TTCI indicator consists of, we found out that the weak competitiveness position of Slovakia in tourism affects factors (indicators) - efficiency of legal framework in settling disputes; the time required to deal with construction permits; the effect of taxation on incentives on work hiring and firing practices; ease of finding skilled employees; government prioritization of travel and tourism industry; effectiveness of marketing and branding to attract tourists; fuel price levels, particulate matter concentration; aircraft departures; and number of operating airlines. All these indicators result in an unsatisfactory competitive evaluation of Slovakia in tourism, indicating the importance of paying attention to them in the future. Results of created cluster analysis confirmed three significant clusters/groups of countries which were divided into the following sections:

a) Cluster 1 called "Tourism balanced countries" – required values of selected indicators,
b) Cluster 2 called "Tourism lagged countries" – the lowest values of selected indicators,
c) Cluster 3 called "Tourism receipted countries" – revenues are higher than expenditures.

Based on cumulative findings, we can conclude that the TTCI indicator is not influenced by revenues, expenditures or GDP per capita in tourism. In addition, we can state, that evaluation of country by using TTCI indicator is not determined by membership to any of created clusters.

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A THEORETICAL APPROACH INTO TOURISM, IMMIGRATION AND MULTICULTURALISM: THE CASE OF SOUTH AFRICA

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Abstract: The article explores tourism migration within a South African context, focusing on migration and tourism circulation. Tourism and migration are inter-linked with globalisation. Almost all countries have jumped on the tourism bandwagon as a result of the positive economic impacts such as labour-intensive jobs, balance of payments, attracter of foreign exchange and the taxation of non-residents. Tourism has been adopted in the economic development policies and a separate Ministry of Tourism has been created, because tourism required dedicated attention. The literature review adds to the paucity of academic scrutiny of the link between tourism and multiculturalism in South Africa. The in-depth literature review analyses various sources of secondary data, to provide an authoritative understanding of the literature and draw conclusions for the academic audience. The in-depth literature review of secondary data which used the meta-analytical methodology to investigate, and critically analyse the link between tourism and multiculturalism within a Southern African context. The interpretation of the literature resulted in the crafting of essential realities about the interface between tourism and multiculturalism which has received scant academic analysis in South Africa.

Keywords: Robben Island, migration, domestic tourism, Cathcart, Goshen village, Muslim tourism.

* * * * * *

INTRODUCTION

Unemployment, poverty and inequality are the stubborn challenges facing South Africa. Creating labour-absorbing economic growth has been the major challenge facing the post-apartheid state. Job shedding has been the perennial reality, which has created a

* Corresponding author

poverty problem as a result of unemployment. The decline in mining's share of GDP has negatively affected the economic prospects of South Africa. The decline in mining production has created widespread unemployment and it is accepted that when mining sneezes, the South African economy catches a cold. Tourism mitigated the decline of mining's contribution to economic growth and jobs. After years of isolation, South Africa has emerged as an attractive industry destination striving to position itself as a major player in this high-growth, global industry that has been identified in a South African perspective as a pro-poor empowerment asset of our young democracy" (Thornton, 2009: 9). Tourism is internationally recognised as one of the world's fastest-growing industries.

RESEARCH METHODOLOGY

The research method was a literature review. "Conducting a literature review is a means of demonstrating an author's knowledge about a particular field of study, including vocabulary, theories, key variables and phenomena" Randolph (2009: 2). The literature review depends on secondary data for analysis. Johnston (2014) noted that secondary data analysis is analysis of data that was collected by someone else for another primary purpose.

DEVELOPMENTAL BENEFITS OF TOURISM

The growth of tourism has caught the attention of almost all countries, which sought to benefit from the positive developmental impacts of tourism. According to the World Tourism Organisation the number of travellers has increased from 25 million in 1950 to 806 million in 2005 (Carolin et al., 2015). Tourism, according to the World Travel and Tourism Council, accounts for 9.3% of the GDP and 9.8% or approximately 1.5 million jobs in South Africa, and is expected to rise to about 2.5 million or 13.2% of the total number of jobs in the country in 2027 (World Travel and Tourism Council, 2017). The sustained growth of tourism has made it an attractive sector to diversity and catalyse national economies. Steyn and Spencer (2011) stated that tourism is the world's biggest industry, growing at compound rates of about 4% per annum. United Nations World Tourism Organisation (2018) noted that international tourist arrivals grew by a remarkable 7% in 2017 to reach 1,322 million, and it's expected to continue in 2018 at a rate between 4% -5%. The arrival of tourists at a destination area increases business activity, and the consumption of goods and services.

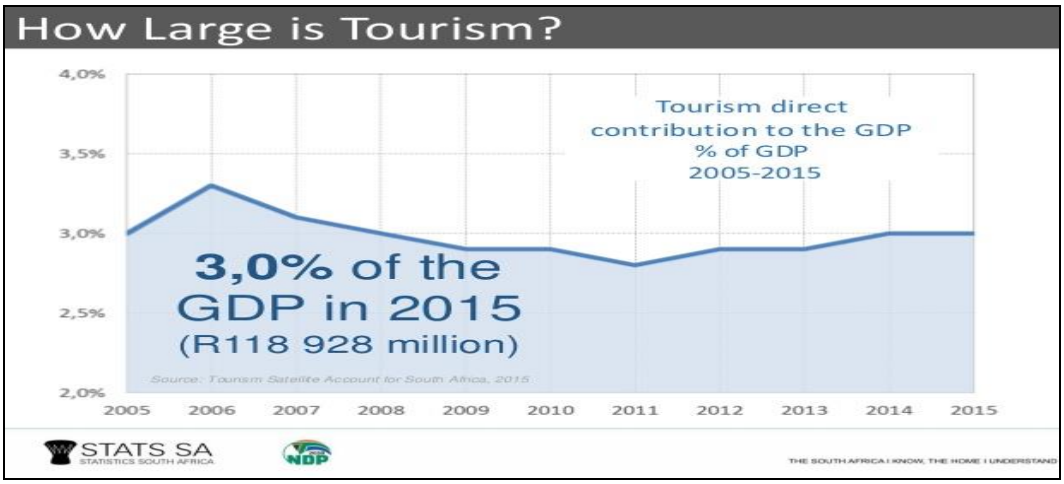

Figure 1. How large is Tourism in South Africa
Source: Statistics South Africa (2018)

Tourism is used as a form of economic diversification, from declining sectors such as mining, manufacturing and agriculture. In South Africa, tourism is regarded as the "new gold". Apleni et al., (2017) noted that tourism in South Africa has grown to become a leading sector that creates jobs in the country. South African tourism has grown in leaps and bounds since 1994 when South Africa held its first democratic elections. Henama and Sifolo (2017) noted that tourism had been identified as an engine for the South African economy. Tourism's annual growth rate has always surpassed the GDP growth of the South African economy for the past 20 years. Tourism contributes 3% of the GDP in South Africa as noted by Statistics South Africa (2018). Sifolo & Henama (2017) noted that governments can increase tax coffers by taxing non-citizens. These taxes can be used to fund infrastructure, as the fragile tax base of developing countries is increased. "Tourist development will bring about improvements to the local infrastructure, services and facilities that will benefit both residents and tourists. It may also stimulate the protection of local natural resources that are often the attraction of the developing destination" (Wall & Mathieson, 2006: 84).

Tourism benefits the destination area, as the infrastructure that is created for tourists, is also shared with the locals. The development of roads, airports and better policing to cater for tourists, benefits the locals, which means that tourism improves the Quality-of-Life of the community. "The tourism industry is supposed to increase the standard of living of locals. Quality -of-Life of the host community must be improved by tourism employment and supply chain opportunities that will ensure that the benefits are retained in the local economy" (Henama & Sifolo, 2017a). The growth of middle-class communities around the world means that tourism growth will be robust. The utilisation of tourism has been adopted as a form of lifestyle in many developed nations, and increasingly in developing nations. "Tourism has become part of a lifestyle" (Honkanen & Mustonen, 2007: 43). According to Blichfeldt (2007), a family's annual vacation may also act as an institution such as family, school and religion. The growth of international travel, has also seen the growth of international citizenry, where people may have multiple homes as a result of globalisation. Globalisation has benefited tourism consumption, located within the dominant consumer culture. The increasing diversity of tourists has forced tourism destinations to adapt. The growth of Chinese tourists and millennials present opportunities for countries that actively adapt to cater for these markets. The inherent nature of service transactions as well as the growing competitiveness of destinations and businesses in particular, require foreign skills to be a necessity (Aitken & Hall, 2010). Multiculturalism arises as a government's philosophical and political response to civilization develops.

It promotes different cultures and a specific orientation toward a culturally different population. This position advocates the inclusion of distinct cultural, ethnic and religious, with equal status, rights and opportunities because every culture and race makes a substantial contribution to its society. Henama and Sifolo (2017a) noted the growth of tourism at a destination area may lead towards an inward migration of tourists and labour to that local area. The inward migration of labour includes the unemployed and the skilled who come into the destination area as expatriate staff. Henama and Sifolo (2017a: 56) noted that "The tourism industry continues to follow a global trend of hiring foreign illegal undocumented labour, in spite of the high levels of unemployment that exists in South Africa." The use of foreign labour limits the developmental benefits of tourism at a destination area. Sifolo and Henama (2017) noted that tourism has the responsibility to improve the standard of living and quality-of-life for the host community.

DOMESTIC TOURISM AND SECOND HOME OWNERSHIP

According to the Department of Tourism (2013: 8), "Research has shown that domestic tourism tends to be the main sustainability factor for most successful

destinations. Therefore, by 2020, the National Tourism Sector Strategy aims to increase the domestic tourism GDP by 60% of tourism's overall contribution to the GDP, compared to the 2009 baseline of 52%. Domestic tourism remains the most robust form of tourism for a destination, characterised by geographical spread when compared to international tourism. According to Visser and Hoogendoorn (2015: 118), "During the past ten years, it has become quite clear that, in the case of South Africa, second home tourism is not exclusive to the White, the wealthy, the mobile and the educated. Because of the social engineering policies of the apartheid regime, migration has stayed an important part of everyday life for many poor or middle-income people." "From 1948 onwards, Black South Africans were effectively stripped off of their citizenship making them legally citizens of the ten ethnically-based and nominally self-governing Bantustans or tribal homelands" Rogerson (2014: 23). The establishment of self-governing Bantustans created the migrant labour system which institutionalised migration between the Bantustans, as the centres of labour, and the urban centres of commerce, as places of employment. Gauteng and the urban centres of Cape Town, the greater Durban and the greater Port Elizabeth area have been the main centres of employment.

This has therefore meant that migrant labourers would have two homes, a home in the urban centres of employment and a home in the Bantustans, which meant that the face of Black tourism has been dominated by visiting friends and relatives. Rogerson (2017) noted that Blacks are over-represented in the tourism market that is identified as, "Visiting Friends and Relatives" (VFR). "Another aspect of Black domestic tourism was expanding in the form of a little recognised or 'hidden' informal sector of travel. This informal economy of domestic tourism was represented by movements out from the country's urban areas to rural 'second homes' which were situated in areas created as labour reservoirs under South Africa's political economy of cheap labour" Rogerson (2015: 124).

South Africa has experienced a migration of wealthy individuals as well as the migration of the poor and job seekers to the Western Cape. Property24 (2017) noted the Western Cape as the retirement mecca of South Africa. Heystek (2017) noted the average house price in the Western Cape is now 40% more expensive than average prices in Gauteng and other parts of the country. The migration of the relatively affluent individual is called "lifestyle migration". The Western Cape, which is the epicentre of the tourism economy of South Africa, has seen the emergence of second homes and inward migration where tourists acquire property in the Western Cape. This has increased the cost of accommodation in the Western Cape, and, has led to gentrification challenges, where locals are being priced out of the market. The gentrification of the Western Cape has seen an inward migration of people from other countries that have increasingly changed the demographic character of the Western Cape. This means over time, the Western Cape will benefit from VFR inward migration, which may predominantly be White, considering that the VFR market in South Africa presently is predominantly Black.

ROBBEN ISLAND AND MUSLIM RESISTANCE

The arrival of the Europeans that conquered South Africa has led to the arrival of slaves from other parts of the world, and as a result led to the development of a resident Muslim population. Blickford-Smith (2009) noted that in the 16th century, the Table Bay area was a place of barter between the Peninsula's Khoisan inhabitants and the crews of ships between Europe and the East Indies. "To many travellers of the sea route to the East Indies, Robben Island became a major source of fresh supplies in those early years" (Lubbe 1987: 50). The decision of the Dutch East Indian Company (DEIC) in 1652 to establish a refreshment station was the means to an end to achieve colonialism in the southern part of Africa. The establishment of the refreshment station has also been

associated with the establishment of Robben Island as a place of incarceration. The Dutch exiled leaders from East Asia, which included Java. According to Lubbe (1987), several Muslim noblemen were exiled to Robben Island. These included Doumano of Termano (1738), Daing Mangeman (1749), and Sheik Madura (1742). Lubbe (1987) noted that a shrine (or karamat) has been erected on Robben Island in honour of Sheikh Madura as a silent reminder of his fierce opposition to Dutch colonialism.

According to Blickford-Smith (2009), British took control over the Cape from the Dutch which led to the freeing of slaves in the 1830s. The Bo-Kaap area in Cape Town, with its colourful buildings, became the residential area of the freed slaves of which the majority were Muslim. "Despite landing at the Cape from Africa, India, Sri Lanka, Malaysia and elsewhere in Asia, the people of this community became known as 'Cape Malays' and the area, the 'Malay Quarter' Cape Town. (2017: 1). Today, the Bo-Kaap Museum showcases the local Islamic culture and heritage as well as the history of the freed slaves. The arrival of Muslims in the Cape was imperative for the development of a resident Muslim population in South Africa. According to Zamani-Farahani and Eid (2015), the Organisation of Islamic Cooperation (OIC) which was established in 1969 and which represents the majority of Muslim States, is the second largest intergovernmental organisation after the United Nations. In research conducted by MasterCard-CrescentRanking (2016), South Africa is the fourth most popular non-OIC destination for Muslims in the MasterCard-CrescentRating Global Muslim Travel Index (GMTI).

Hamza et al., (2012) noted that Muslim tourism is tourism that is mainly targeting people with Islamic beliefs. "Halal tourism refers to the provision of a tourism product and service that meets the needs of Muslim travellers to facilitate worship and dietary requirements that conform to Islamic teachings" (Alkhulayfi et al., 2015: 10). As a consequence of the arrival of Muslims in the Cape Peninsula, they went about building places of prayer and worship. According to Peterson (2017), the Masjidul-Jamiah in Kalk Bay was established in 1898 and is a hundred-year-old heritage site. South African Tourism (2017) noted that the most visited kramat is that of Sheikh Yusuf of Mcassar, the first Muslim to read from the Holy Koran in South Africa and who is regarded as the father of local Islam. "Robben Island is currently South Africa's most famous cultural tourism attraction, located in a 30 minute ferry trip from the coast of Cape Town, South Africa. In 1999, Robben Island was declared one of South Africa's first three World Heritage sites" (Shackley, 2001: 356). Today, Robben Island is associated with full blown mass tourism, as it is one of the major tourism destinations in South Africa. The critical number of Muslims has meant that South African cities have become attracted to increase their share of the growing Muslim travel market. News24 (2014) noted that statistics reveal that Cape Town is seen as an ideal holiday destination for Muslim tourists because of the Muslim history of Cape Town.

According to Zamani-Farahani and Eid (2015: 10), "Following the 11th of September 2001, Muslims preferred to travel to and within destinations deemed friendlier. On the other hand, some Muslim countries have also benefited from in-tourism." Haines (2017:3) noted that "after 9/11, the US Congress passed the USA Patriot Act, which amended US immigration laws and impacted the passage of travellers by introducing in-person interviews for visa applications and biometric procedures (fingerprints and photos) at borders. This had a huge impact on America's tourism industry. The election of Donald Trump as the President of the United States of America, is following September 11, the second most significant impactor on Muslim tourism. In January 2017, Mr Trump signed an execution order that restricted immigration from the following Muslim majority countries: Iran, Iraq, Sudan, Syria, Libya, Somalia and Yemen. The decree was not a surprise as Mr Trump has been vocal during his campaign to assume office that this

would be one of the first things he will do when he moves into the Oval Office at the White House. According to The Economist (2017), the decree could have the impact of putting off global travellers from visiting the USA. Haines (2017) noted that the travel ban was unprecedented; history was hinting that it could have far-reaching implications for tourism in the US. "Trump has presented his decree as a way to protect the United States from Islamist militants, but it has been condemned by a growing list of foreign leaders and draws protests from thousands in American cities" Reuters (2017: 2).

The USA is a major tourist destination, in the bigger scheme of things; a decline in the desire to travel to the USA would benefit other international destinations. On the flipside, the travel ban could also limit USA outbound tourism, which would be devastating for the world tourism economy. The USA has one of the major outbound tourism markets in the world. The closure of American airspace immediately after the September 11 terrorist attack, not only had a negative impact on the global tourism trade, as America is a major and profitable aviation route for many airlines, but also robbed the world of American tourism expenditure. As noted by Reuters (2017), Asian countries that are majority Muslim territories such as Malaysia, have taken advantage of the Trump travel ban, by focusing on Muslim tourism. South Africa must also take advantage of its Muslim accessibility, and actively pursue the Halal tourism market to diversify the tourism market segments of South Africa as a destination. Muslim tourism is expected to grow and South Africa must exploit the growth of this sector. This implies that there must be constant engagement with the private sector to ensure that it caters for Muslim tourists whose needs and preferences may be different.

SCHOENSTATT "MOTHER SHRINE OF AFRICA" CATHCART

Cathcart is a peri-rural town located along the N6 highway, 50 kilometres from Queenstown, in the Eastern Cape. It was a small military post established during the Frontier War, between the Xhosa native population and the British, the colonial power. The area was originally occupied by the San and the Xhosas. According to South African History Online (2017), the area was called Windvogelberg, after a San chief. The mountains around Cathcart are called the Windvogelberg Mountains. In 1877, AmaNgqika led a rebellion against the British, the colonial power governing the Cape Colony (South African History Online, 2017). German missionaries arrived in the Cathcart area, and spread the Christian faith amongst the native population. According to Frisk (2000), Kentenich sought to spread the Schoenstatt faith by sending nuns to South Africa, Uruguay, Argentina, Brazil and Chile in the 1930s. The nuns were expected to build replicas of the Schoenstatt shrine in Germany.

Schoenstatt (2017) noted that the Cathcart shrine was the first Schoenstatt shrine built in Africa in 1949 and it is called the "Mother Shrine of Africa". It is a direct replica of the Vallender shrine (Urheiligtum) near Koblenz in the Rhine province. There are only nine of their kind in South Africa. The Schoenstatt shrines remain sites of pilgrimage, where pilgrims receive the three graces of feeling at home, of being spiritually transformed and of apostolic zeal. Astell and Peters (2014) affirm that Schoenstatt is a movement that was founded and established by Joseph Kentenich in Germany in 1914 with the outbreak of World War I. The arrival of German missionaries in Cathcart, led to the development of a Schoenstatt shrine, and today there are nine in South Africa. The legacy of the San is reflected in Bushmen paintings in several caves around the village of Goshen, outside Cathcart. The Frontier War between the Xhosa and the English led to the dispossession of land by the Xhosas, which is reflected in today's reality where land ownership in South Africa remains skewed. The shrine is an opportunity to create religious pilgrimages that can drive tourism consumption in the Cathcart area. This can be an opportunity to attract German tourists to the Cathcart area, considering that Germany is one of the top three inbound

international source markets for South Africa. Social media in addition to traditional marketing platforms can be used to market the religious and pilgrimage experience that is "off-the-beaten track". Marketing outlays must be sustained to ensure tourism consumption demand, increases the introduction of "new money" as tourists spend money in the local economy of Cathcart. There is ample opportunity to use religious and pilgrimage tourism associated with Schoenstatt shrine, as an economic growth point for the local economy.

DISCUSSIONS AND CONCLUSIONS

Multiculturalism is a character of South Africa's society, which should be used as a means for tourism consumption. The South African tourism product is dominated by the game and bush experience. There is increasing interest in heritage tourism consumption, which South Africa has yet to capitalise on, especially in the historical townships, which were the centres of resistance against apartheid. This is an opportunity not exploited, to use heritage as a growth point, in these economically deprived areas. "Throughout the world, museums, art galleries, heritage sites, historical landmarks, archaeological sites and festivals have become major tourist attractions. Rather than just being peripheral or secondary attractions, arts and heritage are increasingly becoming major catalysts in the whole travelling experience" (Phaswana-Mafuya & Haydam, 2005: 151). The visa regiment of a country has emerged as the most important determinant of the rate of international tourism to a destination. In the competitiveness of destinations, South Africa is further challenged by low levels of personal safety and security. Domestic tourism remains the bedrock of the tourism industry in South Africa, and it remains a function of the economic conditions of the country. According to Henama and Sifolo (2015), the tourism industry has benefited from an increase in Black South African tourists. The face of domestic tourism remains dominated by the White cohort of South Africans in terms of tourism consumption. The growth of tourism in South Africa will continue its upward trajectory as the state under President Cyril Ramaphosa has indicated that it will unlock the red tape impacting on tourism growth. South Africa must establish a Tourism Red Tape Initiative (TRTI), which would identify bottlenecks that limit tourism growth. The developmental benefits of tourism will increase, with the increase of tourist arrivals in South Africa.

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SUSTAINABLE DEVELOPMENT GOALS AND SOCIO-ECONOMIC DEVELOPMENT THROUGH TOURISM IN CENTRAL AFRICA: MYTH OR REALITY?

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Abstract: The realisation by many developing countries in the last two decades that tourism can be an important tool in achieving the sustainable development goals of poverty elimination, environmental sustainability and decent work and economic growth in general has led many governments to introduce measures aimed at promoting the development of the industry. However unlike many countries in Eastern and Southern Africa, countries in the biodiversity rich Central African sub-region only recently started to adopt measures aimed at the sustainable development of the industry geared towards the realisation of these goals. The travel and tourism industry here is still at an embryonic and chaotic stage of development, plagued with a multitude of challenges contributing less than 3% to GDP and employment. Using qualitative research methods i.e. semi-structured interviews and field observations, the paper examines the role of the tourism industry in the attainment of these goals and consequently tourism's contribution to local economic development in Cameroon. It highlights the country's diverse potentials as well as some of core challenges which are presently being encountered. The paper concludes by proposing a framework within which all stakeholders can actively work together towards the realisation of these goals.

Key words: Tourism, sustainable development goals, local economic development, environmental conservation, Central African sub-region, Cameroon

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INTRODUCTION

The sustainable development, conservation and use of environmental resources for tourism purposes is one of the tools that is seen by many developing countries, especially those in the sub-Saharan Africa in attaining Sustainable Development Goals

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(SDGs) dealing with eradication of poverty (SDG 1) and hunger (SDG 2) and ensuring environmental sustainability (SDG 15), thereby promoting Local Economic Development (LED). Evidence suggest that in contemporary pan-African context, while most economies have embraced tourism as a recommended tool to achieve such SDGs (World Bank, 2018) by successfully investing in its development (Bakker & Messerli, 2017), others, particularly those located in the Central African sub-region have acknowledge the sector's potential but not as yet, capitalised on the opportunity it represents (Christie et al., 2014). Although some efforts have been made by a handful of governments in the sub-region particularly those in Cameroon and Gabon with regards to improving and increasing level of environmental protection, tourism's impact as a vehicle for LED has not been maximised. While briefly discussing some of the theories of LED in relation to tourism, this study appraises some of the challenges that could make the successful attainment of SDGs of ending poverty and guaranteeing environmental sustainability through tourism a distant reality in Cameroon in particular and the sub-region in general, and proposes a framework which if adopted, could help in changing this trend and thus make LED through tourism a reality. Such a framework we argue, if coupled with the country's bilingual character (English and French are the official languages), natural and cultural biodiversity, are key elements which if well exploited could lead to the development of a vibrant tourism sector which could go a long way to enabling the attainment the SDGs of poverty eradication and environmental conservation and sustainability, thereby fostering LED. However, since the adoption of the SDGs, the use of tourism to achieve some of its objectives has received a rather mixed reception in Cameroon in particular in spite promises of development and investment by the government in the sector.

This paper also examines the main challenges and contradictions presently being encountered in the use of tourism as a tool for the realisation of these goals and LED in general in Cameroon, with the main objective being to develop a strategic framework which will see the institution and integration of core and enabling mechanisms that will facilitate the attainment of these goals and thereby promoting LED.

LED and the MDGs

The advent of democracy in many developing countries in the early 1990s and the imposition of structural adjustment programmes by international financial institutions and donors on these countries during this same period aimed at poverty reduction and therefore the attainment of an important SDG led to a gradual shift from formerly centralised planning to more regional and communal planning. LED which had hitherto been centrally planned became in theory the responsibility of regional, municipal and communal governments who were now called upon to develop strategies aimed at local economic revitalisation and stimulating job creation. Wolfe and Creutzerg (2003) observed that local development strategy involves three different phases or waves, the traditional approach, the capacity building strategy and the development of information flows phase. *The traditional approach* was predominant from the 1950s to the mid 1980s. Governments and regions tried during this period to attract firms by emphasising the presence of cheap factor costs, providing subsidies and tax rebates to potential investors. Thus some risks associated with first-movers were reduced. *The capacity building strategy* became popular in the 1980s when firms realised that offering the concessions in the traditional approach was not enough to lure firms to invest in regions without the necessary qualified human resources to work in the industries. As a result, focus was placed by governments and regions in creating the necessary competitive knowledge base needed to work in industry through the creation of schools and other

educational and technological infrastructures. In so doing, knowledge transfer from schools to industry was enhanced and work and management skills needed in enterprises were honed. *The development of information flows and the quality of life* is an emerging strategy of LED. In this strategy, the role of the local governments is to put in place the necessary infrastructure that will not only guarantee access to information but ensure efficiency in the dissemination of this information to all those interested.

Because destinations become increasingly competitive, the quantity and quality of information available about the characteristics of the tourism products on offer in a particular locality play a very important role in making a destination attractive / popular or not. Accordingly, it is plausible to suggest that LED related activities should be geared towards encouraging active stakeholder participation in every locality or community. Nevertheless, there exists no single model of how to implement LED nor strategies and actions to adopt, due to the fact that factors that are mainly linked to efficiency and effectiveness of regional development are influenced by a range of institutions and processes. Besides, according to several studies (see for example Rogerson, 2002, 2006, 2015, 2016; Rogerson & Rogerson, 2010; Ilies et al., 2016; Ilies et al., 2018 a, Gozner et al., 2016), certain parameters are always necessary if LED initiatives and programmes are to be successful. These include:

- The emergence and support of local role models.
- The creation or formation of institutional intermediaries
- Equitable and active stakeholder participation and ownership
- The provision of financial and technical resources
- Good governance and stringent accountability mechanisms
- Identification of sustainable income generating opportunities for the local community, particularly for the poor
- Development and implementation of monitoring indicators to measure progress

With the above discussion in mind, LED therefore involves the establishment ofenvironments that encourage the stimulation of new opportunities in both rural and urban regions with limited opportunities for economic growth. In communities near or within Cameroon's nature parks and reserves, LED could be promoted through the development of sustainable ecotourism activities which if well executed will go a long way in accomplishing the SDGs linked to poverty alleviation/eradication and environmental sustainability.

STUDY CONTEXT

Cameroon has always been described as "Africa in miniature or all of Africa in one country" (MINTOUR, 2011) because of its geographical and multicultural diversity. Located at the crossroads between west and central Africa, Cameroon has a total surface area of 475 442 km² and a population of about 24.68 million inhabitants in 2018. In 2005, the literacy rate was estimated at 81.1 percent, one of the highest on the African continent (NIS, 2005; BBC, 2008). It is bound by Equatorial Guinea to the southwest, Gabon to the south, Congo to the southeast, the Central African Republic to the east, Chad to the northeast, Nigeria to the northwest and the Gulf of Guinea to the west (Figure 1) (Kimbu, 2017). Cameroon is ergo in a very fertile ground for the development of nature-based tourism activities which if well managed, could effectively lead not only to the reduction or alleviation of poverty levels, but as well guarantee a good degree of environmental sustainability and biodiversity conservation and general LED through the adoption of responsible attitudes, practices and behaviour. This is in view of the fact that these core and enabling factors discussed hereafter would significantly contribute in making the country a potential hot-spot for sustainable tourism activities if they are properly developed and managed.

Core element

Topography and natural biodiversity

The appellation 'Africa in miniature' is used to describe Cameroon's topographical diversity which has given rise to the rich floral and faunal diversity found in the country. The country's location at the crossroads of West and Central Africa in the gulf of Guinea has given rise to a vast floral and faunal diversity and density.

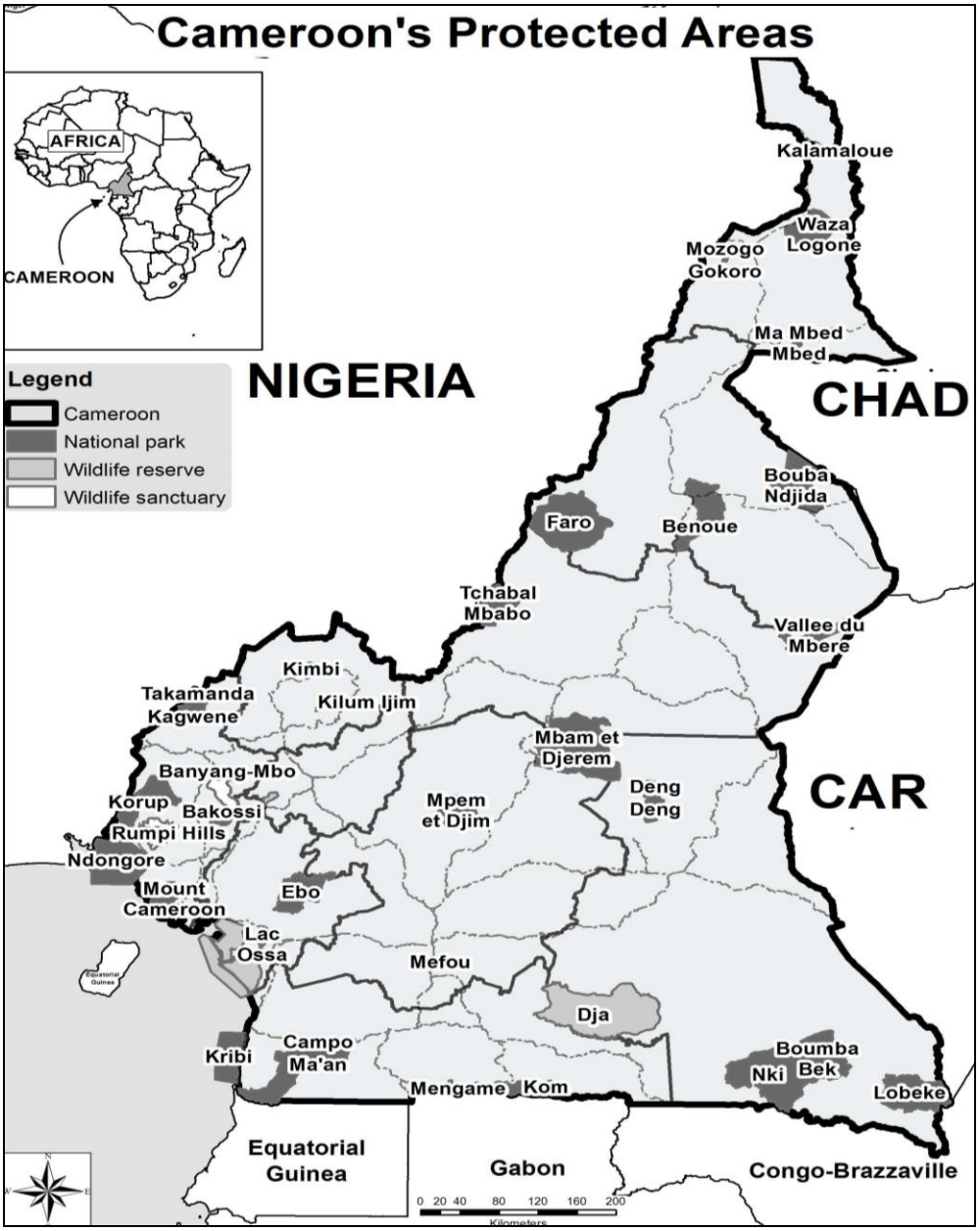

Figure 1. Geographical location of Cameroon and its protected areas (Source: Authors based on fieldwork)

In fact Cameroon has one of the highest concentrations of endemic species on the continent apart from the island of Madagascar. Cameroon is home to 409 known mammalian species (11 of which are endemic), 849 bird species (7 of which are endemic), 143 species of reptiles (23 of which are endemic), close to 200 amphibian species, 542 fish species, and an estimated 9000 plant species, 156 of which are endemic (Dowsett-Lemaire & Dowsett, 2000; Earth Trends, 2003; MINEF, C.O.C, & BirdLife International, 1999; Stuart et al., 1990; Vivien, 1991). It is in this regard that the World Bank and the WWF classified Cameroon as one of the 13 countries worldwide with the highest amount of biological diversity (Graf, 1997; Riley & Riley, 2005). As a result of the realisation of this ecological diversity, work on conservation started in Cameroon as far back as during the colonial period (1884 - 1960) when the foundation of most of the parks and reserves presently found in the country such as the Kimbi River Game Reserve; the 1000 hectares Kilum Ijim Floral Sanctuary on Mount Oku (the second highest Mountain on mainland West Africa at 3,011 metres and home to one of the rarest birds in the world, the Bannerman's turaco as well as 16 endemic mammalian species) were laid down by the Germans and later by the French and English. Serious conservation work in the Kilum Ijim Floral Sanctuary only started in 1987 even though the British colonial administration started attempting to protect the reserve as far back as 1930; the Korup Forest Reserve (which is one of the last remaining undisturbed equatorial forests in the world with its rich variety of endemic flora and fauna was designated during the period of German colonisation); the 1988 revamped internationally acclaimed Limbe Botanical and Zoological Gardens (which harboured the Mount Cameroon Project in 1994 and later the Limbe Biodiversity Conservation Centre) and the Bipindi Botanical Garden were created by the German botanists Preuss and Zenker in 1892 and 1896 respectively for the study, nursing and cultivation of different plant species of the region (Eloundou, 2005).

Apart from the Korup, Kilum Ijim, Kimbi River and Mbi Crater reserves all in located in the western region of Cameroon, all faunal reserves in (francophone) Cameroon where created by orders (*arrêtés*) of the then French High Commissioners between 1931 and 1950 (WCMC, 1992). In the southern and eastern regions of Cameroon, include the Dja Faunal Reserve and UNESCO World Heritage Site which as early as 1930 already had some form of protection and became officially protected as a faunal and hunting reserve by Law No. 319 of 25 April 1950 by the French colonial administration before being transformed to a faunal reserve under the National Forestry Act Ordinance No. 73/18 of 22 May 1973. It was internationally recognised as a Biosphere Reserve under UNESCO's Man and the Biosphere Programme in 1981 and included in the list of World Heritage Sites in 1987 under Criteria II and IV dealing with its contribution to the evolution of mankind and its abundance of biodiversity species (UNESCO, 2008; Nyang & Hamerlynck, 2006). Others are the 2000 km² Lobéké National Park (which became part of the Sangha Tri-National Area, in association with the Zangha-Sangha National Park in the Central African Republic and Noabele-Ndoki National Park in the Republic of Congo as part of a commitment taken by governments of the central African sub-region to protect and ensure sustainable use of forest resources during the Yaoundé Forest Summit of 1999). The Boumba Bek Reserve, Nki National Park and the 264 064 ha Campo-Ma'an National Park were created in 2000 (Government of Cameroon, 2000; Riley & Riley, 2005; Tchakounte, 2008; Lukong, 2008).

The reduced cover of the savannah type vegetation in the north of the country which is favourable for big game viewing favoured the creation of the first six national parks in this part of the country. These include the Waza National Park and UNESCO-MAB Biosphere Reserve. Located 122 km from Maroua in the Far North Province in the Chad depression, the vegetation in this 1700 km² park which is the most accessible,

famous, visited, developed and probably one of the best known of Cameroon's parks. It was created in 1934 by the French colonial administration, albeit as a hunting reserve, and it became a National Park in 1968 and a UNESCO Man and Biosphere Reserve in 1979. The park is home to a wide variety of animals including lions, elephants, hippopotamuses, rhinoceros among others as well as a large variety of birds, the most popular being the ostriches which roam the plains of the savannah; the 3,300 km² Faro National Park which is home to a large variety of hippo colonies, black rhinoceroses, elephants and cheetahs (whose survival is actually threatened by over poaching); the Bénoué National Park which is also a UNESCO-MAB Biosphere Reserve and the Bouba Njidah National Park in the Guinea savannah belt about 150km from Ngaoundéré which are famous for their elephants, giant elands and an abundance of other wildlife species (Riley & Riley; 2005). These parks were created primarily to attract tourists. In total, four distinct topographical regions containing different varieties of flora and fauna can be mapped out in the country. These are the area around the Mount Cameroon National Park, the Korup National Park in the south/north west regions, the Campo-Ma'an / Dja National Parks and south/eastern regions Cameroon and the Waza National Park and in the 'Grand' north region. Thus whilst the south west and south eastern regions of Cameroon (North West, South West, Littoral, Centre, South and East Regions) are a potential haven for ecotourism and beach tourism development (which is gradually being developed), the northern portion of Cameroon (Adamaoua, North and Extreme North Regions) can be seen as the Mecca for safari adventurers.

Realising the significant importance of Cameroon's biodiversity and the need for its protection upon gaining independence in 1960, the tradition of creating more parks and reserves was expanded and entrenched into law. In 1974, law No. 74 / 357 of 17th April 1974 dealing with the organisation of "state forests" was promulgated. This law fixed a quota of 20% of the national territory to be designated as protected areas. The National Assembly later on voted another law authorising the President of Cameroon to ratify the Rio Convention increasing this quota to 30% of the national territory thereby theoretically complying with the SDGs (13, 14, and 15) linked to environmental sustainability. However, as of 2005, only 14% of Cameroonian territory was actually under some form of protection on paper but there were plans to increase this amount to 19% especially after the approval by the World Bank to finance the Cameroon Forestry and Environmental Project in 2005 (World Bank, 2005). Presently, there are 13 national parks, 3 of which are UNESCO-MAB biosphere reserves and one a UNESCO World Heritage Site; 18 wildlife reserves, 3 wildlife sanctuaries, 16 forest reserves and protected areas, 9 cloud (mountain) forest sites in the country (Table 1). This is in addition to the 402 km of coastline with pristine beaches near the foot of Mount Cameroon in Limbe (South West Region) and at the entrance of the equatorial forest around Kribi and Campo (South Region) as well as the diversity and multiplicity of customs and traditions manifested in architecture, dressing, music, song and dancing most especially in the Western and Northern Regions of Cameroon.

Protected Areas	Number	Surface area (ha)
National Parks	11	2 577 930
Faunal Reserves	6	702 995
Synergetic Zones	35	3 083 750
Faunal/Floral Sanctuaries	2	132 000
Zoological Gardens	2	4,07
TOTAL	56	6 496 499,07

Table 1. National parks, reserves and protected areas in Cameroon
(Source: Ministry of Forestry & Fauna - MINFOF, 2007)

With its rich and abundant biodiversity, LED around these parks and sites can be promoted, if different forms of community based sustainable tourism development ventures are introduced, and if successfully managed and monitored, these ventures could go a long way in attaining the objectives of poverty alleviation and environmental sustainability set out in the SDGs.

Enabling elements

Proximity to Europe

Considering the fact that Cameroon is only about six hours away from most European countries by air, the country could have been profiting as a winter sun destination just as the likes of the Gambia and Senegal or a safari paradise just like Kenya, Tanzania or Botswana for example. This is however, not the case owing to high air travel related costs. While strides have been made interms of the number of airlines operating in the country (from 8 companies in 2009 to 30 as at 2015 as available data shows) (see Ncham, 2009; Business in Cameroon, 2015), air transport to Cameroon is still considered a costly affair as ticket prices, coupled with lack of low-cost no-frills airline operators and charter flights, excessively high airport taxes make the destination an expensive one to visit.

Adventure/discovery factor

Cameroon as far back as the colonial period has always been a region of fascination to adventurers. It is while living here during their colonial expeditions and adventures that popular early 20th Century novelists such as Gerald Durell collected tropical plant and animal specimens and had inspiration for his best selling novel *The Bafut Beagles*. This fascination has continued up till recent times drawing big screen movie directors to use some of its natural parks as settings to some of their movies such as Hudson's (1984) *Greystoke: The Legend of Tarzan, Lord of the Apes* featuring Andie MacDowell and Christopher Lambert or Antoine Fuqua's *The Tears of the Sun* in 2003 featuring Bruce Willis and Monica Belluci amongst others set in Nigeria and Cameroon. As such the varied topography and vegetation most of which has resisted the impacts of development and civilisation due to its remoteness sometimes very difficult terrain limiting accessibility offers a very fruitful environment for tourists who are out for adventure and discovery in all parts of the country. This adventure and discovery element makes Cameroon which according to Butler's (1980) tourism area life cycle is still somewhere between the involvement and development stage. At the moment it is mostly visited by a variety of tourists ranging from what Plog (1974) and Cohen (1972) describe as allocentric travellers and explorers respectively, to near venturers and centric venturers.

Language and cultural diversity of the people

Though three main linguistic groups are identified in Cameroon; the Bantu-speaking peoples of the south, the Sudanic speaking peoples of the north and the semi-Bantu speaking peoples in the west, Cameroon's ethnic composition is varied and diverse with more than 250 distinct ethnic groups speaking more than 270 languages and having as many distinct cultures and traditions manifested in music, song, dance, clothing, and nutrition. This makes it one of the countries in the world with the highest number of ethnicities, languages and cultural diversity (Paden & Soya, 1970; Benneh, 2008; Ilies et al., 2017; Ilies et al., 2009). The principal ethnic groups consist of the Cameroon Highlanders who account for 31% of the population, the Equatorial Bantu for 19%, the Kirdi for 11%, the Fulani for 10%, the North-western Bantu for 8% and the Nigritic for 7%, other African 13%, and non-African less than 1%. In spite of the multiplicity of ethnic languages, English and French are the official languages with French being the most spoken (Benneh, 2008), enabling easy communication between locals and tourists.

MATERIALS AND METHODS

Primary data for this research came from in-depth semi-structured interviews/ discussions that were conducted with 20 tourism industry stakeholders; 8 from the private sector and 12 from the public sector organisations in Cameroon in 2017 and 2018. Primary data was also generated by the researchers from a total of seven field visitations that were undertaken to various sites that were considered as existing tourism developmemt products, including those with a strong potential. Using a purposive snowball sampling technique (Mason, 2002), public sector stakeholders from Cameroon's Ministry of Tourism and Leisure, and national park conservators which are all state-owned on the one hand and private sector stakeholders made up of representatives of community based tourism organisations, home-based tour/hotel operators and local community representatives on the other hand were targeted to take part in the study.

The in-depth semi-structured interviews and discussion techniques were considered appropriate for the current study as it allows for access to rich and personal data and the ability to understand the stakeholder's context and motivations linked to the study objective. Particularly, the opportunity for the researchers to access the "interviewees' thoughts, reflections, experiences, memories, understanding" (Morris, 2015: 5) of tourism and LED, linked to SDGs in Cameroon was a major motivation. In addition, the lack of up-to-date secondary data sources and accurate statistics of tourism development in Cameroon (Tichaawa, 2017; Harilal et al., 2018) and the interviewing strategy adopted meant that the researchers were able to elicit as much information as possible from the respondents on the topic. The interviews lasted for between 30 and 60 minutes. Interviews were conducted on a face-to-face basis at a predetermined location of choice selected by the interviewee. The interviews were digitally recorded and later transcribed vabatim. Suplimentated by fiedtrip notes and observations, the content analytical technique was used to generate the results from the interviews, which are presented next.

RESULTS DISCUSSIONS

In spite of possessing the natural elements favouring the development of an ecologically sustainable tourism industry capable of alleviating poverty within communities in the Central African sub-region and Cameroon in particular, and in spite of the commitment of some governments of the region to prioritise the development of the tourism industry as one of the means of stimulating local economic growth in areas devoid of other natural (e.g. minerals) resources and industries and thereby attaining the SDGs linked to poverty alleviation and environmental sustainability, it is becoming increasingly difficult to see how countries in the sub-regionin general and Cameroon in particular will attain these goals by the 2030 target date. Analysis of data collected during the field work i.e. interviews, observations and secondary data revealed the existence of some core and general challenges which made LED and the attainment of the other two SDGs through tourism a far fetched reality. Some of the principal challenges included the lack of finance leading to the non implementation of park management plans, shortage of park management staff, poor maintenance and upkeep of tourist sites, inexistent or maraud service infrastructure, non implementation of general tourism policy framework, conflict of interest between various stakeholders and government departments, as well as slow pace of professionalisation of the tourism sector.

Principal challenges

Lack of Finance

The absence of or limited nature of financial resources for investment, infrastructural development and maintenance and human resource management was

considered to be the primordial problem by all tourism industry stakeholders in Cameroon and this contributed to:

Absence of a sustainable tourism development and management policy

The Cameroon Tourism Sectorial Development Plan drawn up in 2005 which outlined the some of the potential areas and types of tourism (most notably ecotourism) which had to be consolidated and developed as well as the means of undertaking these developments in various parts of the country has still to date remained only on paper with very few of its recommendations ever having been put into practice. This is the same situation with Cameroon Tourism Marketing Plan drawn up in 2002 (which outlined a strategy for the marketing of the country as a tourism destination) with the technical and financial assistance of the Commonwealth. Its recommendations have also to date been implemented only on an adhoc basis. These issues do arise because of the absence of the concise and precise tourism policy in Cameroon (see Harilal et al., 2018) coupled with the absence of an independent national tourism board to oversee the general development and management of the country's tourism industry. The effects of the absence of a clearly defined tourism policy and strategy coupled with the absence of a national tourism board (Kimbu & Ngoasong, 2013) has led to the industry being in a disorganised state with very little cooperation and coordination between various branches of the industry on the one hand and other sectors of the economy in general leading to conflicts of interest between the various stakeholders involved.

Conflicts of interest between various stakeholders and government policies

Persistent conflicts of interest between the various ministerial departments as well as between public and private stakeholders within Cameroon's tourism industry accounted for the limited contribution of tourism to LED and in the process hampered the attainment of the SDGs related to economic growth and decent work, poverty eradication and environmental sustainability. Due to the ever increasing and changing developmental plans of the government, decisions are sometimes made which stand in direct contradiction to these goals. In the past, most of these conflicts arose from the infringement by lumbering companies who had been granted logging concessions near national parks. Some took it on themselves to log right into the parks but this attitude according to one of the interviewees is presently being brought under control thanks to the decisive action of the present Minister of the Environment and Forest who has "waged a campaign against illegal logging (and poaching) in protected areas of the country" as well as the change in the attitudes of a few logging companies who have joined forces with the conservation agencies aimed at environmental protection. Companies caught logging on protected areas are sometimes imposed severe penalties and some have had their exploitation licences revoked. On the other hand however, there are certain areas where the national interest has superseded interest of conservationists, be they from the government or from national and international NGOs. This was the case with the decision on construction of the World Bank sponsored Chad Cameroon pipeline project (which passes through the Campo Ma'an National Park though care was taken to avoid destroying the Deng Deng Forest Reserve which is one of the rare hardwood forests in Africa) completed in 2003 (IFC.org, 2003). It is presently the same situation with the recently launched Kribi deep sea port and gas terminal project where the government and local inhabitants opted for the construction of the above infrastructure instead of the creation of a marine park in the region citing the economic advantages which could accrue from the realisation of this project in the region (PAK, 2018; Bainkong, 2009).

This scenario was likely to be replayed with the construction of the Lom Pangar Dam and hydro electric power station in the Eastern Region which will not only flood about 318 km² of the Deng Deng Forest Reserve but also parts of the Lom Pangar Reserve as well as the construction of the Mve-Ele hydroelectric dam in the Southern region of

Cameroon (Ngala, 2009). Though the construction of these two dams when completed will significantly boost the country's deficient electricity output and is expected to increase economic activities (leading to the attainment of SDGs 1 and 8) (World Bank, 2018), vast areas of the parks and reserves within the area will be flooded with the result that floral and faunal species some of which are endemic will be lost for ever as well as displace many local communities from the habitats impacting on their wellbeing (SDG 3). These activities will lead to an influx of people into the region, worsening the spectre of illegal logging, poaching and fishing, and obviously generate associated risks like the spread of diseases. The same situation also holds true for the granting of multiple mining concessions by the Ministry of Mines within already designated national parks to multinational companies for the exploration and eventual exploitation of minerals such diamonds, gold, bauxite, nickel and cobalt among others. Logging and mineral exploration and exploitation activities are presently taking place within parts of the Boumba-Bek and Lobéké National Parks and according to the WWF Cameroon these activities will all have negative consequences to the flora and fauna of these parks because the methods of exploitation are not at all compatible with the objective of protecting of the biodiversity in these parks (SDG 15) (Elvido, 2009). Even though jobs will be generated once the exploration phase of mineral mining starts, if not well planned the consequences could be disastrous to the communities living around these sites, the environment and the biodiversity in the long term. There are thus persistent conflicts of interest between the various stakeholders involved in the country's tourism industry but national interest always takes pride of place over environmental conservation and sustainability issues which even though taken into consideration when drawing up management plans often end up being relegated to the background. All these actions make attaining SDGs 1 and 2 a distant reality.

Non implementation of park management plans

Since 2002, Park management plans have gradually become the order of the day in all of Cameroon's main national parks. However, the effective implementation of the projects found in them leaves much to be desired. Before the advent of these plans, emphasis since the late 1990s had been placed by the government in the integration of development of ecologically sustainable tourism ventures with national park conservation. Conservation and tourism development near or within parks during this period was mostly realised thanks to the technical and financial assistance of international non-governmental organisations such as the World Wide Fund for Nature (WWF), German Technical Cooperation Mission (GTZ), Dutch Development Organisation (SNV), and the UK Department for International Development (DFID). This started off with the Korup Project in the South West region of Cameroon sponsored primarily by the WWF, the EU and the UK DFID. The main aims of the project were to achieve conservation and protection of the biologically important Korup National Park while integrating the conservation and protection goals with the development the development goals of the local communities (Kimbu & Ngoasong, 2013; Kimbu, 2010; Ilies et al., 2017, 2018b; Gozner & Avram, 2010). In addition it aimed to achieve a well-functioning and well-managed park which the local communities prized and which provided benefits to them in terms of natural resources and income from tourism and employment.

The project lasted from 1997 to 2002 during which conservation work was done in the park and the ecotourism initiatives were also introduced, hiking trails were opened within the park and camps were also constructed in addition to a guest house in the town of Mundemba at the entrance to the park. The local populations some of whom were former hunters and poachers were also actively engaged and many employed and trained as

ecoguides, eco-monitors and porters. However when the project wrapped up in 2002 at the end of the contract, funding dried up and the Cameroonian government was not able to continue with some of these projects even though their continuation had been envisaged in the Korup Park Management Plan which was drawn up at the end of the Korup Project. As a result, the most of the infrastructure set up fell into disrepair and the some members of the community who had been employed became redundant and went back to hunting and poaching with very negative consequences for the flora and fauna of the park.

The same was the situation with the Mount Cameroon Project which was set up and funded by the German Development Mission (DED) and the GTZ. The aim was the foster the conservation of the floral and faunal resources on Mount Cameroon by reducing the pressure on it from the local communities who were to be actively and profitably engaged in this conservation venture by being offered income generating activities centred around conservation and eco tourism development. The project lasted from 1998 – 2007 during which time former hunters and forest product gatherers from the surrounding mountain communities were employed and retrained as guides, porters and farmers. The project was a success until the departure of the GTZ and DED team when management divergences started cropping up leading to some of the porters and guides to return to their past preoccupations. In addition since the end of foreign assistance, maintenance of some of the infrastructure (trails and camps) leading up to the mountain has virtually come to a standstill and most are in a state of decay. Visitor numbers to the mountain which until 2007 had been steadily increasing is now declining. It was thus very evident that even though the government has made it a priority to include the sustainable development of ecotourism activities around most of Cameroon's nature parks and reserves, in principle it remains only in theory due to the lack of financial resources to execute these goals in the field. Without external help from foreign donors, (as is presently the case with the Kudo-Zombo Project in the Campo-Ma'an National Park sponsored by the WWF), most of these plans will never see the light of day. The Ministry of Tourism and Leisure itself has one of the smallest budgets (6.3 billion francs CFA[1] in 2017) (Ivaha, 2017) when compared to all other ministries and half of this is used to service the administrative costs alone.

Human resource deficiencies in management and technical staff

Environmental sustainability and conservation which is directly linked to SDGs 13. 14, and 15 can only be achieved if the appropriate service personnel needed to carry out tasks related to conservation and ecotourism development are in place. Unfortunately this is not the case with most of Cameroon's parks, reserves and other protected sites. The presence of only two professional schools in the country for the training of senior forestry and wildlife engineers and mid-level forestry technicians and only two main institutions for training management staff in the tourism and hospitality industry (receiving only a limited number of students annually) means that there is a shortage of well trained and skilled professional staff needed to oversee and effectively coordinate the day to day management of the different tourism activities, natural parks and sites in the country. In the Korup National Park for example there are only 3 mid level technicians and 20 ecoguards who patrol and do ecological monitoring in the park. This is lesser than the number which was stipulated in the Park Management Plan which provided for 36 ecoguards and the when the IUCN ratio of ecoguards to park surface area is taken into consideration. It is the same situation for example in the Kimbi River Game Reserve, the Dja Faunal Reserve and the Faro National Park with their large variety of flora and fauna whose survival is actually threatened by over poaching from poachers a good number of whom come from the neighbouring Central

[1] 1 Euro = 655.957 CFA Francs

African Republic and Chad and from far away Sudan. Illegal lumber exploitation and mineral prospections from companies which have concessions near these parks was also identified as a serious threat by the interviewees (Musa, 2012; Riley & Riley, 2005).

General challenges

Some of the general challenges which emanated from the interviews and field observations and which are also contributing in limiting the eventual attainment of the SDGs related to poverty eradication through tourism development and environmental conservation in Cameroon included the existence of inadequate marketing and publicity due to the lack of funding to attend tourism fairs and exhibitions as well as carry out serious marketing campaigns.This meant that the country was not very well known as such was still not considered as a tourist destination according to UNWTO standards; improper behaviour of immigration and public security officials at the airports and on highways leading to complaints of harassment by some tourists; limited government support to small business operators in the sector which meant they had to fend for themselves and were incapable of raising the necessary collateral security needed grow their businesses and to go into partnerships with international tour operators and neither could they take part in international tourism fairs which served as one of the best avenues to market their products, limited information and technology (ICT) skills enabling them to make muse of ICTS in marketing their products and getting visibvility, (Kimbu, 2011a) poor government taxation/registration policies caused by unnecessary bureaucratic bottlenecks leading to increased costs for the local operators and making their businesses unsustainable (Ngoasong & Kimbu, 2016; Kimbu & Ngoasong, 2016). Additionallly, another major issue hampering the development of tourism and the marketablility of Cameroon as an attractive destination could be attributed to two major geopolitical situations that Cameroon has experienced in recent times. Firstly, terrorist activities perpetrated by the Boko Haram group in the northern parts of the country, which is home to its best known national parks and safari game reserves (e.g. the Waza and Bouba Ndjida national parks) (International Crisis Group, 2016) means that very few (inter)national tourists venture to the north of the country. Secondly, the domestic tourism market, especially in the North West and South West Regions of the country has since 2016 witnessed a slump in activities due to the ongoing Anglophone crisis making these regions less attractive to visitors and seriously impacting on the business activities of the tourism and other industries. The perceptions of such political unrest and its spill over effects have been noted to affect tourism performance in the past, due to the downturn in the economic activities linked to both domestic and international tourism they are likely to cause (International Crisis Group, 2018) This could also contribute to limiting the industry's contribution to attaining the SDGs and LED in Cameroon.

Contribution

The absence of an effective tourism framework coupled with the lack of finance for human resource development as well as the development and promotion of the industry means that tourism in Cameroon is still not considered as a full time profession (Kimbu & Ngoasong, 2016). Many private operators who work in the sector consider it as a part time business with other concurrent businesses they manage by the side. It is the same case with individuals from the local communities who consider the sector as not being sustainable enough for them to live off it and maintain their families from their employment in the sector. It is as a result of this that when ecotourism ventures are initiated in the communities (Mount Cameroon National Park, Korup National Park or Belo Rural Development Project for example), the amount of enthusiasm shown by the locals (apart from the Northern Region of Cameroon which already had safari and

synergetic tourism activities being practised there as far back as the 1960s and are thus used to tourism) is always very low due to the fact that the notion of tourism is still relatively new to most of them. As such the benefits of the training courses which often accompany the introduction of these projects even though attended are short lived. This is due to the fact that in the long run when participants trained (in such disciplines as guides, porters, guards) realise that the proceeds from tourism are not immediate but rather take time in coming and not as not regular due to the fact that the tourism season in Cameroon lasts from November to April, the general tendency is for them return back to their past preoccupations (mainly poaching and illegal collection of forest products) which has disastrous consequences for the environment. The result of this is that in comparison to other countries such as Botswana, Kenya or Senegal where up to 4% of the labour force is directly employed in the travel and tourism industry which in turn contributed more than 9% of the GDP of these countries in 2017, in Cameroon the WTTC estimated that 2.6% of total employment in the country came from direct tourism industry jobs and 6% of total national employment was generated by the travel and tourism economy as a whole. In addition the travel and tourism industry in Cameroon directly contributed only 3.2% to the GDP in 2017 (WTTC, 2018). Thus an integrated LED framework aimed at overcoming the above mentioned challenges and which makes sustainable use of the existing biodiversity available in the different communities will have to be instituted if the SDGs of poverty alleviation will have to be attained (Figure 2).

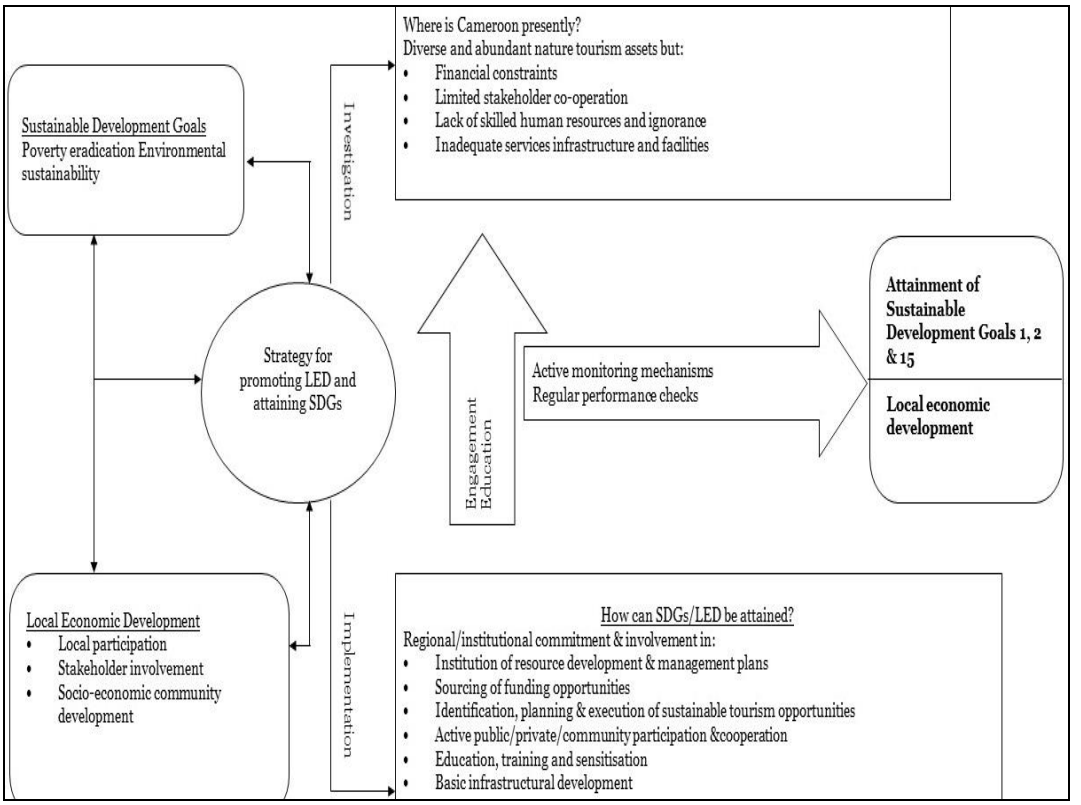

Figure 2. Framework for the attainment of Sustainable Development Goals (1, 2, 15) & LED through tourism development in Cameroon

In order to guarantee the effective utilisation of Cameroon's tourism potential as one of the tools in attaining the SDGs of poverty alleviation and environmental sustainability and therefore LED, tourism would first and foremost have to be considered by the public and private sector as an industry with equal standing to other industrial sectors in Cameroon capable of generating revenue and contributing to the GDP, creating jobs and improving the standards of living of the communities.

If this reality is recognised and accepted by the government, the Ministry of Tourism and Leisure and related ministries will have to be provided with a budget which will enable it to carry out the necessary reforms (setting up professionnal services, staff recruitment and training, marketing and publicity campaigns) and implement measures guaranteeing the effective take off of the industry in the country. This at the moment is however not the case.

It would be imperative for the government and committed private sector stakeholders to carry out education and sensitisation campaigns through out the country and most especially in areas of existing and potential tourism development in order to successfully introduce tourism to the communities as a tool for local economic development, poverty alleviation and environmental protection in Cameroon. The inhabitants will have to be sensitised and educated on the economic advantages that the sustainable development and management of tourism resources can bring to their communities as well as made aware of the fact that tourism development is a process that takes time before profitability sets in. Local communities and minority groups will also have to be empowered and given the freedom to control and manage the sustainable tourism projects after they must have received initial training from capacity building workshops and institutions set up by the government in conjunction with other stakeholders with the necessary expertise and know-how (Ngoasong & Kimbu, 2016; Kimbu & Ngoasong, 2016). Without the necessary training, the community members will not be able to manage these structures and they will gradually fall into disrepair as was observed in the Korup National Park. Another factor to be taken into consideration will be that of active stakeholder collaboration and cooperation. All tourism industry stakeholders will have to effectively work together in the development of the industry which should be placed under the supervision of an autonomous national, regional and local tourism boards (bringing together representatives of public and private sector stakeholders) that will have to be created (Kimbu & Ngoasong, 2013). One of the initial tasks of this board will be to come up with a practical and financially sustainable framework for tourism development and management in the country as well as assume responsibility for the professionalisation of the industry.

The government on its part in addition to creating the basic enabling infrastructure (transportation, health, security which at the moment are lacking in most of Cameroon's tourism sites) necessary for development in the country (Kimbu, 2011b) will have to liberalise the sector and reduce the administrative bottlenecks as well as give tax incentives to potential investors. These measures would encourage investments from private sector individuals at the national and international levels who up till now have been shied away by the bureaucracy, lack of incentives and the general absence of a conducive environment for tourism development in the country.

In addition, the government should engage in a serious and continuous marketing campaign in the potential source markets of Europe and North America where very little has been done up till now as regards marketing and promotion (Kimbu, 2011a). This marketing could take place in the form tourism trade fair attendances in reputed fairs of Berlin, Paris and London for example.

CONCLUSION

The geographic location of the country, the rich and varied topographical, floral and faunal biodiversity coupled with the multi-linguistic and cultural diversity of the country provide the primary components necessary in making Cameroon a very fertile terrain for the development of a sustainable tourism industry capable significantly contributing to the realisation of the SDGs linked to ending poverty (SDG 1) and promoting environmental sustainability (SGDs 14 and 15) leading to local economic development (SDG 8). However a lot of work still has to be done with regards to coordinating and providing the necessary services and infrastructures which will harness these potentials and make them profitable to all stakeholders engaged and guarantee that future generations still get to profit from them. It is only when this foundation has been laid and constant monitoring ensured that it will be possible to look positively into the future and be certain that tourism will be a significant arsenal in the fight against poverty and environmental sustainability in Cameroon. In addition a blueprint that aims to mobilise all stakeholders including those in the government, the private sector and the community, to work in synergy with the view to make the tourism sector in the country a catalyst for positive change for citizens is of essence. The research examined the present level of tourism development in some of the national parks in Cameroon. However, focus was placed mainly in some of the parks located in southern half of the country and as such, it would be preposterous to conclude that these same situation holds true for the north of the country (home to the famous Waza and Benoué National Parks, both MAB reserves) which as far back as the 1960s was already well known internationally (frequented mainly by French visitors) for some of its excellent photographic nature safari and synergetic tourism sites. Future research could look at the effects tourism has had over the decades in this part of the country and its impact on the socioeconomic development of this region as well as the consequences on the environment. It could also examine the role other forms of tourism such as cultural tourism (already being practiced in some parts of the country) can contribute to the attainment of these goals.

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ANALYZING THE REGIONAL DEVELOPMENT OF KURDISH BORDER CITIES OF IRAN USING SUSTAINABLE URBAN DEVELOPMENT INDICES (STUDY AREA: KURDISTAN PROVINCE)

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Abstract: Access to welfare services and social, infrastructural, cultural, and educational facilities is one of the major indicators of development in any planning unit. Hence, the analysis and comparison of access to these facilities are considered as one of the most important factors in determining the degree of development in each society. In order to, the main goal of this research was analyzing the regional development of Kurdistan province using sustainable urban development indices. This research is an applied study with respect to its goal, and a descriptive-analytical study with respect to its nature. It was also predominantly carried out with a quantitative approach. The statistical population for this research included 10 cities of Kurdistan province that were ranked using six indices in the form of 61 criteria extracted from the 2016 statistical yearbook. Analyses were conducted using the VIKOR, TOPSIS, SAW, and Copeland techniques to integrate the results. The findings show that the cities of Kurdistan province are not in a good status in terms of the development indices, and there are large disparities in these cities in the economic, infrastructural, educational, health, cultural, and well-being dimensions, so that only the Sanandaj city was considered as a developed area. Also, four cities were semi-privileged (half-developed), while five cities were deprived of development.

Key words: Regional Development, Urban Development, Decision-making Techniques, Kurdistan Province

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INTRODUCTION

By the end of the 1990s, approximately 15% of the earth's population were living in urban areas (Badiali et al., 2018). The statistics increased considerably in the 20th century, and it is estimated that over 90% of the world population will live in cities by 2100 and the urban world will change the dominant identity of the geographical spaces (Carreon & Worrell, 2018; Fragkias et al., 2013). A major transformation will also occur in the harvest of resources, and as areas occupying less than 5% of the earth's surface area, cities will consume 80% of the resources, replacing the producer space with the dense demographic space (Carreon & Worrell, 2018). This trend has posed several challenges to cities as the centers for capital accumulation and economic power. Therefore, the unsatisfactory distribution of spatial facilities and different levels of access to development indices is serious warnings to urban planners about overcoming the existing challenges and increasing the potentials for urban development (UNEP, 2015; Barrera et al., 2018; Ghaedi Rahmati et al., 2013). In these countries, the levels of development have been influenced by drastic regional disparities due to the rapid asymmetric growth, lack of proportional development in the region, uncontrolled allocation of resources and facilities to the privileged regions, and deprivation of other regions. These disparities are increasing in some areas, resulting in underdevelopment in all dimensions (Nazmfar et al., 2015; Venkatesh, 2002). In these countries, one or two regions are privileged in terms of access to public services and thus play a substantial role in the national product and revenue.

This has resulted in the underdevelopment of other regions and has increased disparities between regions and districts (Lotfi & Shabani, 2012; Ela & Schwartz, 2006; Soleymani et al., 2016; Sasanpour et al., 2015). In Iran, the human development reports discuss these differences and disparities and introduce the concern for spatial planning as one of the most important human development policies and a long-term plan for social justice and regional balance (Taghvayi et al., 2011). Moreover, due to the Regional inequality in Iran, the development gap between the developed and deprived regions grows increasingly, while economic and social justice loses its meaning (Husseinzaeh Dalir, 2013). The studies on the deprived regions and the comprehensive development studies on various parts and regions of Iran in the past decades are among the extensive operational actions serving this purpose (Mirzakhani & Barandak, 2014).

This is because the identification and clarification of different levels of regional development and the identification of their weaknesses and strengths are of great importance to planning. In addition, disparity reduction and utilization of the resources, achievements, and facilities of societies are among the major criteria for development (Taghvayi & Ghaedrahmati, 2006; Safaypour & Shanbehpour, 2016). Currently, one of the major planning problems in Iran is the imbalance caused by the distribution of facilities in provinces and cities, which has disabled and impaired the balance of the urban network (Nemati et al., 2014). This is because development and its infrastructure have caused drastic changes to the development of various parts of Iran due to the unsatisfactory and centralized national plans of the past (Zareh & Zadilak, 2011; Yu et al., 2010). Kurdistan province is one of the country's deprived regions in terms of having the development indices. Hence, the analysis of various educational, infrastructural, and health dimensions and the shortages in these dimensions in the cities of this province are among the factors necessitating the investigations into this issue in this province. The problem discussed in this research is the assessment of the distribution of facilities and services in this province with respect to the development indices. It is also attempting to identify the cities that are considered privileged and

deprived in terms of having the development indices. Finally, it is trying to use the results from this research to identify the spatial investment priorities for balanced development and organization and reduced inequality.

Literature review and theoretical background

As a notion connoting excellent, development is the fruit of long-term evolutions (UN, 2011). It has changed with the public needs and demands by virtue of economic, social, and environmental conditions in the modernization process (Michael, 2014). Hence, given that the notion of development is a general notion its actualization relies on concurrent successes in areas such as drastic economic growth, acquisition of vast technical knowledge, achievement of spatial balance on the local, regional, and national levels, establishment of social and economic welfare, cultural promotion of people and groups, and attempts at constant modernization of society and enhancement of social and economic relations (Saeedi, 1998; Anabestani et al., 2014). Various theories such as the growth and economic development theory, modernization sociologic theory, Marxism and Neo-Marxism theories, post-structuralism, post-development theory, postcolonial theory, and feminist development theories, which explain the development of the global and national levels, are involved in the analysis of development and underdevelopment.

The first fundamental theory of development and underdevelopment was put forward in the 1950s, while various schools and viewpoints (Badri et al., 2006) on the establishment of social and economic justice were voiced to eradicate inequality, optimally distribute the resources, and provide for the balanced growth of the regions (Houghton & Counsel, 2004). One of the theories advanced to increase the understanding of development and its related phenomena (such as welfare and income inequality) was a John Friedman's core-periphery theory, which is proposed as a general model of economic development and the interwoven regional planning strategies to provide a simple model and measure of regional development in the underdeveloped countries (Dehghani & Rayati Showazi, 2011). The dependency theory was produced in response to the conventional development theories in the 1950s, when new countries suffering from underdevelopment emerged, introducing the simulation of the capitalist institutions as the key to development (Salimi, 2012). It consists of two main movements: The first movement was the Marxists movement, which suggested that underdevelopment was rooted in the class conflict caused by capitalism and led to the exploitation of the third world countries. The second viewpoint advocated the convergence theory. In their attempt to achieve similar levels of economic development, countries converge by one or several criteria, reaching a state of stability (Anton, 2006). Neo-Keynesians believe development is export-dependent. They split the regional economy into the basic and non-basic parts and believe development is born of the basic part (Harvey, 1996). Neoclassic economists also argue that growth and development are influenced by the balance and displacement mechanisms, which result in a free flow of resources between the regions in an area or country or the establishment of inter-regional balance in the long run (Li & Wei, 2010).

The satisfaction of fundamental needs, the reduced economic inter-regional disparities, access of most deprived groups to public services, and increased public participation in the economic, social, and political processes have been the top priorities of development since the 1970s due to the failure of the traditional development strategies in reducing disparity and bringing about balanced regional development. Governments must also adopt the growth and equality policies more than ever and strategies such as participatory development, integrated, development, and down-top development (Tavakoli et al., 2014) must be put into practice. This is because today no development theorist emphasizes its one-dimensional nature and its economic, social, political, and cultural

aspects are also acknowledged (Sasanpour et al., 2011). Through a brief review of the development and underdevelopment theories, these theories can be classified into two major categories: 1) fundamental development frameworks) modern development frameworks. The evolutionary development school, modernization theories, and Marxist development theory fall into the fundamental frameworks category (Safaypour & Shanbehpour, 2016). On the other hand, the modern development frameworks, which advocate notions such as local communities, the role of nonpublic organizations, gender-, justice-, and democracy-related issues, citizenship participation, environment, and sustainable development, rely on the bottom-up participation approach (Hataminezhad et al., 2017). They change the government's role as the primary builder, provider, and regulator to the developer of powerful frameworks, granter of power, and motivator of collaboration based on the notion of populism in the sustainable development theory (Montazer, 2008).

MATERIAL & METHODS

The present research is an applied study as regards its objective and a descriptive-analytical study with respect to its nature. It was also conducted by adopting a quantitative approach. The statistical population for this research included 10 cities of Kurdistan Province. The data were collected using the desk research method and the tables included in the statistical books. Hence, six indices were used in the form of 61 economic, educational, infrastructural, health, therapeutic, and welfare criteria extracted from the Population and Housing Census of 2016 and 2015 statistical yearbook (Table 1).

The norm method was employed to standardize these indices, and through the Shannon entropy a weight was assigned to each index. The entropy coefficient varied between zero and one. As the value approached one, the distribution was more just, and as it approached zero the distribution was more imbalanced. Entropy is an unstable measure of the balance of a distribution. As this index grows, the distribution moves toward a state of equilibrium (Dadashpour & Moloodi, 2011: 110). The multiple criteria decision-making models (SAW, TOPSIS, and VIKOR) were used to analyze the data and measure the development of the province's cities. VIKOR is a multiple criteria problem-solving method used to solve problems with incongruent criteria when the decision maker needs a near-ideal solution. On the other hand, this method can function as an effective decision-making tool when the decision maker is not capable of identifying and expressing the superiority of a problem in the beginning and also designing it. The difference between this model and the hierarchical or network-based decision-making models is that in this model, no pairwise comparison is carried out between the criteria and options, and each option is independent and assessed against a criterion.

In TOPSIS, the selected indicator must have the shortest distance from the positive ideal and the longest distance from the negative ideal. In this method, the preference of each index must increase or decrease uniformly. In other words, the best existing value of an indicator shows a positive ideal, whereas the worst value shows a negative ideal. Finally, the options are ranked according to the shortest distance from the positive ideal and the longest distance from the negative ideal. SAW is the simplest multiple criteria decision-making technique. In this method, which is known as the linear weighted combination ranking technique, after normalizing the decision matrix, the weighted normalized decision matrix is obtained using the criteria weighted coefficients, and based on this matrix, the score of each option is calculated. Copeland technique was used to obtain equal ranks using a combination of ranks resulted from the decision-making techniques. Copeland is an integration technique in which the number of victories and defeats for each option is calculated in the prioritization

process. To this end, the options are prioritized based on the difference between the number of victories $\sum^C$ and the number of defeats $\sum^R$, and the outcome is determined by the difference between the defeats and victories (Pour Taheri, 2015: 184). Finally, ARC GIS10.2 is used to draw the spatial distribution map of the cities.

Table 1. Research indices and criteria
(Data Source: 2015 Statistical Yearbook and 2016 Population and Housing Census)

Index (indicator)	Criterion
Economic	1) The number of farming cooperatives per 10000 villagers; 2) The number of employees of farming cooperatives per 10000 villagers; 3) The number of mining cooperatives per 10000 people; 4) The number of employees of mining cooperative per 10000 people; 5) The number of industrial workshops per 10000 people; 6) The number of personnel of industrial workshops per 10000 people; 7) The number of banks per 10000 people; 8) The number of active cooperatives per 10000 people; 10) The number of transportation companies per 10000 people; 11) The number of job opportunities created per 10000 people; 12) The active population percentage; and 13) The inactive population percentage
Educational	1) Percentage of female villagers' literacy; 2) Percentage of male villagers' literacy; 3) Percentage of urban women's literacy; 4) Percentage of literacy of urban men; 5) The number of trained personnel per 10000 people; 6) Percentage of users of educational-cultural services; 7) The number of kindergartens per 10000 children; 8) The number of elementary schools per 10000 people; 9) The number of first and second grade high schools per 10000 people
Infrastructural	1) The number of gas connections per 10000 people; 2) The number of water connections per 10000 people; 3) The percentage of electricity customers; 4) The number of land phone lines per 10000 people; 5) The number of ICT offices per 10000 people; 6) Touristic accommodations per 10000 people; 7) Total number of roads in proportion to the city surface area; 8) The number of paved rural roads in proportion to the city surface area; 9) The number of deep wells per 10000 rural people; 10) The number of semi-deep wells per 10000 rural people; 11) The number of mailboxes per 10000 rural people
Health and treatment	1) The number of rural health and treatment centers per 10000 rural people; 2) The number of hospitals per 10000 rural people; 3) The number of active beds per 10000 people; 4) The number of active rural health centers per 10000 rural people; 5) The number of laboratories per 10000 people; 6) The number of drugstores per 10000 people; 7) The number of urban health-treatment centers per 10000 urban people; 8) The number of emergency rooms per 10000 people; 9) The number of general physicians per 10000 people; 10) The number of dentists per 10000 people; 11) The number of paramedics per 10000 people; 12) The number of health bases of rural centers per 10000 rural people
Welfare-social	1) Rehabilitation centers per 10000 people; 2) Number of counseling centers covered by the prevention deputy of the Welfare Organization per 10000 people; 3) The number of people covered by the social security insurance (per 1000 people); 4) The number of training courses offered by Hilal Ahmar per 10000 people; 5) The number of rescue teams per 10000 people; 6) The number of clients per 10000 people; 7) The number of therapeutic service providers and insurance service provides per 10000 people; 8) The percentage of pensioners.
Cultural	1) The percentage of postal items exported from this province; 2) The percentage of postal items exported to other cities of the province; 3) The number of cinemas per 10000 people; 4) The number of printing houses per 10000 people; 5) The number of public libraries per 10000 people; 6) The percentage of the library members; 7) The number of public libraries for the literate population

STUDY AREA

Kurdistan Province has an area of 28200 km², which accounts for 0.71% of the country's area. It is located at 23°45"-36°28"N latitude and 45°34"-48°14"E longitude. This province is located in the hillside and the scattered plains of the Central Zagros. It reaches West Azerbaijan and Zanjan provinces in the north and Hamedan and Zanjan provinces in the east. In the south it shares borders with Kermanshah Province and reaches Iraq in the west. Kurdistan Province also has a 200-km border with Iraq. Based on the latest national divisions, it is composed of 10 cities, 31 districts, 86 Rural complex, 1697 populated

villages, and 187 deserted villages. Moreover, based on the 2016 Population and Housing Census, this province has a population of 1603011 people, 66% of whom reside in urban regions, and 34% reside in the rural regions. The population density of this province is 51.2 inhabitants/km². The figure depicts the position of Kurdistan Province in Iran.

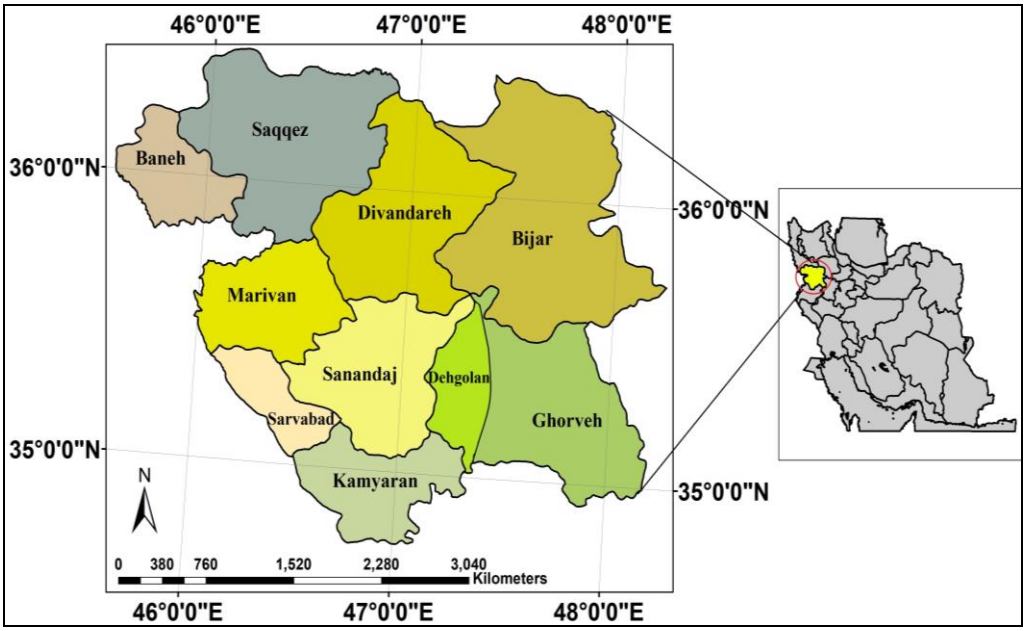

Figure 1. Geographical location of the study area

FINDINGS AND RESULTS

Based on the research objective, the levels of development of cities of Kurdistan Province were determined using the decision-making techniques. Hence, first the Shannon entropy was used to assign a weight to each criterion. As seen in Table (2), the criteria have different weights. Among the economic indices, the inactive population criterion has the highest weight, which is 0.072. Among the educational criteria, the percentage of urban men's literacy has the highest level of importance (=0.0317).

On the other hand, the number of books in the public libraries to the number of literate people has the highest weight (=0.1169) among the cultural indices. Of the 12 infrastructural and fundamental criteria, the number of electricity consumers has the highest level of importance (with 0.0547). As regards the health and treatment index, the number of paramedics displays the highest level of importance (with 0.0002) as compared to the other criteria. Finally, the number of people with social insurance coverage stages the highest importance among the welfare-social indices with a weight of 0.0526 (Table 2). After assigning weights to the research criteria, the aforesaid techniques were used to prioritize the cities of this province. In VIKOR, the VIKOR index, which is the final score of each criterion, is calculated. Q shows the final rank of each village among the 61 study criteria. This value varies between 0 and 1. As the value approaches zero, the development level increases, but as it approaches one, it is indicative of underdevelopment. Hence, the findings from VIKOR indicate that Sanandaj City has the highest level of development (=0.000), while Divandarreh City has the lowest quality of development indices as compared to the other cities (=1.00).

Table 2. The weights of the study criteria based on Shanon entropy (Jackson, 2017)

Index	Criterion no.	Weight	Index	Criterion no.	weight	Index	Criterion no.	Weight	Index	Criterion no.	Weight
Economic	1	0.0726	Educational	4	0.0042	Health and treatment	11	0.0246	Welfare-social	3	0.0116
	2	0.0525		5	0.0008		12	0.0213		4	0.0000
	3	0.0002		6	0.0317		1	0.0000		5	0.0000
	4	0.0000		7	0.0265		2	0.0002		6	0.0526
	5	0.0000		8	0.0226		3	0.0000		7	0.0000
	6	0.0000		9	0.0172		4	0.0000		8	0.0000
	7	0.0000	infrastructural-fundamental	1	0.0005		5	0.0000	Cultural	1	0.1169
	8	0.0002		2	0.0000		6	0.0000		2	0.0015
	9	0.0000		3	0.0006		7	0.0000		3	0.0000
	10	0.0001		4	0.0001		8	0.0000		4	0.0000
	11	0.0000		5	0.0001		9	0.0000		5	0.0000
	12	0.0005		6	0.0000		10	0.0001		6	0.3670
	13	0.0007		7	0.0000		11	0.0000		7	0.0663
Educational	1	0.0000		8	0.0000		12	0.0000	total indices: 6		
	2	0.0001		9	0.0487		1	0.0001	Total criteria: 61		
	3	0.0000		10	0.0547		2	0.0030	Total weight: 1		

Considering the final results from TOPSIS, the C* ideal shows the final rank of each city among the 61 criteria. A larger rank shows a higher priority, and thus Sanandaj City has the highest rank, whereas Sarv Abad has the lowest rank. The other technique used in this research to rank the cities by the degree of development was the SAW technique. In this method, if the options approach one, the city is in better condition. Hence, the findings from this technique suggest that Sanandaj City has the highest degree of development as compared to the other cities (=0.877), whereas Sarv Abad City (=0.331) has the lowest degree of development as compared to the other 9 cities (Table 3).

Table 3. Ranking of Kurdistan cities using the decision-making techniques

City	VIKOR score, Q value	Rank	City	TOPSIS score, C* value	Rank	City	SAW score	Rank
Sanandaj	0.000	1	Sanandaj	0.983	1	Sanandaj	0.877	1
Baneh	0.219	2	Baneh	0.655	2	Baneh	0.679	2
Marivan	0.470	3	Saqqez	0.555	3	Bijar	0.667	3
Bijar	0.473	4	Marivan	0.527	4	Marivan	0.599	4
Saqqez	0.552	5	Bijar	0.494	5	Saqqez	0.598	5
Gharveh	0.632	6	Divan Darreh	0.425	6	Gharveh	0.569	6
Dehgolan	0.747	7	Gharveh	0.415	7	Kamyaran	0.538	7
Kamyaran	0.841	8	Dehgolan	0.405	8	Dehgolan	0.538	8
Sarv Abad	0.935	9	Kamyaran	0.393	9	Divan Darreh	0.516	9
Divan Darreh	1.000	10	Sarv Abad	0.030	10	Sarv Abad	0.331	10

As seen in Table 4, each city of Kurdistan Province has a different position according to each ranking technique. Hence, Copeland technique was used to secure the consistency of the ranks (Alavi, 2011). This technique uses pairwise comparisons for decision making. The final outcome is calculated based on the difference between the victories and defeats (Table 4). The results from Copeland technique suggest that Sanandaj City is privileged in terms of the study indices, yet Sarv Abad is deprived of development (i.e. the lowest level of development) (Table 5). Finally, the spatial distribution map of the development levels of the cities of Kurdistan Province was prepared using the results from Copeland (Yfantidou & et al, 2018), (Figure 2).

Table 4. Integration of the results from different models using Copeland (Alavi, 2011)

City	Baneh	Bijar	Diavn Darreh	Saqqez	Sanandaj	Gharveh	Kamyaran	Marivan	Sarv Abad	Dehgolan	ΣC
Baneh		M	M	M	X	M	M	M	M	M	8
Bijar	X		M	X	X	M	M	X	M	M	5
Divan Darreh	X	X		X	X	X	X	X	M	X	1
Saqqez	X	X	M		X	M	M	X	M	M	5
Sanandaj	M	M	M	M		M	M	M	M	M	9
Gharveh	X	X	M	X	X		M	X	M	M	4
Kamyaran	X	X	M	X	X	X		X	M	X	2
Marivan	X	M	M	M	X	M	M		M	M	7
Sarv Abad	X	X	X	X	X	X	X	X		X	0
Dehgolan	X	X	M	X	X	X	M	X	M		3
ΣR	1	3	8	3	0	4	7	2	8	6	

Table 5. Ranking of the cities of Kurdistan Province using Copeland

City	ΣC	ΣR	ΣC- ΣR	Priority	Development status
Sanandaj	9	0	9	1	Developed
Baneh	8	1	7	2	
Marivan	7	2	5	3	Semi-developed
Saghez	6	4	1	4	
Bijar	5	4	1	5	
Gharveh	4	5	-1	6	
Dehgolan	3	6	-3	7	
Kamyaran	2	7	-5	8	Deprived of development
Divan Darreh	1	8	-7	9	
Sarv Abad	0	9	-9	10	

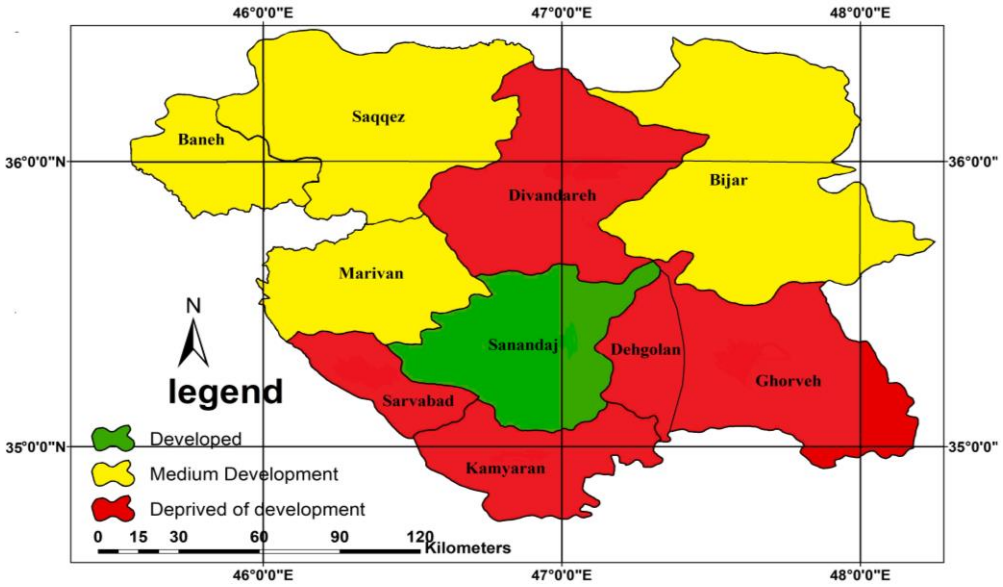

Figure 2: Spatial distribution of the cities of Kurdistan Province by the levels of development

DISCUSSION AND CONCLUSIONS

The ultimate goal of every planning initiative is to achieve sustainable balanced regional development and make maximum use of the environmental capabilities and the balance in the development process. However, regional developmental disparities caused

by various historical, natural, social, and economic reasons have resulted in the heterogeneous imbalanced growth of the regions. In addition, access to facilities and proper/accurate zoning are issues that must be prioritized by urban managers. These issues call for precise investigations and examinations because ranking reveals the spatial, social, cultural, and economic differences (Monfaredian & Sarvetani, 2007). The present research goals were to measure development and rank the cities of Kurdistan Province by the development indices. Six indices, viz. the educational, cultural, economic, infrastructural, welfare, and health/treatment indices, were used in the form of 61 criteria extracted from the aforesaid statistical yearbook and 2016 census. In order to analyze the indices, weights were assigned using Shannon entropy model. The results revealed that the "percentage of the number of the library members" criterion (with a weight of 0.3670) had the highest level of importance. The results from the TOPSIS, VIKOR, and SAW techniques also indicated that Sanandaj and Baneh cities enjoyed higher levels of development according to all of the three techniques, while the other cities attained lower ranks with varying priorities. Hence, Copeland technique was employed to secure the consistency of the results. The examination of the spatial organization of Kurdistan Province indicated that despite its large potentials, this region suffers from spatial imbalance. The results also suggested that only Sanandaj City is developed, and the high per capita indices and criteria are among the factors influencing the development of this city as compared to the other cities. In other words, the centralization of facilities, services, and activities has deprived the other cities of development, and the development indices lack congruity on the city level. On the other hand, it could be stated that the development of the core-periphery relations and the attraction of investments to the capital of this province as well as the development caused by the attraction of investment from the peripheries to the core have maximized the bipolarity of the facilities and the number of expert human forces moving from the peripheries to the core.

As a result, four cities, namely Bijar, Saghez, Baneh, and Marivan, are half-developed, while the other five cities (viz. Gharveh, Dehgolan, Kamyaran, Sarv Abad, and Divan Darrreh) are deprived of development due to their negative results. The inadequacy of the economic indices and the lack of proper access to the urban and rural roads are among the factors hindering the development of these cities. On the other hand, the shortage or the lack of equipped laboratories, central rural health centers, and cultural facilities have contributed to the negative development of these cities, resulting in the temporary or permanent migrations from the city centers to the capital of this province. Hence, disparities can be avoided by planning the fair distribution of the services, which calls for a decrease in the differences between cities in terms of development indices. Therefore, concern for regional planning, avoidance of district-based planning, and adherence to balanced policies for the creation of equal opportunities and provision access to different types of development indices in all cities of this province are essential.

In sum, it could be stated that the cities of Kurdistan Province are not in a good place in terms of the development indices and most of them are either semi-privileged (half-developed) or deprived of development. Hence, it is necessary to set the scene for the growth and development of this province by lending a deep insight into the limitations on the study cities and stressing the criteria and the more underdeveloped cities. This is because there is a lack of congruity between the population density and the distribution of facilities and services. Furthermore, development relies on success in all dimensions such as the economic, spatial, cultural, educational, and health dimensions. On the other hand, the unfettered access to diverse human and environmental facilities and the proper utilization of these resources are indicative of higher levels of regional

development. This reflects the necessity of valuing the policies for the elimination of deprivation and establishment of regional balance, because the planning approach governing the country and the centralized planning system have affected this province in the past years by increasing the regional disparities.

Suggestions

The following solutions are proposed for enhancing the development of the cities of Kurdistan Province in view of the research findings:

- Developing and improving access to the roads as the bottlenecks of development in order to establish balance in the spatial and communicative organization of cities, which lack proper access to the roads.
- Increasing and improving the efficiency of the active population of the province and creating sustainable employment in the deprived and underprivileged cities.
- Encouraging and fostering public and private investments with the aim of improving the development indices and diversifying the sources of income in the deprived cities.
- Prioritizing the deprived cities (the majority of the cities) in the distribution of credit and budget in the provincial development polices and plans.
- Local authorities and the government are obliged to conduct planning and take substantial measures to improve the development and condition of this province as regards the infrastructural and health-treatment indices considering the low levels of these indices in all cities of this province.
- Improving the educational indices, literacy, and educational coverage in the deprived/far-off cities and villages.
- Improving access to the cultural centers, constructing educational and academic centers in the deprived cities, and founding/running reputable libraries in the cities and villages.
- Valuing the provincial plans to secure the decentralization of the cultural facilities and services in the capital of this province and guarantee the proper distribution of these facilities and services in the other cities.

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HISTORICAL AND CULTURAL HERITAGE OF THE REGION AND ITS OPPORTUNITIES IN TOURISM AND EXCURSION ACTIVITIES (CASE OF CHERNIVTSI REGION, UKRAINE)

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Abstract: Chernivtsi region in Ukraine is a unique territory where the historical and cultural heritage of different time periods is represented: from Old Russian, Ottoman, Austro-Hungarian to Romanian and Ukrainian. The purpose of the article is a comprehensive assessment of the historical and cultural heritage of the Chernivtsi region for a more intensive further involvement in the tourism industry in the Carpathian region, together with neighboring EU countries: Romania, Slovakia, Poland. For this purpose, different status, state of preservation and spatial differences were taken into account together with the resources support throughout the territory under study. The article considers the theoretical and methodological foundations for studying the historical and cultural significant sites of the region, carries out a comprehensive assessment of the historical and cultural potential of the Chernivtsi region, analyzes its legacy through three factor components of ratings: the number, concentration and location of tourist destinations (archaeological sites, monuments of architecture, history and monumental art). The result is an integral grade rating of the Chernivtsi region and its regional taxonomic units of the lowest hierarchy, which have the greatest concentration of historical and cultural tourist destinations. According to the studies of the territory the most suitable for effective and perspective use in domestic and international tourist and excursion activities, but the North Bukovyna recreational supra-region occurred to be weak promotional and organizational component of the integral touristic product.

Key words: cultural and historical resources, heritage, tourist and excursion activities, tourist destination, quest-excursion, Bukovyna, Northern Bessarabia

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INTRODUCTION

Now there is active unification of Ukraine with the world cultural environment, a comprehensive and adequate clarification and analysis of its historical and cultural heritage (HCH) for rational use and special protection is the most important state, international, humanitarian and practical task of science. The need for expert assessment of the capabilities of the historical and cultural heritage of the region is traced in the actualization of its effective application for the future. This is reflected in the system and structural justification of the location of a certain resource in the study area, the identification of forms and methods for its development that are fair in this resource, especially in tourist and excursion activities, and ensuring coordinated rules for all interested in the opening up, development and use of the historical and cultural heritage.

However, despite the substantial methodological and practical component that has been implemented in the field of historical and cultural heritage by foreign and domestic researchers, there is no innovative generalizing research in this field, especially if it concerns the post-Soviet space within its countries and regions. Until recently, the issue of historical and cultural heritage assessment was not a part of scientific research and practical application to identify the region's total potential, its development guidelines and its use in tourism and excursion activities. However, with Ukraine's signing of an agreement on associate membership with the EU in 2014 and the implementation of related reforms on the decentralization of the economy, the vectors of Ukraine's development have changed, including in the field of tourism business, so the urgency of research of this kind has increased dramatically.

Figure 1. The map of geographical location
of the study area and the main its tourist destinations of heritage

These events have caused an acute need for in-depth geographical study of the local territories with a significant resource potential, but in need of grant or investment funds for the development and restoration of their infrastructure, the organization of preservation of tourist and excursion destinations or the promotion of their activities at the local level or for cross-border cooperation with the EU countries. The urgent need to answer these questions determined the choice of the research topic, tasks, assessments and perspective directions of the operation of the historical and cultural heritage of the Chernivtsi region as a border region with the EU (Figure 1) and the territory of the Carpathian recreational zone within Ukraine, Romania, Slovakia and Poland.

Today, scientists whose research studies are focused on history, archeology, ethnography, philology, art criticism, culturology, etc. are engaged in the assessment of the cultural heritage. However, despite so much interest from scientists, the use of historical and cultural heritage in tourist and excursion activities is not given enough attention, even though there is now a separate discipline "Tourist Local Studies" in the curriculum of Ukrainian universities. It should be noted that the assessment of the regional historical and cultural heritage is concentrated by Ukrainian and foreign scientists mainly on the descriptive part of its placement or studying only the material component and the list of recreational or tourist resources. In addition, the content of scientific research for determining the object of research is reduced to a management system of historical and cultural significant sites (hereinafter HCSm), however, territories that have the greatest or best prerequisites and potential are not specified.

Thus, the issue of the unconditional connection between tourism and the historical and cultural heritage is considered in the research "Tourism and development of Malta". In it, the author emphasizes the exceptional role of the island's cultural heritage (historical monuments, crafts, art, music and even parish feasts) for the promotion of domestic and international tourism (Boissevain, 1977). The process of forming a tourist product and its composition, which must necessarily cover cultural attractions, was in the field of vision of the Nigerian scientist Dr. Franklin J. (Adejuvvon, 1985). The lack of attraction of cultural monuments to the tourism sector was noted in the work "Selling art and history: cultural heritage and tourism". In it, the authors draw attention to the advisability of including in the tourist product of the cultural heritage not only the HCS, but also museums, art galleries, historical theme parks and arts festivals. In the Soviet scientific space, questions of the methodology for assessing the HCS and objects, palace and park and estate complexes, and significant nature sites by their importance were investigated. The quantitative characteristics of the historical and cultural potential (hereinafter HCP) were presented through the number of objects of tourist attraction of different significance levels, according to the classification of objects of international, federal, regional and local level (Pirozhnik, 1985, Litovka, 1990).

The theme of the research on the historical and cultural heritage in the former Soviet Union was revived, while simultaneously developing beyond its borders. In particular, M. Kuznetsov made complex zoning of historical places, monuments of culture and architecture, nature, and museums for the development of tourist and excursion activities in the Crimea. He used indicators of the number and density of the location of cultural and historical objects for 1000 km² for the parametrization of scientific conclusions (Kuznetsov, 1995). Separately, the density of monuments of the highest class of national and international significance per 100 km² was suggested for use in tourism science by V. Matsola. To do this, the scientist used the national density rating scale of the historical and cultural heritage of national status, which he compared with the indicators of Ukraine and the Lviv region: less than the average Ukrainian score is estimated 1 point,

the average regional is 2 points, and more than the average is 3 points (Matsola, 1997). According to the same principle of density of HCS, the Carpathian recreational region was assessed by V. Evdokymenko (Evdokymenko, 1996). Pavlov and Cherchyk have divided historical and cultural heritage into three categories of importance for tourist-excursion activity at the level of the region. In their opinion, especially valuable objects for the organization of the specified activity in tourism are attributed to the first category, the objects having significant interest for tourists to the second, and other objects to the third (Pavlov & Cherchyk, 1998). The importance of the influence of Baroque historical and cultural heritage on tourism development in Sicily was studied by Tiziana Cuccia and Cellini Roberto. The results of the ranking sample of the tourist visit to Shikli city were based on factor analysis of the seasonal impact, socio-demographic indicators and the diversity of the city's historical and cultural heritage (Cuccia & Cellini, 2007). The work of Aline Chiabai, Stephen Platt and Wadim Strielkowski was dedicated to the evaluation of e-services in tourism and promotion of their cultural heritage in Amsterdam, Genoa and Leipzig (Chiabai et al., 2014). The association between the sustainable development of tourism and its impact on the cultural heritage and the environment of countries at different levels of economic development in this context is revealed in the writings of Harry Coccossis (Coccossis, 2009).

Thus, this article is almost the first attempt to give a detailed final assessment of the historical and cultural heritage within the Chernivtsi region as a border area with the EU, to enhance the development of tourist and excursion activities. In all of the studies analyzed above, the Chernivtsi region was not in the focus as an independent geographic object, and the comprehensive assessment of the historical and cultural heritage made in the regions of Ukraine (Beydyk, 2001; Polyvach, 2012) did not reflect the internal territorial differences of the regions themselves according to administrative units of lower rank, and did not take into account the "weight" of historical and cultural heritage objects by their status and integrity. Under the current reform of decentralization of the economy (after 2014), this situation deprives local governments of an understanding of the rational allocation of funds in the regions to those areas where they correspond to the greatest potential for developing their attractiveness, hence the relevance of such research is growing. An additional argument for the importance of the chosen topic is that, according to Polyvach and the Institute of Geography of the Academy of Sciences of Ukraine, Chernivtsi region has a high heritage potential but a low level of use (Polyvach, 2012, p. 133). Based on the above, the first task of the work is to take into account not only the quantitative territorial values, but also the "status weight" (points) when assessing four types of historical and cultural objects (archaeological, architectural, historical and monumental art) that was suggested for the first time. At the next stage, it will be important to calculate the total scores for each of the four types of historical and cultural heritage objects, in particular for the three components: scoring their number, taking into account the "status weight", the modified indicators of the concentration of objects and the coefficients of their localization. The cartographic model of the total rating positions of each administrative unit of the region, covering the total number of points from the three components evaluated by the authors with four types of historical and cultural heritage, will be one of the results of the study. In the end, this will make it possible to identify the main territorial units of large, medium and small potential of the historical and cultural heritage integral value. It should be noted that the results of the work and the methodology for calculating the rating positions of administrative-territorial units by the total value of the historical and cultural heritage can be used by other local self-government bodies and relevant institutions for effective management and development of their tourist and excursion activities.

METHODOLOGY

The study of the region historical and cultural heritage (case of the Chernivtsi region, Ukraine) was carried out using the method of K. Polyvach, which was declared by her in her dissertation research and monographs in which she offers comprehensive geographic methods for an integral assessment of the cultural heritage of a region or regions (Polyvach, 2007, 2012). In contrast to the already existing dozens of methodological developments of scientists in assessing cultural heritage by several criteria (see Figure 2) and are focused on the study of only its material component, recreational and tourist resources (Piroshnik, 1985; Kuzyk & Kasianchuk, 1993; Kartashevska, 1995; Kuznetsov, 1995; Bayteriakov, 1996; Matsola, 1997; Panchenko, 1998; Zavada, 1998; Beydyk, 2001; Pavlov & Cherchyk, 1998, Pokolodna, 2003; Yakovenko, 2004; Filonenko, 2005; Cuccia, 2007), K. Polyvach's technique is stratified into two components, according to the level of its territorial coverage: the region and the district (city planning area). The difference of these approaches to the territories of different levels lies in the differences in the criteria that are the basis for the assessment, the relevant assessment indicators and areas of application. The proposed methodology makes it possible to identify the most effective and promising regions for the use of historical and cultural potential, to identify the region's prospective opportunities and to assess their attractiveness to a potential investor, to diagnose problem regions and to analyze possible causes of the emergence of problematic situations in them, to facilitate the development of recommendations for improving the efficiency of HCP use, create a basis for defining long-term goals and devise a strategy for the development of the region, and their main achievements through the implementation of grant, state and regional programs for the preservation of HCS and the development of tourism (Polyvach, 2007).

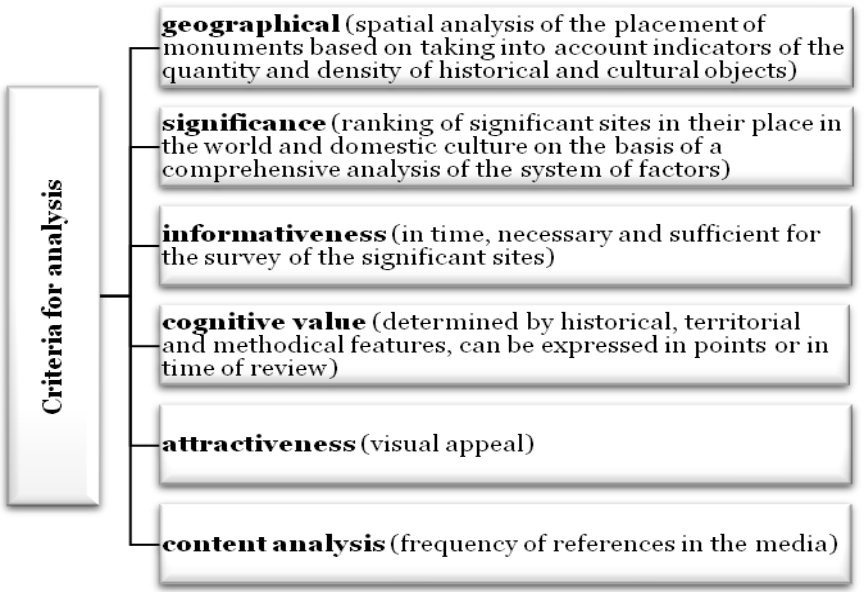

Figure 2. Criteria for analysis of historical and cultural heritage
(Source: made by authors based on K. Polyvach, 2012, p. 49)

To ensure the correctness of the comparison of regions, in addition to general statistical indicators of the number of historical and cultural tourist destinations represented in the State

Register of Monuments of Ukraine, the authors also used regional coefficients: the modified coefficient of concentration of tourist destinations and the localization coefficient of objects, calculated using geographical methods of research. The first factor in the partial rating of the regional historical and cultural heritage (namely, the Chernivtsi region) is their number. But for evaluation it is also necessary to take into account their conservation status or the degree of preservation. In other words, the total physical quantity of monuments of a certain region cannot act as a formative and prevailing potential, since not all monuments have the same value, given their status and suitability as a destination for use in tourism activities. That is why the authors suggest taking into account additional coefficients for a separate territorial unit in their common HCP. Therefore, in order to determine the status capacity of equally weighting sites-destinations, was taken into account not only their number, but also their status, and preservation as an integral object of tourist and excursion activity, proceeding from the coefficients proposed in formula 1 (Hyshchuk, 2016):

$$C_{HCP}(s) = \sum k \times x1 + k \times x2 + k \times x3 + k \times x4 \quad \text{“1”}$$

CHCP (s) is the status capacity of HCS of different weights (values); k is the coefficient of the “status weight” of the HCS, where 1,2 are obtained by the significant sites of international (UNESCO heritage) values, 1.0 by the sites of national importance, 0.9 by the sites of state importance, 0.75 by the sites of local significance; and x1, x2, x3, x4 the number of HCSs, respectively, of international, national, state and local status (Hyshchuk, 2016).

The second factor component of the partial rating of the regional historical and cultural heritage in the study is a modified indicator (coefficient) of concentration of tourist destinations. It takes into account both the number of historical and cultural destinations, the total area on which they are located, and the tourists who visited them for a certain period of time, usually a year. The methodology of its calculation is presented in K. Polyvach using the formula (Polyvach, 2007):

$$W = V / \sqrt{SP} \ln B \quad \text{“2”}$$

W – modified index (coefficient) of concentration of tourist destinations;

V – absolute indicator of the number of objects of the historical and cultural heritage in the region;

S – area of the studied regions;

P – population of the region;

B – √SP.

The third factor component of the partial rating assessment of the regional historical and cultural heritage is the localization coefficient of the facilities. This factor takes into account the specific weight of the territory by the number of destinations and the specific weight of the territory by area. The order of its calculation is presented in the formula “3” (Polyvach, 2012).

$$Kloc = Ch / Cs \quad \text{“3”}$$

Ch – specific weight of the region by the number of objects of historical and cultural heritage;

Cs – the region’s share by area.

Consequently, the total rank value of all three factor components and their partial assessments of the region’s historical and cultural heritage gives, as a result, an overall score in points (according to the rating) that a region has received. It is important that this evaluation has an inverse relationship (lower scores correspond to better and enhanced potentials). In other words, the authors have obtained a final picture of the aggregate of those

territories that have a favorable concentration of historical and cultural tourist destinations, suitable for effective and perspective use in domestic and international tourism and excursion activities, as well as within the framework of associated EU membership and wider cross-border cooperation between Ukraine, Romania and other countries.

RESEARCH RESULTS AND DISCUSSION

Historical and cultural tourism resources are a set of territories, objects of material and spiritual culture created in the course of historical development and are objects of tourist interest. The category of historical and cultural resources (hereinafter referred to as "HCR") unites educative resources, event resources, ethnographic resources, and biographical and social resources (Beydyk, 2001). So the historical and cultural heritage is a collection of objects of cultural heritage taken over by mankind from previous generations. The object of historical and cultural heritage in tourist-excursion activities is the landmark, construction, complex, parts thereof, associated mobile objects, as well as territories or water objects, other natural, natural-anthropogenic or man-made objects, regardless of the state of preservation, which have survived and have value from an archaeological, aesthetic, ethnological, historical, architectural, artistic or scientific point of view and have retained their authenticity.

Estimation of the total number of HCSm in the Chernivtsi region showed that Kitsman, Khotyn, Zastavna districts and Chernivtsi city are the highest average of the indicators in the region (106). However, the total physical quantity of significant sites of a certain region can not act as a formative and predominant potential. Thus, according to the potential of significant sites in view of the status of their preservation value, it is necessary to "bring them down to a common denominator" and calculate the total rating potential of the Chernivtsi region, HCR, through the sum of the products of their quantity by the corresponding coefficients according to the formula "1".

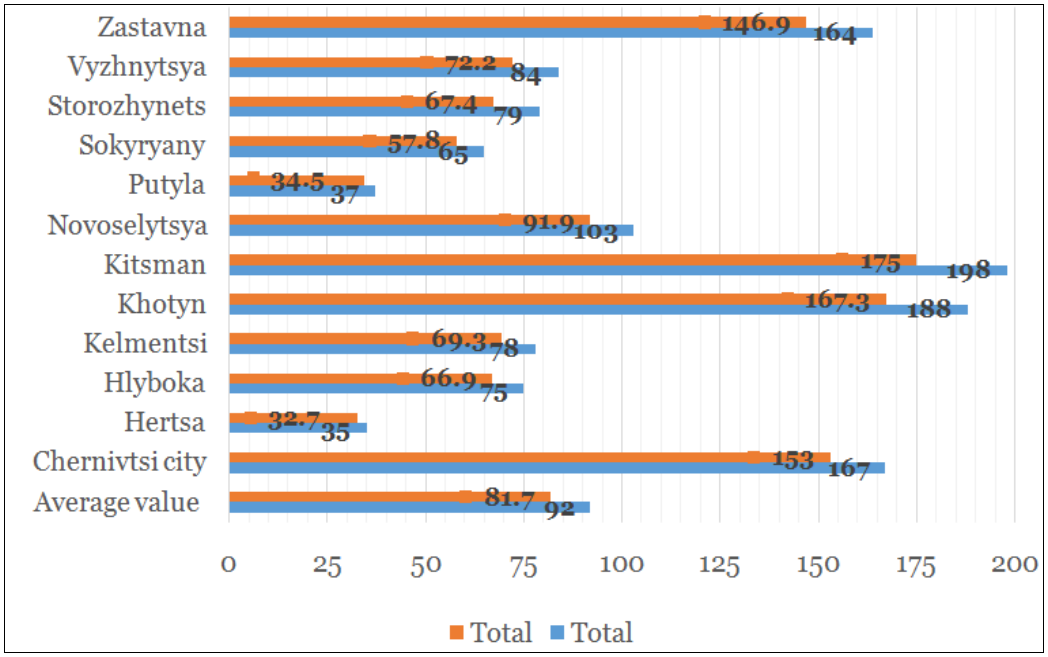

Figure 3. Number and rating assessment of historical and cultural heritage in the Chernivtsi region

The average total rating of the potential of regional historical and cultural heritage, taking into account its preservation status coefficients, is currently 92 objects. Higher values of this value are concentrated in the Prut-Dniester region, including Chernivtsi city (153), Zastavna (146.9), Khotyn (167.3) and Kitsman (175). Novoselytsya also belongs to these areas, most of which are located in the valley of the river Prut. It is in this region of the Prut-Dniester Upland that, in our opinion, it is necessary to concentrate more attention in the formation of excursion tours that may be related to the resource use of the cultural heritage of the region (Figure 3).

For a more detailed analysis and correctness of the conclusions, it is expedient to determine not only the number of significant sites in these districts in general, but also the modified coefficients of concentration and localization of objects, given the areas they occupy and the population of the same areas. According to the total score of the archaeological heritage objects by the administrative units of the Chernivtsi region and the methodology for calculating the modified concentration indicators and the localization coefficient of tourist and excursion destinations, we calculated the total ratings of the administrative-territorial units for each of the three indicators (Table 1).

Table 1. The total rating evaluation of the potential of archaeological heritage objects by the administrative units of the Chernivtsi region

Districts	State archeological heritage, points	Ranking	Modified indicator of the concentration of objects	Ranking	Object localization coefficient	Ranking	Total ranking
Chernivtsi city	15.3	10	1.75	10	2.02	4	24
Hertsa	9.9	11	1.23	11	0.63	8	30
Hlyboka	32.4	5	3.66	5	0.98	6	16
Kelmentsi	23.4	7	2.73	7	0.7	9	23
Khotyn	70.2	2	7.96	2	1.98	2	6
Kitsman	65.7	3	7.48	3	2.18	3	9
Novoselytsya	42.3	4	4.73	4	1.16	5	13
Putyla	0.0	12	0.00	12	0.0	12	36
Sokyryany	24.3	6	2.83	6	0.74	7	19
Storozhynets	18.0	8	1.94	8	0.31	11	27
Vyzhnytsya	17.1	9	1.93	9	0.38	10	28
Zastavna	82.8	1	9.59	1	2.7	1	3
Chernivtsi region	*401.4*	-	35.36	-	1.0	-	-
Average value	**29.3**	**-**	**3.36**	**-**	1.0	**-**	**16**

Above average values of the modified indicator of the concentration of archaeological sites were formed in Zastavna district (9.59), Khotyn (7.96), Kitsman (7.48), Novoselytsya (4.73) and Hlyboka (3.66) districts. Below average, but close to them, were the second group of regions: Sokyryany and Kelmentsi, in which the indicated coefficient was respectively 2.83 and 2.73. In the latter group, the territorial parts of the region are combined, where the integrated modified indicator took the least values. They include the areas of the Prut-Siret interfluve in the Carpathian region, as well as the city of Chernivtsi (1.75): Storozhynets (1.94), Vyzhnytsya (1.93) and Hertsa (1.23) districts.

There are no such monuments in Putyla district. For a more detailed explanation of the availability of archeological sites in the region, it is worthwhile analyzing the distribution of the localization coefficients for archaeological heritage sites. In this case, the optimal value should approach 1, since here the ratio of the shares of archaeological

objects of the specific weight of the areas on which they are represented is taken into account. In general, a good concentration of such monuments is observed in Zastavna, Khotyn and Kitsman districts and in Chernivtsi, where they are concentrated twice as densely as in other regions. The second group of districts is formed by Novoselytsya (1.16) and Hlyboka (0.98) districts. The third group unites outsiders, which are located in the Carpathian Mountains, the mountainous part of the region and Northern Bessarabia. The localization coefficient in such areas is not enough, since it ranges from 0.31 (Storozhynets district) to 0.74 (Sokyryany).

Analysis of the value of the total potential of the administrative districts for archaeological sites showed the importance of Zastavna region, where this potential has achieved the best value, 3. Khotyn and Kitsman districts have quite powerful indicators, the ratings of which do not exceed 10 points. Taking into account the average value of the overall ratings for the region, which is 16, a group of districts is singled out, consisting of Novoselytsya and Hlyboka, whose indicators are close to that. Another group of districts (with the sum of the rating places which exceeded 16) were formed by Kelmentsi, Sokyryany, Vyzhnytsya, Storozhynets, Hertsa, Putyla and Chernivtsi city.

In the Chernivtsy region there are 113 sites of national importance, which are estimated at 113.2 points. Most sites of this status, taking into account the average value in the region of 7.6, are in the city of Chernivtsi (25.2), as well as in Kitsman (17), Khotyn (15), Hertsa (15), Putyla (12) and Zastavna (11) districts. So, half of the administrative-territorial units have the average regional value. Good indices, although below average, are observed in Hlyboka district. Sokyryany and Storozhynets districts are characterized by the least values (2). In the Kelmentsy district, they are not registered at all (Table 2).

Table 2. The total rating evaluation of the potential of the objects of the architecture of national significance by the administrative units of the Chernivtsi region

Districts	National architectural heritage, points	Ranking	Modified indicator of the concentration of objects	Ranking	Object localization coefficient	Ranking	otal rankir
Chernivtsi city	25.2	1	2.88	1	11.71	1	3
Hertsa	15	3	1.86	3	1.50	3	9
Hlyboka	6	6	0.68	7	0.71	7	20
Kelmentsi	0	10	0.00	12	0.00	12	34
Khotyn	15	3	1.70	4	0.93	6	13
Kitsman	17	2	1.94	2	1.81	2	6
Novoselytsya	5	7	0.56	8	0.53	8	23
Putyla	12	4	1.42	5	0.97	5	14
Sokyryany	2	9	0.23	10	0.16	11	30
Storozhynets	2	9	0.22	11	0.45	9	29
Vyzhnytsya	3	8	0.34	9	0.35	10	27
Zastavna	11	5	1.27	6	1.07	4	15
Chernivtsi region	113.2	-	*9.95*	-	1.00	-	-
Average value	**7.6**	**8**	**0.87**	**5**	**0.89**	**5**	**15**

The average value of the modified indicator of the concentration of objects of national architecture heritage reached 0.87. Proceeding from this, we note that half of administrative units exceed this value, namely Chernivtsi city (2.88), Kitsman (1.94), Hertsa (1.86), Khotyn (1.70), Putyla (1.42) and Zastavna (1.27) districts. Other areas are

poorly provided with sites of national status, since their indicator is twice, or even more, inferior to the usual value: these are Vyzhnytsya (0.34), Sokyryany (0.23) and Storozhynets (0.22) districts. Exceptions to this list are Hlyboka (0.68) and Novoselytsya (0.56) districts. Evaluating the index of national heritage localization, taking into account its mean value, in region it reaches 0.89 and does not refer to sufficient quantities, since it is less than 1. It should be noted that only 2 of 12 areas exceed the average value of objects' localization, Chernivtsi and Kitsman districts, and these are eleven higher than the optimal index. Putyla and Khotyn districts (0.97 and 0.93) are slightly inferior in the optimal index. Novoselytsya, Vyzhnytsya, Sokyryany and Storozhynets districts are distinctly different in this index, where it varies between 0.53 and 0.35. These areas, together with Kelmentsy, are least provided with architectural sites of national level, therefore they occupy the last places in the rating.

Note that for three indicators for objects of architecture of national significance, Chernivtsi clearly stands out as the absolute leader (the sum of the rating places has reached the minimum possible value, 3). Since the average total value of all ratings for the region is 15, this level does not exceed (according to the inversely proportional entity), except for the regional centre, also Kitsman, Hertsa, Khotyn, Putyla and Zastavna districts. Hlyboka, Novoselytsya, Vyzhnytsya, Storozhynets, Sokyryany and Kelmentsi districts scored higher values. For the first three the indicators can be considered more or less satisfactory, and for the last three the total score is defined as rather unsatisfactory (from 29 to 34). Throughout the Chernivtsi region there are 564 significant sites associated with important historical events in the life of the country and the region. Historical sites can be both architectural constructions, and places of military actions and grave sites of soldiers. Most of these attractions on state record are registered in Chernivtsi city, 125, which amounted to 92.7 points. Five regions have the higher average value (31.2) of indicators with scores in the range from 61.2 to 33.3. In general, the number of scores in regions with a value less than average is noticeable and ranges from 18.9 to 29.7. The exception is the Hertsa district, whose weight is at the lowest level (5.4) (Table 3).

Table 3. The total rating evaluation of the potential of historical significant sites of state significance by the administrative units of the Chernivtsi region

Districts	**State historical heritage, points**	**Ranking**	**Modified indicator of the concentration of objects**	**Ranking**	**Object localization coefficient**	**Ranking**	**Total ranking**
Chernivtsi city	92.7	1	10.61	1	10.76	1	3
Hertsa	5.4	12	0.67	12	0.13	11	35
Hlyboka	18.9	11	2.13	11	0.55	8	30
Kelmentsi	37.8	5	4.41	5	1.02	4	14
Khotyn	61.2	2	6.94	2	0.94	5	9
Kitsman	60.3	3	6.87	3	1.59	2	8
Novoselytsya	33.3	6	3.72	6	0.88	6	18
Putyla	21.6	10	2.55	10	0.43	10	30
Sokyriany	27.0	8	3.14	8	0.53	9	25
Storozhynets	26.1	9	2.81	9	1.47	3	21
Vyzhnytsya	29.7	7	3.35	7	0.85	7	21
Zastavna	42.3	4	4.90	4	1.02	4	12
Chernivtsi region	456.3	-	*40.2*	-	1.00	-	-
Average value	**31.2**	**5**	**3.58**	**5**	**0.91**	**5**	**16**

According to the modified indicator of the concentration of historical objects in the region, the absolute advantage of Chernivtsi (10.61) is again noted. The latter's value is three times more than the average and about twice as much as the second rated Khotyn district (6.94). Also, the average value (3.58) is lower than the Kitsman, Zastavna, Kelmentsi and Novoselytsya districts. Other areas do not reach the average. Moreover, the indicator of the last of them, Hertsa district, is 5 and 16 times less, respectively, than the average value and the leading city of Chernivtsi. Only 5 administrative-territorial units as for the localization of historical objects of national importance have indicators above the average: Chernivtsi city (10.76), Kitsman district (1.59), Storozhynets district (1.47), Zastavna and Kelmentsi districts (1.02). The minimum values are characteristic for a number of other areas, and Khotyn has a close to the average regional index (0.94). At the same time, the Hertsa district with the smallest localization parameter is four times lower (0.13) than the previous one in the coefficient rating of Putyla district (0.43).

The total rating evaluation of historical sites of state significance revealed the top three leaders in the Chernivtsi city, Kitsman and Khotyn districts. Incidentally, we note that the first of them holds the best position in all three indicators. The second group of territories of high values (from 12 to 16) is occupied by Zastavna and Kelmentsi districts. The third group is formed by regions with lower parameters: Novoselytsya, Storozhynets, Vyzhnytsya and Sokyryany districts, whose numerical expressions range from 17 to 25. The worst provided by historical sites are Hlyboka and Hertsa (Subcarpathians) and Putyla (Carpathians) districts. All sites of monumental art of national significance in the Chernivtsi region have a total value of 51.3 points, and their average value is 1.8 points. Their significant part is represented in Chernivtsi city, whose potential is estimated at 19.8 points. The mark of average value was reached also by Kitsman (7.2) and Novoselytsya (4.5) districts. Kelmentsi, Vyzhnytsya, Hlyboka and Khotyn districts have the same number of significant sites: 3.6. The smallest parametric indicators are fixed for Zastavna (1.8), Storozhynets (1.8), Hertsa (0.9) and Putyla (0.9) districts. There are no historical monuments in the Sokyryany district (Table 4).

According to the modified indicator of concentration of monumental art objects, Chernivtsi is far ahead of all other administrative-territorial entities. In particular, its coefficient is 6 times the average over the region. Closer, but larger than it, are Kitsman (0.82), Novoselytsya (0.503), Kelmentsi (0.42), Khotyn (0.408), Hlyboka (0.407) and Vyzhnytsya (0.406) districts. In the remaining areas, the value of the modified coefficients indicates a low concentration of the above-mentioned monuments, since the value of their parameters is less than the average for the region, 0.36. The remaining areas do not exceed the average value. These are areas in which the modified coefficient is less than the average value of 0.36: Zastavna (0.208), Storozhynets (0.194), Putyla (0.106). In Sokyryany district, there are no sites of national importance.

The localization of objects of monumental art of state registration is excessive in Chernivtsi, as indicated by their coefficient, which acquired its highest value here and exceeded the nominally optimal figure by twenty times. Hlyboka (0.94) and Novoselytsya (1.06) can be categorized as regions with more or less optimal localization structure.

The rest of the districts are beyond the optimal regional structure of the objects of monumental art, but they can be reduced to at least two intervals: close to the optimal (more than 0.50) and very distant from it. The first include Vyzhnytsia, Storozhynets' and Kel'mentsi districts. The second interval is formed by Khotyn, Zastavna, Hertsa and Putyla districts. The Sokyryany district occupies a special place, since no objects of monumental art of state significance have been recorded on its territory. According to the total number of rating places for the objects of monumental art among administrative-

territorial units, the top three are the city of Chernivtsi city (3 points) with Kitsman (6 points) and Novoselytsya (9 points) districts. Another group of regions centres around the usual total for the region, 15 points, namely Hlyboka, Kelmenetsi and Vyzhnytsya districts. This indicates their more or less sufficient supply of monuments of national importance. The second twenty areas where the total indicator is quite far from the ordinary value are rounded out by Khotyn (17 points) and Storozhynets (20 points). Others (Zastavna, Hertsa, Putyla and Sokyryany) are insignificant in terms of rating potential and it is difficult to count on them for tourist-excursion activities.

Table 4. Assessment of the potential of state record sites of monumental art by the administrative units of the Chernivtsi region

Districts	**State art monument heritage, points**	**Ranking**	**Modified indicator of the concentration of objects**	**Ranking**	**Object localization coefficient**	**Ranking**	**Total ranking**
Chernivtsi city	19.8	1	2.266	1	20.43	1	3
Hertsa	0.9	6	0.111	10	0.2	10	26
Hlyboka	3.6	4	0.407	6	0.94	4	14
Kelmentsi	3.6	4	0.420	4	0.86	7	15
Khotyn	3.6	4	0.408	5	0.49	8	17
Kitsman	7.2	2	0.820	2	1.69	2	6
Novoselytsya	4.5	3	0.503	3	1.06	3	9
Putyla	0.9	6	0.106	11	0.16	11	28
Sokyryany	0.0	7	0.000	12	0.00	12	31
Storozhynets	1.8	5	0.194	9	0.90	6	20
Vyzhnytsya	3.6	4	0.406	7	0.92	5	16
Zastavna	1.8	5	0.208	8	0.39	9	22
Chernivtsi region	51.3	-	4.52	-	1.00	-	-
Average value	**1.8**	**4**	**0.36**	**5**	**0.84**	**5**	**15**

The ordinary values of the total sum of places for four types of destinations (archaeological, architectural, historical, monumental objects) reached 23.6 (≈ 24) position points, that is, the range of the average values for the region was within 21-27. So, the territories of Novoselytsya (21) and Hlyboka (26.5) have more or less satisfactory attractions. They can be considered as quite suitable for the development of tourist and excursion activities using all varieties of historical and cultural heritage and require priority investments in the development of infrastructure, its preservation, restoration and popularization in the domestic and international tourist markets. The high level of HCPm (20-15) is fixed in the north of the region in the Trans-Dniester section, therefore Zastavna (20) and Khotyn (16) districts can be combined into the North Trans-Dniester region with a significant HCP. Most of the historical and cultural attractions are concentrated in the west and in the centre of the Trans-Prut part of the Chernivtsi region, in the Kitsman area and in the city of Chernivtsi (interval ≤ 14). In particular, within the first administrative-territorial unit, the total amount of places in four historical and cultural destinations was 9 rating points, and in the other, 11. This territory will be designated as West-Prut region of notable development of historical and cultural attractions.

In general, the North Trans-Dniester and West Prut regions are geographically tangential, therefore they should be combined and designated as the North Bukovyna recreational supra-region with a significant concentration of HCPm. Low (28-33) and

very low (≥ 34) summary rating sites of the historical and cultural heritage components are concentrated in the Precarpathian region on the right side of the river Prut, the mountainous part of the region and the regions remote from Chernivtsi in the extreme eastern and southwestern regions: Kelmentsi (29 points), Vyzhnytsya (32.5), Storozhynets (34.5), Hertsa (36), Sokyryany (38) and Putyla (38.5) districts.

Within the framework of a certain administrative-territorial array, two areas of weak concentration of the HCPm are clearly distinguished: the East Bessarabian region (the Kelmentsi and Sokyryany districts) and the Precarpathian-Carpathian region (the Vyzhnytsya, Storozhynets and Putyla districts). A separate enclave is the Hertza district, in which, according to the results of similar prospective studies of the border territories of Moldova and Romania, it will be possible to develop recreational activities. Although the administrative-territorial allocations mentioned above have lower scoring indicators than usual, they can be identified as the areas of the second stage of long-term development of tourist and excursion activities for favourable investment management in the said territory (Figure 4).

So the most promising area for the organization of tourist and excursion activities using historical and cultural destinations is, in general, Upper-Dniester-Prut part of the Chernivtsi region, one third of which is concentrated around the city of Chernivtsi. It was this territory that first of all belonged to the old developed ethno-cultural territories in the Dniester valley, within which, in particular, there was the largest number of settlements of the Trypillia civilization. It also belonged to the Galicia-Volyn principality, the Shypyntsi land, the Moldavian principality and the Austro-Hungarian Empire as historical Bukovyna. All state-political entities left here a significant historical heritage of many cultures, ethnic groups and their traditions.

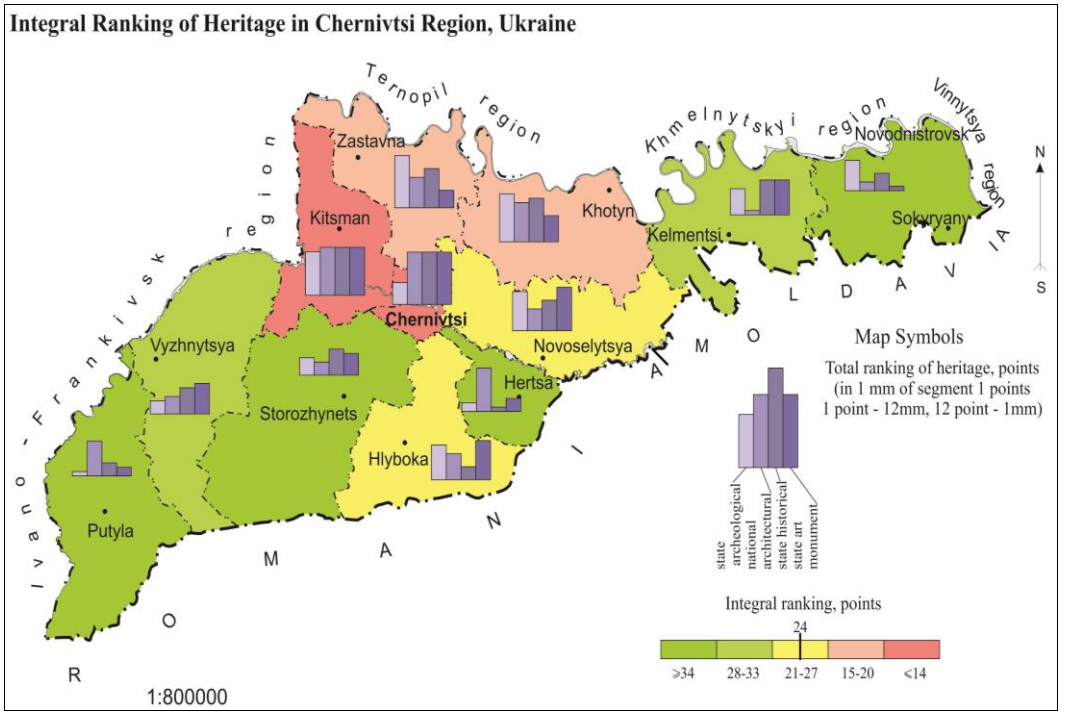

Figure 4. Integral ranking of heritage in Chernivtsi region, Ukraine

CONCLUSIONS

For all rating positions, four types of destinations (archaeological, architectural, historical and objects of monumental art) are above average. The total summary rating values of the historical and cultural heritage of the Chernivtsi region are concentrated in the city of Chernivtsi and the administrative districts to the west and north. These lands are the most promising for the organization here of tourist and excursion activities using HCPm. Within their boundaries are the North Trans-Dniester and the West Prut regions, which are united in the North Bukovyna recreational supra-region. In general, throughout its historical development, this territory as historical Northern Bukovyna and Northern Bessarabia was a part of various civilizations and states. The most important among them were Trypillia and the Austro-Hungarian Empire, which left here a significant historical heritage of many cultures, ethnic groups and their traditions.

Taking into account the fact that Chernivtsi, despite the leadership in three positions (architectural, historical and monumental art objects), took second place in the research, we suggest that the city should be used more actively in new directions of tourist-excursion activity for its development, attractiveness and popularization. An additional argument for the full ability to use the historical and cultural heritage of the above-identified recreational areas in the tourist and recreational business is transport accessibility. Today there are important rail and road transport routes in this area, and the city of Chernivtsi is located 40 km from the state border with Romania. Chernivtsi has direct railway communication with the cities of Ivano-Frankivsk, Lviv, Kovel, Kiev, Odesa. From the end of 2015, between Chernivtsy and Lviv, there is a regional express of the Intercity + class (duration 3.5 hours), which passes through two important railway hubs of western Ukraine in Ivano-Frankivsk and Lviv.

This route allows tourists to make a transfer to high-speed trains "Intercity and Intercity +" in Ivano-Frankivsk and to the most important tourist destinations in Ukraine, and in Lviv to Przemysl in Poland (travel time 1 hour 10 min.) and other Ukrainian tourist cities. According to another project, Chernivtsi is connected today by railway communication with Suceava and Bucharest in Romania with the change in Vadul-Siret. The international road transport corridor E-85 passes through the Chernivtsi region: Klaipeda (Lithuania) – Brest (Belarus) – Chernivtsi (Ukraine) – Siret (Romania). The main highways of national importance that pass through the Prut-Dnister Bukovyna and Bukovyna-Bessarabian Transprut recreational areas are: M-19 Domanovo (to Brest, Belarus) – Chernivtsi – customs crossing Mamalyga (to Chisinau, Moldova), M-20 Zhytomyr – Chernivtsi – customs transition Tereblechye (to Bucharest, Romania) and a number of regional and local roads.

In Chernivtsi there is an airport that serves only regular flights from Kiev and charter airlines during the summer vacation season for Ukrainian citizens. Now the nearest to the alternative routes mediated air communication with Chernivtsi city, constantly take regular and low-costers, for tourists there were Ivano-Frankivsk, Lviv, as well as Romanian Iasi, Bacau, Cluj-Napoca and the capital of Moldova Chisinau. The problems and prospects of direct passenger flights with Chernivtsi have been studied and discussed in the earlier publications (Hyshchuk & Pylypets', 2016).

In 2017, 75 hotels and similar accommodation facilities operated in the Chernivtsi region (in the city of Chernivtsi 28 hotels), where 116,959 people were attended to. This is 9.7% more than in the previous year, but only 5.8% of the settlers were citizens of 56 countries, but mostly from Romania, Belarus, Moldavia, Israel, Poland, Germany, Turkey and USA. It should be noted that a positive factor in this is that 68.0% in terms of the number of hotels and 81.3% of visitors account for the best recreational potential of the

historical and cultural heritage determined. However, the extremely negative is the fact that foreigners and their minimum number of all the region's tourists lived mainly in hotels and similar accommodation facilities in Chernivtsi city. This once again points to the lack of comprehensive programs for the development and promotion of tourism and harmonious decentralization in the work of tourism and excursion specialists regarding the interest of foreigners in the historical and cultural heritage of peripheral but also interesting areas of the tourist destination. Another sign of such statistics is their underestimation of the potential and the lack of an actual innovative format and attraction of grant funds to the development of a tourist product for the Prut-Dniester Bukovyna and Bukovyna-Bessarabian Transprut recreational areas. The most successful current format in this now can be considered quest-excursions. Their peculiarities are non-standard, where the guide is often absent, and the tourists themselves, using previously received information, embody its functions. In this case, the excursion route is formed so that at each point the excursionists, in addition to cognitive information about the object, receive various tasks, riddles, puzzles, etc., guessing which lead to the next destination.

According to the above considerations, a script for a developed quest "Austrian Chernivtsi in urban culture and architecture" has been already initiated for the "Tourist Bukovyna" Tourism Industry Association a script for a developed quest "Austrian Chernivtsi in urban culture and architecture", which currently successfully serves tourists and all comers through the streets of Chernivtsi. Another series of excursions for the same Association has been developed for areas with a rating above the average, which to as the "Civilizations of the ancient world of the Prut-Dniester", "Sacred objects and monasteries of the Transdniestrian Bukovyna" and "Roman civilizations of the Prut-Dniester Bukovyna". Another thematic excursion "Northern Bessarabia in the late Roman times" runs through the territory with lower rating points, but in the long term it provides for the popularization of archaeological tourism in scientific and personnel cooperation with the Department of the History of the Ancient World, Middle Ages and Museum Studies of Chernivtsi National University named after Yu. Fedkovych and the scientific department of the Chernivtsi Regional Museum of Local History and Ethnography, and the excursion "Historical and Cultural Heritage of the Romanian-speaking Bukovyna" will be in the part of the Precarpathian-Carpathian region, with the continuation of its routes to the neighbouring Suceava and Botosani districts of Romania.

All these tourist products are able to increase the competitiveness of the tourism industry using the regional historical and cultural heritage, to identify areas and specific places of investment and tourist attractions using their historical and cultural resources and to attract Ukrainian Bukovyna to a single region of transboundary cooperation of the Carpathian recreational zone in Ukraine and EU countries at the same time. The global prospect of our further scientific research may be the identification, in accordance with the methodology proposed above, and a detailed analysis of those potential territories of the Ukrainian Carpathians in other areas (Lviv, Ivano-Frankivsk, Transcarpathia) that have highly preserved historical and cultural heritage destinations for the development and continuation of relevant thematic tours involving countries on adjacent border areas – not only Romania but also Poland and Slovakia.

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GEOGRAPHICAL EXPLORATION OF VEGAN DISHES FROM TURKISH CUISINE

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Abstract: Turkish cuisine is suitable for vegan and vegetarian diets with its healthy dishes. The aim of this study is to reveal the dishes suitable for vegan and vegetarian diets in Turkish cuisine culture and to analyze their nutritional values. Turkey is geographically divided into seven regions. In this study, 21 vegan and vegetarian recipes that are served as soup, main course and dessert from each of the seven regions in Turkey were handled. The materials used in the dishes were determined by interviews and literature. Approximately one portion of each dish was analyzed for 21 items with the Nutrition Information System. The Nutritional Information System (BeBiS) is a packaged program that allows the calculation of nutrients in the contents of foods during studies related to nutrition. BeBiS uses the nation's scientific food databases. The recipes discussed were compared and evaluated in terms of regions through nutritional facts. Findings suggest that there were significant differences between dishes from different regions for vegans and vegetarians. These results suggest that vegans can be guided by vegan samples into Turkish culinary culture.

Key words: cuisine, Turkish cuisine, vegetarian recipes, vegan recipes

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INTRODUCTION

Nowadays, gastronomy, one of the most significant elements of heritage tourism (Matlovičová & Husárová, 2017: 5), has become an important discipline that attracts people's attention. In gastronomy, vegan and vegetarian diets have become notable issues in the last decade. Veganism and vegetarianism, which are rapidly-growing trends

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throughout the world (Key et al., 2006: 35; Stahler, 2012; Son et al., 2016: 830; Clarkson, 2017), are not only simple eating habits or styles, they are also considered as lifestyles, life philosophies and ethical approaches (Mendes, 2013: 145). People prefer vegan/vegetarian lifestyles for various reasons: respecting the right to live, taking an ethical stand against the exploitation of animals, eliminating the damage to the environment, living a healthy life, and religious beliefs are among the reasons of these preferences (Tezcan, 1999: 217; Shani & Dipetro, 2007: 70). Vegans refuse to consume animal products: fish, meat, marine products, eggs, dairy products, and honey. Besides their dietary habits (diets), they also refuse to use animal products such as furs or leather (Altmann, 2015: 3).

There are different styles of vegetarian nutrition:

Occasional Vegetarians: Basically eat all kinds of animal products, while trying to keep a balanced diet, and sometimes keep a vegetarian diet.

Semi-vegetarians: Eat milk and dairy products, eggs, fish, and poultry. However, they avoid eating red meat. Pesco-vegetarians: Eat milk and dairy products, eggs and fish, but avoid all other animal products.

Lacto-Ovo Vegetarians: Consume dairy products and eggs, but avoid all other animal products.

Lacto-Vegetarians: Consume dairy products, but avoid all other animal products.

Ovo-Vegetarians: Consume egg products, but avoid all other animal products.

Vegans: Neither eat nor consume animal products of any kind (including honey).

Raw Foodists: Vegans who do not cook or heat food, but eat it only in its natural, raw state.

Fruitarians: Consume only fresh fruit and food that is technically considered as fruit, such as cucumbers and tomatoes (Shani & DiPietro, 2007: 67).

Products for vegetarians and vegans are beginning to appear on menus in restaurants, even if there are still just a few. In previous years, vegetarians had to accept vegetable-based menus. However, today, one can easily find vegetarian menus in many restaurants (Gruber, 2013: 11). Along with the increasing demand for vegetarian products and the increasing demand in healthy nutrition in recent years (Radnitz et al., 2015: 35), the variety and quality of meat-free options have increased in many restaurants. Today, the increasing number of restaurants, which aim to attract vegetarian customers through movements such as the "Meatless Monday" movement, also led other restaurants to offer meatless menus for vegetarians (Kühn, 2008: 10; Brandau, 2008: 35). While restaurants without any vegetarian themes or concepts can be visited by vegetarians (Shani & DiPedro, 2007: 72), the menu options that can be offered by restaurants for vegetarians are still limited. Thus, changing approaches in food and beverage industry towards vegetarian food products is critical for people who have adopted a vegan or vegetarian lifestyle (Rivera & Shani, 2013: 1062). Having a vegan/vegetarian-friendly menu will provide great advantages to restaurants in this competitive environment.

Turkish cuisine is generally known for dishes such as shish kebab (grilled meat on skewers), doner kebab (gyro), and lahmacun (a pizza with spicy meat filling). These are – unfortunately – the varieties preferred by tourists, or in other words, forced to prefer when they visit Turkey. However, with its rich variety and healthy nutrients, Turkish cuisine has what it takes to pioneer the vegetarian cuisine (Tamkoç, 2006). Geography of a country plays a key role on local cuisine cultures (Matlovičová et al., 2014: 141). Because of this fact, geographical influences were the reason for excessive consumption of meat dishes in old Turkic communities. However, Turkish cuisine is also rich in terms of vegetable dishes, pies, fruit stews, soups, and other varieties. Thus, it is a cuisine that may be preferred by vegetarians (Güler, 2010: 167). Historical background and diversity, the richness of the region, and high quality products are the main elements that constitute the

base of the Turkish cuisine. Turkish cuisine has many different foods and food types as well as diversity and suitability of taste, healthy and balanced nutrition, and even dishes that can be used as sources of vegan vegetarian cuisine. This study presents vegan and vegetarian dishes from Turkish cuisine.

METHOD

Turkey is geographically divided into seven regions. These regions are the Marmara Region, Central Anatolia Region, Aegean Region, Southeastern Anatolia Region, Eastern Anatolia Region, Black Sea Region, and Mediterranean Region (Figure 1). In this study, vegan and vegetarian recipes that are served as soup, main course and dessert from each of the seven regions in Turkey were discussed. Purposive sampling, which is generally used in qualitative analysis method (Yolal, 2016: 88), was used to determine the dishes for the study. The samples in this study are soups, main courses and desserts for each region, determined by interviews with two food experts and two nutritionists. Consequently, a total of 21 dishes were selected for the purpose of the study. The materials used in the dishes were determined by interviews and literature (Hızlı, 2017; Işık, 2017; Şallı, 2017; Yıldız, 2017). Approximately one portion was analyzed of each of the 21 items with the Nutrition Information System (Erhardt, 2010). The Nutritional Information System (BeBiS) is a packaged program that allows the calculation of nutrients in the contents of foods during studies related to nutrition. BeBiS uses the nation's scientific food databases. The data are evaluated by reliable intake levels (Annex 1) from Turkey's Food and Nutrition Guide. This guide takes into account the reference values from the World Health Organization and the World Agriculture Organization: it is a scientific study based on the results of Turkey Nutrition and Health Research (Besler et al., 2015, 86-88).

RESULTS

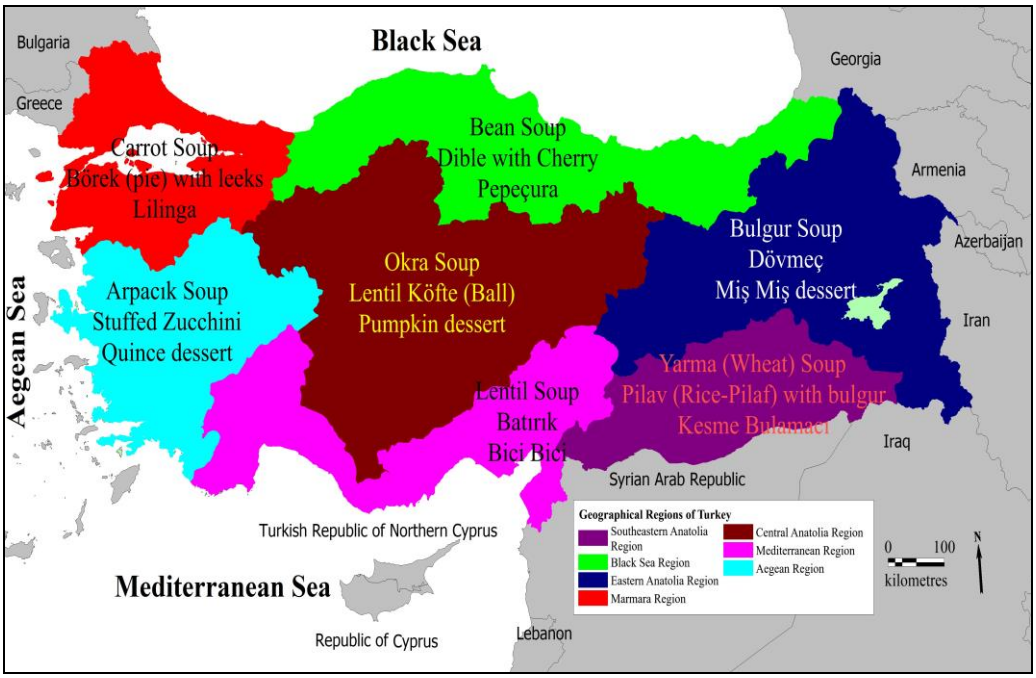

Figure 1. Geographical Regions of Turkey and Dishes that Have Chosen
(Source: Drawn in the MapInfo program, 2018)

The dishes determined through the interviews with the experts are located in Figure 1. There are soups, main courses and desserts for each region (Hızlı, 2017; Işık, 2017; Şallı, 2017; Yıldız, 2017).

Carrot soup (Annex 2) chosen from the **Marmara Region** (Sarıçay, 2007; Gürsoy, 2011: 44) meets 7% of the daily needs of women and 6% of men with an energy value of 153.9 kcal. The soup, which is very rich in vitamin A, meets daily nutritional needs as follows: 641% (F-Female) - 499% (M-Male); 46% of vitamin B6; 48% of vitamin C and 28% (F-Female) - 19% (M-Male) of Omega 6 (Table 1-A) (Erhardt, 2010). The soup contains ingredients (Baysal, 2004) which have a positive effect on eyes, skin and mental health, and it is found to be practical and fast in terms of preparation and cooking.

Table 1-A. Analysis of the Dishes-Nutritional Values About 1 Serving (Data source: Erhardt, 2010)

	Carrot Soup	Börek	Lilinga	Okra Soup	Lentil Köfte	Pumpkin Dessert	Arpacık Soup
Energy (kcal)	153.9	415.9	174.2	48.1	263.0	258.3	158.9
Protein (g)	3.2	14.4	3.9	1.9	8.9	3.7	5.7
Fibre (g)	7.7	8.5	1.2	3.5	8.3	4.8	3.9
Vitamin A (mcg)	4489.8	338.5	3.7	70.4	68.7	254.8	146.6
Vitamin D (mcg)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Vitamin E (mg)	3.9	3.2	0.5	1.7	1.2	2.1	1.1
Thiamine (mg)	0.1	0.2	0.1	0.1	0.2	0.1	0.1
Riboflavin (mg)	0.1	0.2	0.0	0.1	0.1	0.1	0.1
Niacin (mg)	1.2	1.8	0.4	0.8	3.1	1.1	1.2
Vitamin B6 (mg)	0.6	0.7	0.1	0.1	0.4	0.3	0.2
Vitamin B12 (mcg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Folate (mcg)	47.1	123.1	9.2	58.2	46.4	75.9	42.9
Vitamin C (mg)	43.4	48.8	1.8	25.3	11.2	24.1	12.8
Sodium (mg)	903.9	17.1	2.1	414.4	795.3	2.3	807.6
Calcium (mg)	92.8	191.5	25.5	78.1	51.1	53.8	61.5
Phosphorus (mg)	87.1	167.9	70.7	59.9	266.5	129.8	104.3
Iron (mg)	1.7	3.6	0.9	1.0	4.2	2.0	1.6
Zinc (mg)	1.0	1.7	0.5	0.8	2.4	0.7	1.0
Omega 3 (g)	0.1	0.2	0.7	0.0	0.1	0.8	0.1
Omega 6 (g)	3.3	2.5	3.8	1.3	0.6	3.7	0.5
Cholesterol (mg)	0.0	0.0	0.0	0.0	0.0	0.0	12.5

Börek (pie) with leeks (Annex 2) selected from the **Marmara Region** (Bandırmalı, 2007; Gürsoy, 2011: 534) contains 415.9 kcal energy value, which covers 20% of women's daily needs and 16% of men's. It meets daily nutritional needs as follows: 29% (F)- 24% (M) of protein; 34% (F)-29% (M) of fibre; 54% of vitamin B6; 54% of vitamin C and 24% of phosphor (Table 1-A) (Erhardt, 2010). It includes nutrients for renewal of the body for healthy digestive and respiratory systems (Baysal, 2004). However, it is difficult to make, as it takes time and needs expertise in terms of the cooking method.

Lilinga (a kind of dessert with molasses) (Annex 2) selected from the **Marmara Region** (Güldemir, 2007: 36) has 174.2 kcal energy value. Lilinga meets 8% (F)-7% (M) of daily nutritional requirements. It meets daily nutritional needs as follows: 9% (F)-8% (M) of thiamine; 10% phosphorus and 32% (F)- 22% (M) of omega 6 (Table 1-A) (Erhardt, 2010). It contains nutrients that are good for circulation, nervous systems, energy metabolism, and skeletal structure (Baysal, 2004).

Okra soup (Annex 2) selected from the **Central Anatolia Region** (Halıcı, 2014: 40) contains 48.1 kcal, which is quite low. The recipe meets daily nutritional needs as

follows: 14% (F)-12% (M) of fibre; 11% of vitamin E; 15% of folate and 28% of vitamin C (Table 1-A) (Erhardt, 2010). It contains nutritional ingredients that are known to have positive effects on the digestive system, circulatory system, immune system, vitamin metabolism and muscle health (Baysal, 2004).

Lentil Köfte (Ball) (Annex 2) selected from the **Central Anatolia Region** (Eryılmaz, 2011: 513) meets 13% (F)-10% (M) of daily requirement with an energy value of 263 kcal. It meets daily nutritional needs as follows: 18% (F)-15% (M) of protein; 33% (F)-29% (M) of fibre; 22% (F)-19% (M) of niacin and 24% (F)-22% (M) of zinc (Table 1-A) (Erhardt, 2010). The lentil dish, which is highly balanced in terms of nutritional composition, was evaluated positively in terms of taste and health.

Pumpkin Dessert (Annex 2) selected from the **Central Anatolia Region** (Karadağ et al., 2014: 73) contains 258.3 kcal energy and meets 13% of women's and 10% of men's daily needs. It meets daily nutritional needs as follows: 19% (F)-17% (M) of fibre; 36% (F)-28% (M) of vitamin A; 23% of vitamin B6; 19% of phosphorus and 31% (F)-22% (M) of omega 6 (Table 1-A) (Erhardt, 2010). It contains nutrients that have positive effects on eyes, bones and skin health, and immune and circulatory systems (Baysal, 2004).

Arpacık soup (Annex 2) selected from the **Aegean Region** (Kiraz, 2007: 28) contains low energy with 158,9 kcal. It meets daily nutritional needs as follows: 16% (F)-13% (M) of fibre, 21% (F)-16% (M) of vitamin A, 15% of vitamin B6, and 10% (F)-9% (M) of zinc (Table 1-A) (Erhardt, 2010). It contains nutrients that are good for skin and eye health; digestive, immune and respiratory systems, and sexual life. It takes a long time to prepare arpacık soup, but it is quick and practical to cook.

Table 1-B. Analysis of the Dishes-Nutritional Values About 1 Serving (Data source: Erhardt, 2010)

	Stuffed Zucchini	Quince Dessert	Yarma Soup	Pilav with Bulgur	Kesme Bulamacı	Bulgur Soup	Dövmeç
Energy (kcal)	225.5	411.1	190.6	460.6	217.3	105.2	154.6
Protein (g)	7.8	1.3	3.9	8.6	4.1	1.8	3.5
Fibre (g)	5.0	7.2	3.6	10.8	2.3	2.1	5.0
Vitamin A (mcg)	219.5	10.6	1.6	60.6	8.5	9.5	167.1
Vitamin D (mcg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vitamin E (mg)	7.8	0.8	6.5	13.4	1.4	0.7	7.7
Thiamine (mg)	0.2	0.1	0.1	0.3	0.2	0.1	0.2
Riboflavin (mg)	0.3	0.1	0.0	0.1	0.1	0.0	0.1
Niacin (mg)	1.6	0.4	1.6	3.9	1.3	0.8	1.6
Vitamin B6 (mg)	0.3	0.1	0.2	0.5	0.2	0.1	0.3
Vitamin B12 (mcg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Folate (mcg)	138.3	13.7	19.8	58.6	20.4	8.7	107.9
Vitamin C (mg)	52.3	18.9	2.4	33.7	4.5	2.2	54.9
Sodium (mg)	790.6	5.4	7.2	10.3	8.6	2.7	407.9
Calcium (mg)	114.4	25.8	30.8	44.3	98.1	11.4	54.4
Phosphorus (mg)	140.6	45.6	115.0	288.8	133.3	62.9	90.8
Iron (mg)	5.1	1.4	1.2	4.4	2.3	0.9	1.6
Zinc (mg)	1,2	0.4	1.1	2.7	1.2	0.6	0.7
Omega 3 (g)	0.3	0.0	0.1	0.1	0.4	0.0	0.1
Omega 6 (g)	6.4	0.6	6.4	12.6	3.1	0.5	6.4
Cholesterol (mg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Stuffed Zucchini (Annex 2) selected from the **Aegean Region** contains 225.5 kcal, which accounts for 11% of women's daily energy needs and 9% of men's. It meets

daily nutritional needs as follows: 16% (F)-13% (M) of protein; 20% (F)-17% (M) of fibre; 31% (F)-24% (M) of vitamin A; 52% of vitamin E; 27% (F)-23% (M) of riboflavin; 35% of folate; 58% of vitamin C and 28% (F)-51% (M) of iron (Table 1-B) (Erhardt, 2010). It contains nutrients which have positive effects on circulatory, respiratory, digestive and immune systems, eye health and blood structure (Baysal, 2004).

Quince Dessert (Annex 2) selected from **the Aegean Region** contains 411.1 kcal energy and 20% of women's daily energy needs and 16% of men's. It meets daily nutritional needs as follows: 29% (F)-25% (M) of fibre; 21% of vitamin C and 8% (F)-14% (M) of iron (Table 1-B) (Erhardt, 2010). It contains nutrients that are good for digestive and respiratory systems, blood structure, mind, and sexual health (Baysal, 2004).

Yarma (Wheat) Soup (Annex 2) selected from the **Southeast Anatolian Region** contains 190.6 kcal, which corresponds to 9% of women's daily requirement and 7% of men's. It meets daily nutritional needs as follows: 8% (F)-7% (M) of protein, 14% (F)-12% (M) of fibre, 43% of vitamin E, 11% (F)-10% (M) of niacin, 15% of vitamin B6, 16% of phosphorus and 53% (F)-38% (M) of Omega 6 (Table 1-B) (Erhardt, 2010). It contains nutrients that are good for circulation, immune, nervous and digestive systems, bone structure, vascular and sexual health (Baysal, 2004).

Pilav (Rice-Pilaf) with Bulgur (Annex 2) selected from the **Southeast Region** is widely consumed in Turkey in different forms. The recipe covered in this study meets 22% of women's daily energy requirement and 18% of men's daily energy requirement with 460.6 kcal energy value. It meets daily nutritional needs as follows: 17% (F)-14% (M) of protein, 43% (F)-37% (M) of fibre, 89% of vitamin E, 27% (F)-25% (M) of thiamine, 28% (F)-24% (M) of niacin, 38% of vitamin B6, 41% of phosphorus and 105% (F)-74% (M) of omega 6 (Table 1-B) (Erhardt, 2010). It contains nutrients that are good for renewal of the cells; digestion, circulation and immune systems and bone health (Baysal, 2004).

Kesme Bulamacı (a kind of dessert with molasses) (Annex 2) chosen from the **Southeast Region** (Işık, 2006: 247; Halıcı, 2015: 150) meets 11% of women's daily energy requirements and 8% of men with 217.3 kcal energy. It meets daily nutritional needs as follows: 9% (F)-8% (M) of fibre, 9% of vitamin E, 18% (F)-17% (M) of thiamine, 15% of vitamin B6, 10% of calcium and 19% of phosphorus (Table 1-B) (Erhardt, 2010). It contains nutrients with positive effects on skeletal, digestive, nervous and immune systems, and sexual health (Baysal, 2004).

Bulgur soup (Annex 2) selected from the **Eastern Anatolia Region** is low on energy with a value of 105.2 kcal. It meets daily nutritional needs as follows: 8% (F)-7% (M) of fibre, 9% (F)-8% (M) of thiamine and 9% of phosphorus (Table 1-B) (Erhardt, 2010). It contains nutrients that are good for the digestive and immune systems and bone health (Baysal, 2004).

Dövmeç (a kind of eggplant dish) (Annex 2) selected from the **Eastern Anatolia Region** (Karadağ et al., 2014: 102-103) is low on energy with of 154.6 kcal. It meets daily nutritional needs as follows: 20% (F)-17% (M) of fibre, 24% (F)-19% (M) of vitamin A, 51% of vitamin E, 27% of folate, 61% of vitamin C, 13% of phosphorus and 53% (F)-38% (M) of omega 6 (Table 1-B) (Erhardt, 2010). It contains nutrients that are good for digestive, nervous, respiratory, and immune systems; the eye, skin, and bone health (Baysal, 2004).

Miş Miş (Apricot) Dessert (Annex 2) selected from the **Eastern Anatolia Region** contains 388 kcal, which accounts for 19% of women's daily energy needs and 15% of men's. It meets daily nutritional needs as follows: 182% (F)- 142% (M) of vitamin A, 18% (F)-15% (M) of riboflavin, 23% of vitamin B6, 20% of phosphorus and 18% (F)-32% (M) of iron (Table 1-C) (Erhardt, 2010). It contains nutrients, which are good for the eyes, blood and bone health and the digestive system (Baysal, 2004).

Table 1-C. Analysis of the Dishes-Nutritional Values About 1 Serving (Data source: Erhardt, 2010)

	Miş Miş	Bean Soup	Dible with Cherry	Pepeçura	Lentil Soup	Batırık	Bici Bici
Energy (kcal)	388.0	153.0	430.1	296.5	253.9	340.3	287.0
Protein (g)	5.9	3.2	6.3	1.7	13.0	9.0	0.7
Fibre (g)	8.1	3.9	2.5	1.6	6.7	8.0	1.8
Vitamin A (mcg)	1277.0	42.3	9.1	9.6	36.2	97.5	6.4
Vitamin D (mcg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vitamin E (mg)	1.8	6.3	7.5	1.1	4.2	1.2	0.1
Thiamine (mg)	0.2	0.1	0.1	0.1	0.3	0.3	0.0
Riboflavin (mg)	0.2	0.1	0.1	0.1	0.2	0.1	0.0
Niacin (mg)	2.4	1.0	1.3	0.5	1.8	3.0	0.4
Vitamin B6 (mg)	0.3	0.3	0.2	0.1	0.4	0.4	0.0
Vitamin B12 (mcg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Folate (mcg)	21.6	40.6	31.0	8.9	120.9	51.6	12.8
Vitamin C (mg)	27.1	16.9	11.0	6.6	10.3	25.2	52.0
Sodium (mg)	21.0	785.0	9.0	4.8	824.0	787.8	9.2
Calcium (mg)	80.3	76.3	22.9	36.0	70.9	77.8	51.5
Phosphorus (mg)	138.0	79.9	118.6	52.9	231.6	297.2	24.4
Iron (mg)	3.2	1.4	0.8	1.1	4.1	4.3	1.0
Zinc (mg)	1.0	1.0	0.5	0.4	2.3	2.6	0.7
Omega 3 (g)	0.7	0.1	0.1	0.0	0.1	1.2	0.1
Omega 6 (g)	3.8	6.2	7.5	0.2	3.4	6.6	0.1
Cholesterol (mg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Bean soup (Annex 2) selected from the **Black Sea Region** is low on energy, and it contains 153 kcal of energy. It meets daily nutritional needs as follows: 16% (F)-13% (M) of fibre, 42% of vitamin E, 23% of vitamin B6, 10% of folate, 19% of vitamin C, 11% of phosphorus, 10% (F)-9% (M) of zinc and 52% (F)-36% (M) of omega 6 (Table 1-C) (Erhardt, 2010). It contains nutrients with positive effects on digestive and immune systems, bone and eye health (Baysal, 2004).

Dible with Cherry (a kind of rice and cherry dish) (Annex 2) selected from the **Black Sea Region** (Güldemir and Halıcı, 2009: 562) is only consumed in the Black Sea Region in Turkey, so it is an original recipe. It contains 430.1 kcal energy and covers 21% of women's daily needs and 16% of men's. It meets daily nutritional needs as follows: 13% (F)-11% (M) of protein, 50% of vitamin E, 15% of vitamin B6, 12% of vitamin C, 17% of phosphorus and 63% (F)-44% (M) of omega 6 (Table 1-C) (Erhardt, 2010). It contains nutrients that are good for renewal of the cells; skeletal, digestive, respiratory and circulatory systems (Baysal, 2014).

Pepeçura (Annex 2) selected from the **Black Sea Region** (Güldemir and Halıcı, 2009: 562) is a special dessert in the Black Sea Region. It contains 296.5 kcal energy, which is 14% of women's daily needs of and 11% of men's. It meets daily nutritional needs as follows: 6% (F)-6% (M) of fibre, 9% (F)-8% (M) of thiamine, 9% (F)-8% (M) of Riboflavin, 8% of phosphorus and 6% (F)-11% (M) of iron (Table 1-C) (Erhardt, 2010). It contains nutrients that are good for nervous, immune, and respiratory systems; bone and muscle health (Baysal, 2004).

Lentil soup (Annex 2) chosen from the **Mediterranean region** is prepared with similar ingredients and methods in almost every part of Turkey. It contains 13% of women's daily energy requirements and 10% of men's daily energy requirements with an energy content of 253.9 kcal. It meets daily nutritional needs as follows: 26% (F)-22% (M) of protein, 27% (F)-23% (M) of fibre, 28% of vitamin E, 27% (F)-25% (M) of thiamine, 31% of

vitamin B6, 30% of folate, 33% of phosphorus, 23% (F)-41% (M) of iron and 23% (F)-21% (M) of zinc (Table 1-C) (Erhardt, 2010). It contains nutrients with positive effects on skeletal, nervous, and respiratory systems; blood health and energy metabolism (Baysal, 2004).

Batırık (a kind of mix with bulgur) (Annex 2) selected from the **Mediterranean region** (Baysal et al., 2001: 205; Karadağ et al., 2014: 54) is consumed frequently, especially in the Eastern Mediterranean Region. It meets 16% of women's daily energy needs and 13% of men's daily energy needs with an energy content of 340.3 kcal. It meets daily nutritional needs as follows: 18% (F)-15% (M) of protein, 32% (F)-28% (M) of fibre, 27% (F)-25% (M) of thiamine, 21% (F)-19% (M) of niacin, 31% of vitamin B6, 28% of vitamin C, 42% of phosphorus, 24 (F)-43% (M) of iron, 26% (F)-24% (M) of zinc and 55% (F)-39% (M) of omega (Table 1-C) (Erhardt, 2010). It contains nutrients that are good for skeletal structure, blood, and skin health; nervous and respiratory systems (Baysal, 2004).

Bici Bici (a kind of dessert with starch and sugar) (Annex 2) selected from the **Mediterranean region** (Karadağ at al., 2014: 59) is a regional specialty. It covers only 14% of women's daily energy needs and 11% of men with 287 kcal content. It meets daily nutritional needs as follows: 58% of vitamin C, 6% (F)-10% (M) of iron and 7% (F)-6% (M) of zinc (Table 1-C) (Erhardt, 2010). It contains nutrients which have positive effects on respiratory, immune and nervous systems; and skin health (Baysal, 2004).

Annex 1. Reliable Intake Levels for Recommended Daily Energy and Nutrients for Turkey (Data source: Besler et al., 2015: 86-88)

Nutrients	Recommended Intake			
	Female (age)		Male (age)	
	19-30	31-50	19-30	31-50
Energy (kcal)	2065	1917	2850	2623
Protein (g)	50	52	58	60
Fibre (g)	25	21	29	29
Vitamine A (mcg)	700	700	900	900
Vitamine D (mcg)	10	10	10	10
Vitamine E (mg)	15	15	15	15
Thiamine (mg)	1,1	1,1	1,2	1,2
Riboflavin (mg)	1,0	1,1	1,3	1,3
Niacin (mg)	14	14	16	16
Vitamine B6 (mg)	1,3	1,3	1,3	1,3
Vitamine B12 (mcg)	2,4	2,4	2,4	2,4
Folate (mcg)	400	400	400	400
Vitamine C (mg)	90	90	90	90
Sodium (mg)	-	-	-	-
Calcium (mg)	1000	1000	1000	1000
Phosphorus (mg)	700	700	700	700
Iron (mg)	18	18	10	10
Zinc (mg)	10	10	11	11
Omega 3 (g)	1.1	1.1	1.6	1.6
Omega 6 (g)	12	12	17	17
Cholesterol (mg)	-	-	-	-

CONCLUSION

Turkish cuisine is very rich in terms of diversity, as well as foods suitable for healthy and clean eating. Such richness can contribute to satisfy both frugal needs of tourists and gourmet tourist (Privitera et al., 2018: 154). Thanks to Turkey's beautiful climate and geography, it is home to many different fruits and vegetables.

Annex 2. Photograps of Vegan Vegetarian Dishes Selected by Region

Region	Soup	Main Course	Dessert
Marmara Region	 Carrot Soup	 Börek (pie) with leeks	 Lilinga
Central Anatolia Region	 Okra Soup	 Lentil Köfte (Ball)	 Pumpkin dessert
Aegean Region	 Arpacık Soup	 Stuffed Zucchini	 Quince dessert
Southeastern Anatolia Region	 Yarma Soup	 Pilav with bulgur	 Kesme Bulamacı
Eastern Anatolia Region	 Bulgur Soup	 Dövmeç	 Miş Miş dessert
Black Sea Region	 Bean Soup	 Dible with Cherry	 Pepeçura
Mediterranean Region	 Lentil Soup	 Batırık	 Bici Bici

Therefore, it is very easy to grow appropriate foods for vegan diet. In this study, 21 vegetarian dishes consisting of soups, main dishes and desserts from seven regions of Turkey were analyzed. Although cereal-based recipes and popular meat-based meals are known in Turkish cuisine, there are dishes suitable for vegan and vegetarian diets in different regions. Interviews with experts and literature reviews show that the Marmara, Aegean and Black Sea regions contain dishes suitable for vegans. Although there are different examples in other regions as well as those included in the study, compared to the Marmara, Aegean and Black Sea regions, less vegan vegetarian diet patterns are found. When the analyzed dishes are evaluated; vitamin E, vitamin A, thiamine, riboflavin, niacin, vitamin B6, folate, vitamin C, calcium, phosphorus, iron, zinc, and omega 6 needs can be met for women and men. However, it is understood that vitamin D, vitamin B12, and omega 3 are not sufficient to meet the requirements.

This is also the case with cuisines of other countries. In this study, 'Pilav (Rice-Pilaf) with Bulgur' was found to be the richest meal in terms of energy, fiber, vitamin E, thiamine, niacin, iron, zinc, and omega 6. Thus, it can be concluded that it is the most useful dish for vegan nutrition among all the dishes analyzed in this study. 'Börek (Pie) with Leek' was found to be the richest meal in terms of protein, vitamin B6 and calcium. 'Batırık (a kind of mix with bulgur)' was found to be rich in thiamine, phosphorus and omega 3. 'Carrot Soup' was found to be rich in vitamin A; 'Arpacık Soup' was found to be rich in vitamin D; 'Lentil Soup' was found to be rich in thiamine; 'Stuffed Zucchini' was found to be rich in riboflavin; and 'Bici Bici (a kind of dessert with starch and sugar)' was found to be rich in vitamin C.

One of the major problems of vegan tourists is the difficulty of finding food that is rich in nutritional value in the destinations visited. Considering the vegan and vegetarian dishes in the world, samples of Turkish cuisine that are included in this study are suggested ingredients for the healthy nutrition of vegans. In future studies, it is suggested to increase the number of dishes to enrich the experimental food preparation practices for the benefit of vegans and thus to develop recipes suitable for vegans.

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THE GEOGRAPHY OF TOURIST BEDNIGHTS IN SOUTH AFRICA

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Abstract: The discipline of geography is a leading contributor to tourism research. Although tourism geography research covers a broad spectrum of issues and approaches the most distinctive approach that geography brings to tourism scholarship is through adopting a spatial view. Against the background of a review of international research using a spatial perspective on accommodation this paper analyses the geography of tourist bednights in South Africa. Bednights include commercial and non-commercial types of accommodation. The results show the majority of bednights in South Africa occur in non-commercial forms of accommodation because of the large volume of tourism in the country which is accounted by low-income VFR travellers most of whom do not use commercial accommodation services. Analysis of the spatial distribution of bednights discloses that the greatest share is represented in the country's largest metropolitan centres albeit important differences are observed in the balance between domestic and international bednights between the country's major cities. The patterns of domestic bednights are more spread than for international bednights. A highly distinctive feature of South Africa's geography of bednights is the particularly strong pattern of dominance of domestic bednights in the tourism economy of the mainly rural and former Homelands areas that were created under apartheid.

Key words: tourism, bednights, spatial approach, accommodation services, South Africa

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INTRODUCTION

Scholarship in tourism studies has been enriched from many academic disciplines with geography one of its leading contributors (Butler, 2004). As expressed by Timothy (2018: 166) geographers were amongst "the very earliest of academics to ponder, theorize and examine the socio-spatial manifestations of tourism". With its strong spatial focus and synthesizing tradition across both physical and social sciences geography assumes a core status in tourism research (Visser, 2016). Che (2018) asserts that tourism geography occupies a 'central role' in understanding a globalized world. By way of example, the work of the geographer Richard Butler (1980) on the tourism area life cycle of evolution is seminal and arguably is the most cited individual article in global tourism research. It is

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contended that geography represents "the ideal discipline to study the global tourism industry given tourism's distinct place, time, distance and activity patterns which transform the economy and environment of visited places" (Che, 2018: 164). Timothy (2018) characterizes geography as "the substance of tourism". With geographers' varied interests in place, space and the environment they offer significant insights for the multi-disciplinary terrain of tourism scholarship (Hall & Page, 2006; Williams, 2009; Saarinen, 2014; Saarinen et al., 2017; Crouch, 2018; Gill, 2018; Ilies et al., 2016; 2017). Overall, it is stressed that the analytical toolkits of geographers are especially valued for interpreting regional patterns, tourism's impact on destinations, the industry's spatial growth, and flows of travellers from home to destinations (Timothy, 2018).

The outputs by Hall & Page (2006, 2009), Hall (2013) and Müller (2018) all draw attention to an extended agenda and 'framing' of research by tourism geographers. This mirrors broader changes occurring within geography in which a descriptive tradition and mapping of the world is exchanged for more analytical approaches defining geography not as an object of study but instead as a perspective on society and the environment (Müller, 2018). Likewise, Timothy (2018: 166) comments that "the contributions of geography have far surpassed the normative perspectives that are commonly assumed to be the province of geography". This said, whilst the domain of tourism geography has a wide focus as is reflected in 20 years of publication of the journal Tourism Geographies it can be argued that the spatial viewpoint remains the most distinctive approach that geography brings to tourism research. The spatial viewpoint was one that was identified in Pearce's (1979) early review of geographical studies on tourism. Among several key focal themes for an emerging geography of tourism are analysis of the spatial aspects of demand and supply for tourism products. Some examples of the adoption of a spatial approach in tourism research include, inter alia, Forer & Pearce (1984) study of package tourism in New Zealand, Pearce (1987) on the geographical organization of package tours in Europe, works by Pearce & Grimmeau (1985) and by Barke & France (1986) on the spatial structure of tourist accommodation supply and demand in Spain, Weaver & Elliott (1996) on spatial issues and problems in Namibian tourism, Müller (2016) on geographical explanations of tourism success or failure in remote regions, Wang (2008) on the spatial structure of tourism resources in one Chinese region, Wen & Sinha (2009) on the spatial patterns of tourism in China, Guedes & Jiminez (2015) on the geographical patterns of cultural tourism in Portugal; and, Yang & Wong (2013) on the spatial distribution of inbound and domestic tourism flows to China's cities.

From the foregoing it is apparent that in China, which is the fastest expanding region of the world in terms of publishing tourism scholarship (see Shen et al., 2018), there has been a strong take up of the spatial approach in tourism studies. South Africa also has witnessed the adoption and increasing application of the spatial approach in tourism studies. Geographers have studied the uneven development of the tourism space economy and identified issues about spatial imbalances in tourism (Visser, 2003, 2007; Rogerson, 2014, 2015a, 2015b, 2015d; Rogerson & Nel, 2016; Rogerson, 2016a, 2016b; McKelly et al., 2017; Rogerson, 2017a, 2017b, 2017c, 2017d; Rogerson & Rogerson, 2019). The relevance of the spatial approach in the context of sub-Saharan Africa was reiterated by Ahebwa & Novelli (2014). These authors stress that an improved understanding of the spatial dimensions of tourism can result in better informed national and regional strategies for tourism development across sub-Saharan Africa. It is against this backcloth that in this paper a spatial approach is adopted to examine one particular dimension of the accommodation services sector in South Africa. The specific focus is upon analysing the geography of tourist bednights. Arguably, for destination managers data on tourism bednights can be one potentially useful index of tourism performance. The analysis draws upon official data on

bednights from Statistics South Africa and from South African Tourism. In addition, it analyses bednight data contained in the IHS Global Insight data base which is a private sector data base that is widely utilised in local economic development planning in South Africa because of the paucity of official sub-national data. For tourism no municipal level data is available from official sources. For this investigation data is extracted from the IHS Global Insight data base for the period 2001 to 2015 on total tourism bednights, the spatial pattern of total bednights and of bednights as differentiated by origin of visit, whether domestic or international. The remainder of the discussion in this paper is organised in terms of two sections of discussion. As context, the next section provides a brief literature review of research surrounding tourism and accommodation services and in particular on spatial investigations. Attention then shifts to explore the macro-picture of tourism bednights, the geography of tourism bednights and the differential patterns of bednights in respect of domestic as opposed to international tourism trips.

TOURISM AND ACCOMMODATION SERVICES

Although the largest volume of academic writings on accommodation services derives from the perspective of hospitality management there is an established stream of writings which examines aspects of accommodation services from a tourism perspective. In their influential volume Timothy & Teye (2009) stress that the growth and consolidation of a commercial accommodation or lodging sector is an accompaniment as well as facilitator for tourism development in any country. Ritchie & Crouch (2003) identify the development of accommodation facilities as the basis for the growth of any tourist destination and stress that their absence "acts as a constraint on overnight visitor numbers". Accordingly, Navratil et al. (2012: 50) can assert that strengthening of "the accommodation capacities is one of the essential parts of the process of planning tourism development in destinations". For Romania Rahovan (2013) affirms the critical role of hotel accommodation services for tourism development. Overall, across the international record the availability of an array of accommodation services is shown to be an indispensable element of the 'infrastructure for competitiveness' for any tourism destination. This is especially so in emerging tourism regions such as contemporary Africa (Christie et al., 2013; Rogerson & Rogerson, 2018).

Within the context of sub-Saharan Africa an undersupply or poor quality of adequate accommodation services (particularly hotels) is identified by World Bank researchers as one of the key blockages on tourism development for several countries (Ernst & Young, 2011). Across sub-Saharan Africa the competitiveness of countries as tourism destinations is conditional upon establishing a network of different forms of accommodation at competitive prices and of acceptable quality standards (Rogerson & Rogerson, 2018). One good illustration is provided by Malawi where, as a result of inadequate provision of accommodation services, tourism in the country was undeveloped (Magombo et al., 2017). By contrast, South Africa provides a 'good practice' case study in the restructuring and upgrading of accommodation services sector following democratic transition and the country's post-1994 re-entry into the international tourism economy (Rogerson, 2013a, 2013b). As a consequence of the diversification of accommodation services, tourists in South Africa enjoy an array of accommodation offerings including luxury hotels and safari lodges, boutique hotels, limited service and all-suite hotels, guest houses, bed and breakfasts, self-serviced apartments, backpacker hostels, camp sites and, most recently, Airbnb home stays (Rogerson, 2010, 2011a, 2011b, 2013c, 2013d; Rogerson & Rogerson, 2014; Greenberg & Rogerson, 2015; Visser et al., 2017; Rogerson & Rogerson, 2019).

In international research on accommodation services and tourism there is a vibrant literature that has emerged out of adopting a spatial view. Not surprisingly, the largest amount of writings relate to hotels. Since 2000 a considerable amount of work has

examined various issues around hotel location at different scales of analysis, global, national, regional and intra-urban. Key theoretical contributions have appeared in the writings of Egan & Nield (2000) and by Yang et al. (2014). The globalization of hotel chains and their location patterns has galvanized the growth of several theoretical and empirical contributions (Ivanova, 2013; Boyen & Ogasavara, 2013; Ivanova & Ivanov, 2014; Niewiadomski, 2014; Niewiadomski, 2015; Ivanova et al., 2016; Niewiadomski, 2016; Niñerola et al., 2016; Rogerson, 2016; Santos et al., 2016). At the national scale of study the spatial pattern of hotel distribution in China (Luo & Yang, 2013), the geographical clustering of hotels in Switzerland (Lund, 2006), the diffusion and spread of tourism accommodation in Spain (Pons et al., 2014), tourism enterprises' location decisions in Greece (Polyzos & Minetos, 2011), the locational influences on foreign and domestic hotel investors (Puciato et al., 2017), and the relationship between the distribution of hotels and amenities in the USA (Lee et al., 2018) are some examples of recent research allied to a spatial perspective. The attractiveness of localities for investment is another critical theme that has secured scholarly attention (Puciato, 2016). The intra-urban scale of hotel location, however, has generated the greatest amount of interest (Bégin, 2000; Shoval & Cohen-Hattab, 2001; Urtasun & Gutiérrez, 2006; Shoval, 2006; Shoval et al., 2011; Rogerson, 2012; Yang et al., 2012; Adam, 2013: Adam & Amuquandoh, 2014; Rogerson, 2014a, 2014b). An historical lens is applied to analyse spatial-temporal variations in hotel development in Manhattan, New York from 1822 to 2012 (Li & Du, 2018). In a contemporary investigation Luo & Yang (2016) offer an analysis of the role of agglomeration economies in determining hotel location choices in Beijing. In recent research on Lisbon a comparison is undertaken of the locational influences on the hotels and budget hostels in the city (Cro & Martins, 2018).

Outside of the hotel sector a number of other researchers have utilised a spatial view to interpret the evolving organisation of various types of lodging services. An important study is that of Walford (2011) who interrogates the spatial distribution of farm-based tourist accommodation in England and Wales. In contemporary research publications a trend is observable that the growth of peer-to-peer accommodation is garnering the most attention. Important works have appeared to unpack the spatial imprint of Airbnb in cities such as Barcelona (Gutierrez et al., 2017), Budapest (Boros et al., 2018), Cape Town (Visser et al., 2017) and Paris (Heo et al., 2019). Other studies have shifted to examine tourism gentrification in cities highlighting issues in residential gentrified areas as a result (in part) of the major expansion of shared economy accommodation (Gurran & Phibbs, 2017). In a useful comparative study undertaken in the Czech Republic Navratil et al. (2012) examine whether differences are observed in the spatial characteristics of particular types of accommodation facilities. In terms of hotels, guest houses, and hostels it was revealed that the location of individual types of accommodation facilities does differ significantly between different forms of accommodation services. Certainly, this conclusion is supported by the findings from a range of recent South African studies which probe the location and character of different segments of commercial accommodation services. It is evidenced from South African research that different types of accommodation reveal a different geographical footprint (Rogerson & Rogerson, 2019). Sharp differences are discernible in the spatial patterns as revealed in studies of guest houses, nature-based accommodation, time-share resorts, boutique hotels, second homes, backpacker hostels, Airbnb home stays as well as different types of hotels (Visser & Van Huyssteen, 1997, 1999; Rogerson, 2010, 2011a, 2011b; Pandy & Rogerson, 2013a, 2013b; Hay & Visser, 2014; Pandy & Rogerson, 2014a, 2014b; Rogerson & Rogerson, 2014; Greenberg & Rogerson, 2015; Hay & Hay, 2017; Visser et al., 2017). Beyond these different segments of commercial accommodation, there is a radically different geography of non-commercial accommodation services. This segment of non-commercial accommodation centres around the supply of home-based accommodation

to cohorts of (mainly) domestic low-income VFR travellers (Rogerson, 2017c, 2017d). In terms of the spatial structure of non-commercial accommodation, it includes destinations throughout South Africa, however, the relative importance of the former Homelands areas is noted as highly significant and distinctive (Rogerson, 2015b; 2017c).

TOURISM BEDNIGHTS IN SOUTH AFRICA

Estimates of the national picture regarding total bednights for South Africa are available in data sets provided by South African Tourism (2016) and Statistics South Africa (2015). In seeking to understand the spatial distribution of bednights, however, one must turn to analyse the IHS Global Insight data base. For 2016 the official estimates are that total bednights in South Africa were in the order of 192.2 million of which 103.4 million was accounted for by domestic tourism as compared to a total of 88.8 million by international visitors (including regional African tourists) (South African Tourism, 2016: 8). Of these totals of bednights, the data presented by South African Tourism indicates that only 17 percent of bednights were recorded for holiday purposes, 10 percent for business and 4.3 percent for other purposes, mainly for religion or medical tourism. The South African Tourism data show that overwhelmingly the largest share of bednights is accounted for by the category of Visiting, Friends and Relatives. It is indicated that of South Africa's national total of bednights in 2016 as much as 68.7 percent is represented by VFR tourism; of the category of domestic tourists it is revealed that as much as 74.3 percent of estimated bednights is accounted for by VFR travellers. The critical significance of this finding is that whilst a small segment of South African VFR tourists do use commercial accommodation services the vast majority of VFR is low-income (mainly Black) tourists who stay outside of commercial accommodation (Rogerson, 2017c, 2017d). Further data concerning accommodation usage by Statistics Africa for 2015 on domestic tourism indicates that as much as 70 percent of all trips in South Africa are taken in non-commercial accommodation (Statistics South Africa, 2015: 26).

What these national findings confirm is that in terms of total bednights the largest segment is recorded in non-commercial forms of accommodation because of the substantial weight of VFR travellers. The national picture of tourism bednights in South Africa is thus massively influenced by the overall patterns of VFR travel (Rogerson, 2015b). Indeed, as indexed by numbers of bednights, this finding points to the fact that the category of private homes is far more significant than either hotels, guest houses or bed and breakfasts in terms of the overall supply of accommodation services. Attention shifts now to examine the spatial distribution of bednights (Figure 1). Table 1 provides an analysis of the relative share of South Africa's leading centres as indexed by total bednights in 2001 and 2015. In terms of the geography of bednights in South Africa the national picture is dominated consistently by the country's leading metropolitan centres. In 2001 the eight metropolitan centres of Buffalo City, Cape Town, Ekurhuleni, eThekwini, Johannesburg, Mangaung, Nelson Mandela Bay and Tshwane accounted for 41.3 percent of national bednights. By 2015 the share of these eight centres had grown to 44.6 percent indicating a growing extent of spatial concentration. Outside of the metropolitan centres the two secondary cities of Polokwane and Mbombela are also leading national foci in terms of bednights. In looking at the differential performance of the ten leading centres it is noted that over the period 2001-2015 there occurs the relative strengthening of Cape Town, eThekwini, Tshwane, Polokwane, Mbombela, Mangaung and Buffalo City. In absolute terms, however, the rank order of destinations in terms of total bednights is unchanged with the dominance of Johannesburg followed by Cape Town, eThekwini, Tshwane and Ekurhuleni.

Table 2 provides a profile of the leading destinations as indexed by total domestic bednights for 2001-2015. In total the eight metropolitan centres accounted for 35.2 million or 37.7 percent domestic bednights in 2001.

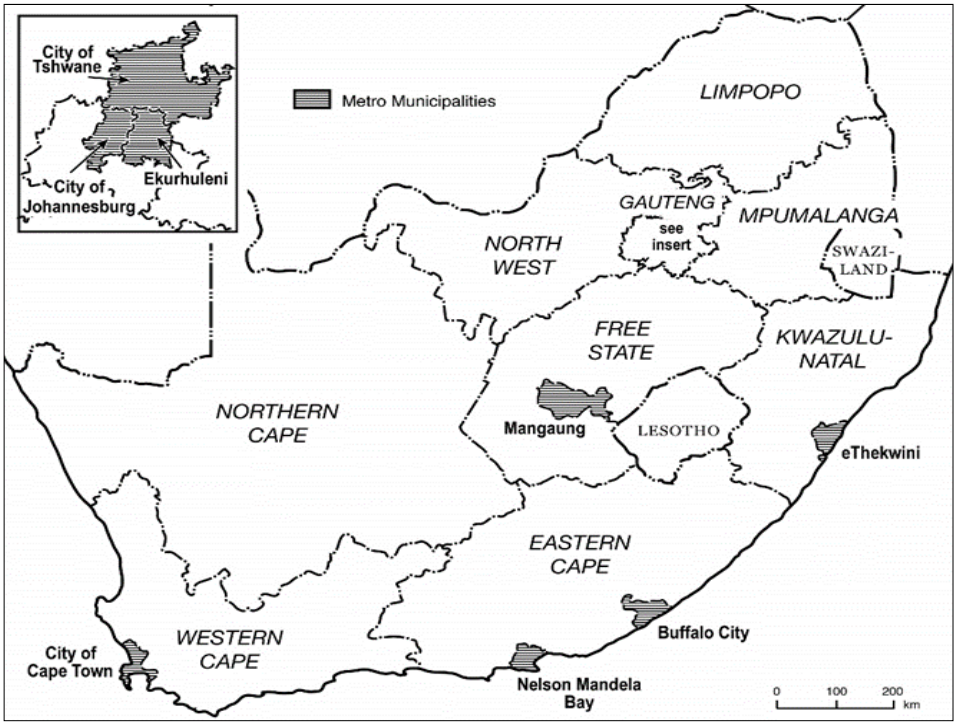

Figure 1. Location Map of South African Provinces and Major Metropolitan Centres

Table 1. Total Bednights: Leading Municipalities 2001-2015 (Data source: IHS Global Insight date)

Municipality	Settlement Type	2001 Share (%)	Total Bednights 2001	2015 Share (%)	Total Bednights 2015
Johannesburg	Metropolitan	9.7	12 494 319	9.5	16 224 055
Cape Town	Metropolitan	7.6	9 810 921	8.1	13 852 724
eThekwini	Metropolitan	7.3	9 431 579	7.8	13 365 580
Tshwane	Metropolitan	6.1	7 827 498	6.3	10 754 400
Ekurhuleni	Metropolitan	4.9	6 377 317	4.9	8 381 711
Polokwane	Secondary City	1.3	1 699 644	2.5	4 246 218
Mangaung	Metropolitan	2.1	2 762 400	2.3	3 954 844
Mbombela	Secondary City	1.6	2 122 240	2.3	3 947 834
Buffalo City	Metropolitan	1.1	1 378 842	1.9	3 263 610
Nelson Mandela Bay	Metropolitan	2.5	3 277 390	1.8	3 003 091

By 2015 the numbers of domestic bednights as a whole had expanded in metropolitan centres to 39.2 million but the relative share of the national total had been reduced to 36.9 percent. This suggests that non-metropolitan centres, such as secondary cities, small towns and rural areas, are taking up an increasing proportion of domestic bednights. The rise in significance of the two leading secondary cities – Polokwane and Mbombela - in terms of absolute growth and relative share of domestic bednights is evidenced on Table 2. Overall, in terms of domestic bednights by 2015 eThekwini was the leading individual destination in South Africa having surpassed Johannesburg which was the most significant destination in 2001. This change is accounted for, in part, by a restructuring of metropolitan boundaries which resulted in the incorporation into the eThekwini extended metropolitan area of substantial tracts of 'rural spaces' which are major zones for VFR travel. In addition, as a

whole, over recent years it has been shown there has been a recorded strengthening in the relative position of eThekwini as a domestic tourism destination (Rogerson, 2015a).

Table 2. Total Domestic Bednights: Leading Municipalities 2001-2015 (Data source: IHS Global Insight data)

Municipality	Settlement Type	2001 Share (%)	Total Bednights 2001	2015 Share (%)	Total Bednights 2015
eThekwini	Metropolitan	8.0	7 478 573	10.5	11 182 250
Johannesburg	Metropolitan	8.2	7 683 756	6.2	6 644 309
Cape Town	Metropolitan	5.9	5 528 347	5.9	6 277 310
Tshwane	Metropolitan	5.1	4 764 480	4.6	4 951 339
Polokwane	Secondary City	1.6	1 546 831	3.6	3 860 370
Ekurhuleni	Metropolitan	4.2	3 906 623	3.1	3 329 054
Buffalo City	Metropolitan	1.2	1 099 433	2.8	2 954 497
Nelson Mandela Bay	Metropolitan	3.0	2 750 757	2.4	2 399 204
Mbombela	Secondary City	1.3	1 240 958	2.1	2 219 242
Mangaung	Metropolitan	2.1	1 993 016	1.4	1 467 116

Table 3. Total International Bednights: Leading Municipalities 2001-2015 (Data source: IHS Global Insight data)

Municipality	Settlement Type	2001 Share (%)	Total Bednights 2001	2015 Share (%)	Total Bednights 2015
Johannesburg	Metropolitan	13.4	4 810 562	14.9	9 579 746
Cape Town	Metropolitan	11.9	4 282 575	11.8	7 575 415
Tshwane	Metropolitan	8.5	3 063 018	9.0	5 803 061
Ekurhuleni	Metropolitan	6.9	2 470 694	7.8	5 052 657
Mangaung	Metropolitan	2.1	769 384	3.9	2 487 728
eThekwini	Metropolitan	5.4	1 953 006	3.3	2 183 329
Mbombela	Secondary City	2.4	881 282	2.7	1 728 592
Matjhabeng	Secondary City	0.6	228 234	1.6	1 031 812
Mogale City	Secondary City	1.7	616 451	1.5	959 590
Nkomazi	Small Town/Rural Area	1.0	337 520	1.4	915 938

On Table 3 is represented the unpacking of bednight data for international visitors. At the outset in terms of interpreting Table 3 it must be understood that the numbers of international bednights is substantially influenced by the significance of regional African visitors who represent almost 80 percent of all South Africa's cohort of international tourists (Rogerson, 2017a). It is evident that the distribution of international bednights is far more concentrated than for domestic bednights. Metropolitan dominance is reflected once again in the fact that the leading six metropolitan centres account for 48.2 percent of all international bednights in 2001 and as much as 50. 7 percent by 2015. The total international bednights in these six leading metropolitan destinations – Johannesburg, Cape Town, Tshwane, Ekurhuleni, Mangaung and eThekwini - expands by more than double from 14.6 million in 2001 to 30.5 million bednights by 2015. For international bednights the three Gauteng metropolitan areas of Johannesburg, Tshwane and Ekurhuleni – emerge strongly because of the high flows of regional African visitors many of them informal business travellers engaged in cross-border shopping (Rogerson, 2018). The city of Cape Town, however, records the second largest numbers of international bednights as South Africa's most iconic destination for long haul international tourists from Europe, North America, Asia or Australasia. Beyond the leading six metropolitan centres one observes for international bednights the significance of Mbombela, the gateway to Kruger National Park, Matjhabeng which receives large numbers of visitors from Lesotho, Mogale City in Gauteng a focal point for attracting regional African visitors, and Nkomazi which is a local municipality that is a borderland for both Swaziland and Mozambique and thus

receives substantial flows of cross-border visitors. Overall, as compared to the patterns of domestic bednights one observes in respect of the metropolitan centres the reduced importance of the three coastal cities of eThekwini, Buffalo City and Nelson Mandela Bay.

Table 4. South Africa's Metropolitan Municipalities (2011 boundaries): Locational Quotients for Domestic and International Bednights, 2001 and 2015 (Data source: IHS Global Insight data)

	Domestic 2001	**Domestic 2015**	**International 2001**	**International 2015**
Cape Town	0.78	0.72	1.49	1.22
eThekwini	1.09	1.34	0.63	0.37
Ekurhuleni	0.84	0.63	1.68	1.80
Johannesburg	0.85	0.65	1.68	1.78
Nelson Mandela Bay	1.16	1.28	0.55	0.55
Tshwane	0.84	0.73	1.73	1.62
Mangaung	0.99	0.59	1.02	1.66
Buffalo City	1.10	1.45	0.71	0.25

Finally, in terms of examining tourism bednights in South Africa as differentiated by international and domestic origin Tables 4 and 5 present the calculation of location quotients for respectively the eight metropolitan areas (Table 4) and for outside the metropolitan areas in South Africa's 44 District Municipalities. Using the available bednight information these location quotients for 2001 and 2015 provide an index of the relative importance of areas for domestic as opposed to international visitors. An index score of >1.0 signifies a relative concentration as compared to the national profile; a location quotient score of <1.0 correspondingly is indicative of the fact that particular types of visitors are relatively under-represented as compared to the national total. Several key points emerge from Tables 4 and 5. First, in terms of the metropolitan areas, the analysis highlights the differential importance of domestic as opposed to international tourism in different metropolitan centres. The location quotients reveal evidence that Cape Town, Johannesburg, Ekurhuleni, Tshwane and Mangaung are relatively 'over-represented' and thus concentrated in terms of international bednights. By contrast, the three coastal centres of eThekwini, Nelson Mandela Bay and Buffalo City emerge as dominant for domestic bednights. Second, in terms of the analysis of the district municipalities an uneven geographical pattern emerges. In terms of international tourism the districts that emerge as 'over-represented' are clustered in particular regions of South Africa. It is evident that all the districts in Western Cape, which is popular for long haul tourists, exhibit the relative dominance for international tourism and corresponding relative weakness for domestic tourism. Likewise, the cluster of district municipalities which are borderlands exhibit high scores for international tourism, albeit in the cases of Free State, Limpopo and Kwa-Zulu Natal this is on the basis of regional visitors from Lesotho, Swaziland, Zimbabwe or Mozambique rather than longhaul from Europe, North America or Asia.

Three, the sparsely settled and remote areas of the Northern Cape province record high scores which reflect the relative strength of domestic tourism and the minimal growth of international tourism. This said, the group of district municipalities which record the highest location quotient scores for domestic tourism correspond closely to the areas delimited and defined under apartheid as the former Homelands. These areas are major areas for outmigration, translocal households and for the occurrence of VFR travel (Rogerson, 2017c). Overall, the character of the tourism economy in most of these areas is of the overwhelming dominance of domestic VFR travellers and most importantly of a non-commercial accommodation sector. In the former Homelands areas the commercial accommodation services sector – in terms of hotels, bed and breakfasts or guest houses – is sparse because of the limited market demand from (almost exclusively Black) low income VFR travellers.

Table 5. South Africa's District Municipalities: Location Quotients for Domestic and International Bednights, 2001 and 2015 (Data source: IHS Global Insight data)

Province	District Municipality	Domestic 2001	Domestic 2015	International 2001	International 2015
Western Cape	West Coast	0.88	0.88	1.29	1.19
Western Cape	Cape Winelands	0.85	0.71	1.37	1.47
Western Cape	Overberg	0.95	0.86	1.10	1.22
Western Cape	Eden	0.79	0.57	1.52	1.69
Western Cape	Central Karoo	0.99	0.80	1.01	1.32
Eastern Cape	Cacadu	0.96	1.22	1.08	0.62
Eastern Cape	Amatole	1.15	1.37	0.59	0.37
Eastern Cape	Chris Hani	1.29	1.45	0.23	0.24
Eastern Cape	Joe Gqabi	1.01	1.32	0.98	0.46
Eastern Cape	O.R. Tambo	1.29	1.45	0.24	0.25
Eastern Cape	Alfred Nzo	1.31	1.48	0.19	0.20
Northern Cape	Namakwa	1.06	1.23	0.82	0.60
Northern Cape	Pixley ka Seme	1.13	1.16	0.64	0.73
Northern Cape	ZF Mgcawu	1.14	1.25	0.63	0.58
Northern Cape	Francis Baard	1.01	1.33	0.97	0.45
Northern Cape	John TaoloGaetsewe	1.16	1.45	0.58	0.25
Free State	Xhariep	0.90	0.67	1.24	1.54
Free State	Lejweleputswa	1.10	0.61	0.71	1.64
Free State	Thabo Mofutsanyane	0.80	0.60	1.50	1.64
Free State	Fezile Dabi	1.08	0.71	0.76	1.46
KwaZulu-Natal	Ugu	1.05	1.26	0.85	0.56
KwaZulu-Natal	uMgungundlovu	1.16	1.32	0.58	0.45
KwaZulu-Natal	Uthukela	1.18	1.29	0.51	0.50
KwaZulu-Natal	Umzinyathi	1.10	1.32	0.74	0.45
KwaZulu-Natal	Amajuba	1.15	1.42	0.59	0.30
KwaZulu-Natal	Zululand	1.20	1.38	0.46	0.36
KwaZulu-Natal	Umkhanyakude	0.97	1.13	1.05	0.77
KwaZulu-Natal	Uthungulu	1.06	1.28	0.84	0.53
KwaZulu-Natal	iLembe	1.14	1.28	0.63	0.52
KwaZulu-Natal	Sisonke	1.03	1.38	0.92	0.36
North-West	Bojanala	0.92	1.04	1.18	0.93
North-West	Ngaka Modiri Molema	1.26	1.26	0.31	0.55
North-West	Dr Ruth Segomotsi Mompati	1.28	1.38	0.27	0.36
North-West	Dr Kenneth Kaunda	0.96	1.12	1.10	0.78
Gauteng	Sedibeng	1.01	0.56	0.97	1.72
Gauteng	West Rand	0.76	0.59	1.61	1.67
Mpumalanga	Gert Sibande	0.95	1.13	1.12	0.78
Mpumalanga	Nkangala	0.92	1.02	1.19	0.95
Mpumalanga	Ehlanzeni	0.92	0.84	1.20	1.25
Limpopo	Mopani	1.22	1.27	0.42	0.54
Limpopo	Vhembe	1.14	1.18	0.61	0.68
Limpopo	Capricorn	1.29	1.44	0.22	0.25
Limpopo	Waterberg	1.04	1.18	0.88	0.68
Limpopo	Greater Sekhukhune	1.22	1.41	0.41	0.31

CONCLUSIONS

Destination planning at any scale of analysis – national, regional or local – can be improved by a better understanding of the spatially differentiated character of the tourism economy. In this paper an analysis was done of tourist bednights which

includes both commercial and non-commercial accommodation services. Under examination was the geographical patterns of bednights across South Africa. It was shown that in the South African case the national data points to the fact that the majority of bednights are in non-commercial forms of accommodation because of the large volume of tourism accounted by low-income VFR travellers most of whom do not use commercial accommodation services. The spatial distribution of bednights shows that the greatest share is accounted for in the country's largest metropolitan centres but that notable differences emerge in the balance between domestic and international bednights between the country's major cities. The patterns of domestic bednights are more spread than the concentrations revealed for international bednights. A highly distinctive feature of the geography of bednights in South Africa is the particularly strong pattern of dominance of domestic bednights in the tourism economy of the mainly rural former Homelands areas that were created under apartheid.

This is explained by the limited tourism economies of these areas which are massively weighted towards VFR travellers. These findings can inform local destination planning for tourism in South Africa as they provide a set of baseline information about the character of local tourism economies. Strategic tourism planning must triangulate these results about bednights with other fine-grained research about purpose of travel as well as information on local tourism spend patterns in destinations.

Aknowlegments

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TREKKING AND GEOTOURISM: A SYMBIOSIS IN CASE OF GOECHE LA TREK ROUTE OF WEST SIKKIM IN INDIA

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Abstract: With the aim to analyse how trekking and geotourism advances hand in hand, Goeche La trek route of Sikkim in Kanchenzongha National Park is selected for the present study. In order to understand the terrain realities, the application of the tools available in geoinformatics is made along with prolonged participant observation as trekkers in the field. Carrying capacity appears as a problem from increasing trekking activities particularly after the recognisition of the park as a world heritage site in the year 2016. This paper is an attempt to interprete the scope of diversification of its trekking activities from sustainability perspective.

Key words: Trekker, Terrain, Carrying Capacity, Heritage, Sustainablity

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INTRODUCTION

Trekking is nature sensitive in the sense that enjoying nature is most important motivation for the trekkers. Increase of trekking in any area leads to economic growth which is related to increases of income level and employment opportunities. Infrastructural growth and improvement in standard of living are also related to such development. Trekking status of an area depends on 5As i.e. status of attraction, accommodation, accessibility, amenities and administration. Trekking in high altitude is classified as one of the branches of adventure tourism since trekkers have to bear enormous risk during trek. One of the main features of contemporary tourism is the increasing segmentation of the demand, in terms of income, age, consumptions, habits, origin of the flows, educational levels, motivations, attitudes (Cappucci et al., 2015). With the development of geotourism, geosites and geomorphosites are among the important elements to enjoy, when people walk, hike or climb mountains (Serrano et al., 2011). It is a unique form of adventure tourism where travelers are ready to accept the limited

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infrastructure or totally undeveloped destination where they get the authentic experience on biodiversity aspects during walking in the nature. Geotourism has been documented as one of the strategies to support biodiversity conservation (Hakim, 2017). With such an integrated educative approach of combining biological and geological aspects, visitors may be motivated during trek to interact with the natural system and environment heritage (Forleo, 2017). For the trekkers, the mountainous countries could offer the natural beauties of mountain peaks, biodiversities of mountainous forests and the distinguishing geosites on the way. To ensure sustainable trekking, identification and characterization of geosites are however very much important, especially while planning an educational trail (Strba, 2015). It is vital to maintain simultaneously the landscape and cultural values (Marszalek, 2018).

Physical parameters such as slope, distance, elevation of trekking track, standard of trekking time and climatic condition of trekking corridor are closely related to trekkers' performances and satisfaction. For the convenience of the geotourisity, who are sensitive to earth and environmental dynamics, geology and geomorphology of the terrain could be presented in a simple and educational way so that knowledge on geoheritage conservation may impart to a wider audience at the same time (Miccadei, 2014). Walking time is vital for the trekkers to complete the whole trek from origin place to destination place and also returning back to origin place which should be preplanned before initiation a trek to provide sufficient scope to enjoy geosites. The relation between walking time and walking speed varies from segment to segment of the route depending on slope character and elevation of the mountain region. Another relevant issue is the carrying capacity for which data is required to confirm the trend in a continuum, the opposite ends of which are constitute by ecotourism and mass tourism (Cavuta, 2016).

A number of studies have been conducted worldwide on relation between trekking and mountain environment with application of the tools of geoinformatics. One of such study by Nepal and Nepal (2004) on Sagarmatha National Park is exemplary in relation to analysis on trail use intensity. For the vegetation characteristics of the study area in particular, i.e. Kanchenzongha Biosphere Reserve (KBR) with special reference to Yuksam-Dzonri- Goeche La trekking route, the contribution of Subba et al., (2016) is very much noteworthy. The study on Yuksam-Dzonri trekking corridor on habitat change by Chettri et al., (2005) represents the scenario of forest depletion in relation to decreasing bird diversity in the region. In the analysis, Singh et al., (2003) pointed out the increasing vulnerability of Rhododendron in the high altitude trekking corridor of Sikkim Himalaya. Controls on grazing and human interference have been identified as the remedies. Collection of firewood for coocking and heating purposes along the trek route has been previously identified as the root cause of forest depletion in the trekking corridor by Chetri et al., (2001) while Rai et al., (1998) already highlighted trail sight erosion as a result of trampling by trekkers and grazing activities of animals. While walking on human interference in the ecologically fragile areas, Kumari et al., (2010) introduced site specific criteria, which are useful in the study of environmental impacts on the trekking route concerned. Examination of available literatures reveals a research gap on application scope of geotourism and geoconservation in the trekking corridor in relation to present status of forest depletion and biodiversity loss. The broad objectives of the study undertaken are as follows:

i. To evaluate the physical and topographical characteristics of trekking route from geotourism perspectives.

ii. To enumerate of depletion of forest along the trek route with a view to its impacts on geosites and geomorphosites.

iii. To examine the overall sustainability status of trekkers activities in relation to existing geo-conservation strategies.

SELECTION OF THE STUDY AREA

Yuksam to Goeche La trekking corridor of West Sikkim District (Figure 1) is situated in the Kanchenzongha National Park (KNP), which is famous for its rich biodiversity and designated as Kanchenzongha Biosphere Reserve (KBR). The total length of this trekking route from Yuksam to Goeche La (via Dzonri view point) is about 44 Km. It is administratively under the jurisdiction of West Sikkim District of a tiny north eastern state of India called Sikkim. As a hilly district situated in the western side of a Himalayan state, West Sikkim is famous as a trekkers' paradise. Latitudinal and longitudinal extension of West Sikkim District is 27°00' N to 27°45' N and 88°00' E to 88°24' E Sharing international border in the west with Nepal,worldwide famous for trekking activities. In West Sikkim, Yuksam, Uttaray and Hiley are serving as the gateway of respective trekking corridors.

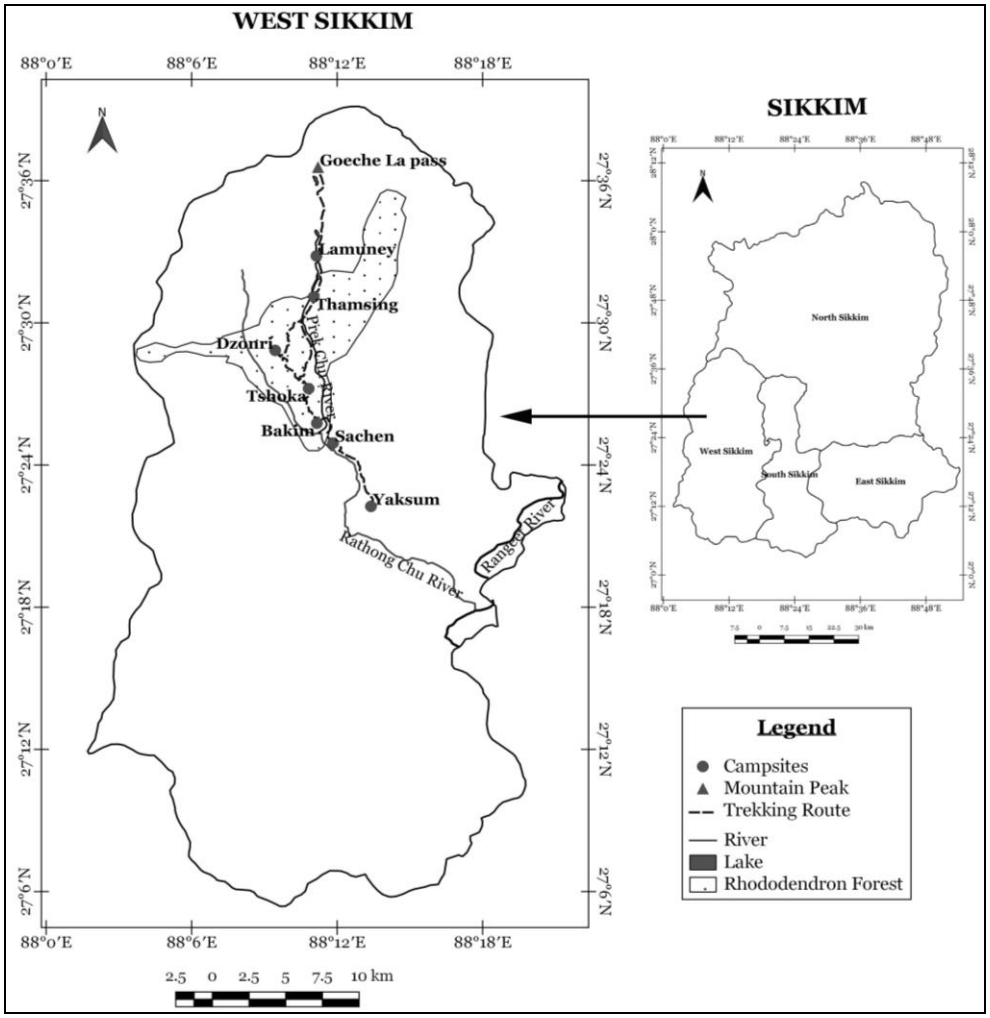

Figure 1. Location map of the study area

Yuksam is the initiation point of Yuksam to Goeche La trekking corridor which is about 150 Km. by road from NJP railway station of West Bengal. Yuksam is a small village which has historical signification. Yuksam was the capital of the first king of

Sikkim named Phutsoh Namgyal, also called Chogyal. The Katok Lake and Kaecheoplari Lake are the two holy lakes of Buddhists situated at Yuksam. Apart from lake, there are some old monasteries among which Dubdi monastery is the oldest monastery located of one hour walking distance from Yuksam (Rubita, 2012). The Goeche La trek route passes through the Kanchenzongha National Park and such trek is a package of eight days as elaborated in the itinerary (Table 1) mentioning the first six days to reach Goeche La, While return journey takes about two days.

Table 1. Segments of Trek Route to Goeche La (Data source: Field survey during trek, November,2017)

Day	Camp Sites	Altitude in Metres	Distance in Km.	Intermediate Halt Station	Trekkers' Attraction
1	Yaksum	1780	0	x	Lake, Monasteries
2	Sachen	2321	10	x	Forest
3	Tshoka	3566	9	Bakim	Cave
4	Dzonri	4007	6	Phedang, Deorali Top	Rhododendron Forest, Mountain Peaks
5	Thansing	3939	8	Kockchurang	Mountain Peak view, River side trek
6	Lamuney	4184	4	x	Mountain peak view

Kanchenzongha National Park is the main attraction of the trekking route, which extended from Lanhok valley. It is a cold desert to the ridges of Lachen in the North district of Sikkim. The western boundary of the park is international boundary sharing with Nepal and China. The total area of the park is 1784 sq. km, which absorb about 25.14% of total geographical area of Sikkim state. Only 18.32% area of the park is however situated in West Sikkim (Bhattacharya & Kumari, 2010). The exposure of garnetiferous-banded biotite gneiss or augen gneiss in this landslide prone area is representative of its geoheritage for the geotourists. Various types of Rhododendron species changing with altitudinal variations may attract the attention of the visitors. Rich biodiversities, panoramic view of mountains and valleys, holy lakes and monasteries, waterfalls, flower blooms, migrant birds and wild animals are drawing huge number of trekkers in this region which ari the carrying capacity issues simultaneously.

MATERIALS AND METHODS

The morphology developed on lithological formations have immense geotourism potentials (Gavrila, 2011; Gozner, 2014). The followings are among the most representative elements of topography in terms of geotourism at Goeche La trekking corridor:

1. Moraine (typological classification, characteristics, micro landforms attracting the trekkers)
2. Glacier Lake (Samiti Lake: formation hydrology, morphology, function)
3. Morphological features of river Prek Chu- Waterfall near Sachen, Cascade on the way of Kockchurang to Thansing.
4. Cold Desert topography beyond Goeche La pass drawing the geotourist.

The moraines are Quarternary deposits, the tentative age of which is ranging from recent to subrecent (Luitel et al., 2012). Geologically being a part of the lesser Himalayas the area is basically composed of Darjeeling gneiss of pre-cambrian origin (Geological Survey of India, 2012). Collapse of the glacio fluvial material particularly during the retreat of Onglaktang glacier resulted an outstanding geotourism landscape (Figure 2) near the camping ground at Thansing (Figure 3) which is next halt stations of Goeche La trek after Dzonri. Widespread rubbles and boulders strewn over a wide area down the valley attracts the attention of trekkers (Chattopadhyay, 2008). Such landscapes are

subjects of interpretation by glacial geomorphologists to serve the purpose of educative tourism, which is one of the objectives of geotourism promotion. Glacial lakes in higher altitude containing water are formed by melt water discharge from ice being accumulated in depressions (Figure 4) bounded by geomorphic features like terminal moraines.

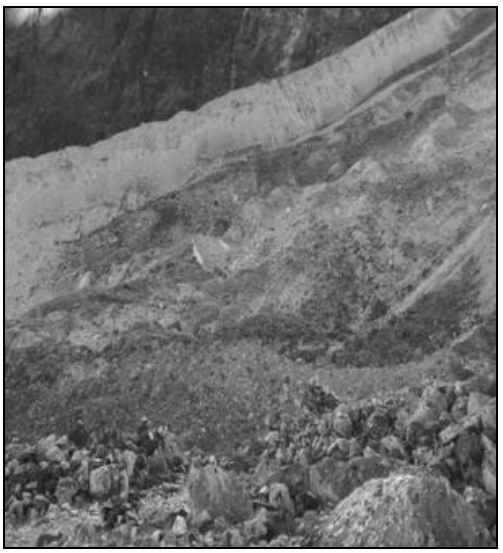

Figure 2. A Moraine Landscape

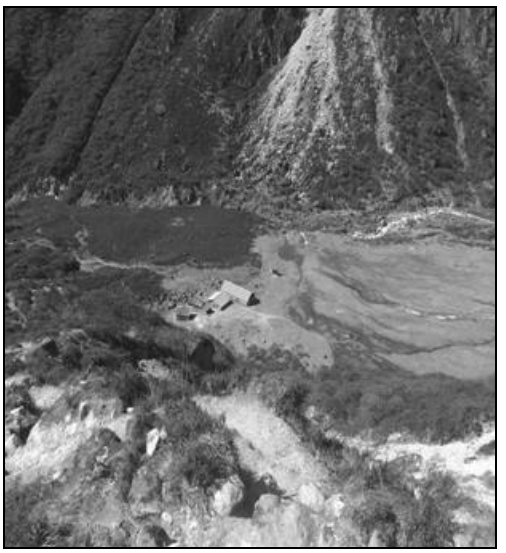

Figure 3. Campsite at Thangsing

Figure 4. Glacial Lake named Samiti

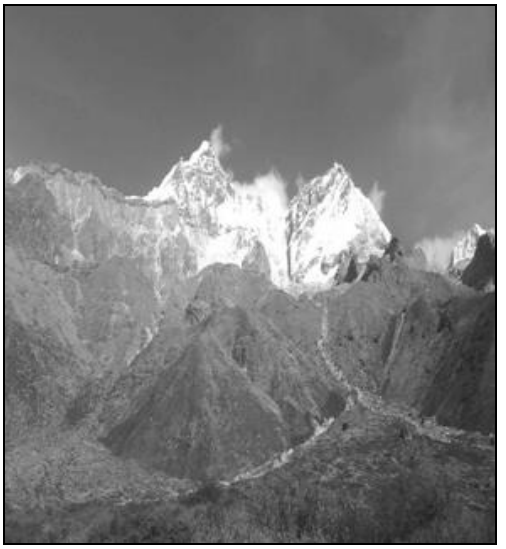

Figure 5. Topography as Gotourism Motivation

On the trek route, the lakes with no water in dry season are also found on scree and hillwash material deposit areas. The complex folded structure and varied lithology with exposure of older rocks compose the topography (Figure 5) of the region (Geological Survey of India, 2012). The waterfalls (Figure 6) and cascades (Figure 7) observed on the way are among the prominent evidences of tectonic activities characteristically frequent

in the region. Geomorphosites developed by the action of river Prek Chu (Figure 8) are the most regular object of photography as revealed from the analysis of photographs captured by the sampled trekkers in Goeche La trek route. The route passes through U-shaped glacial valley from Thansing (Figure 9), which is an outstanding experience for a geotourists. Prolonged engagement in the field is supplemented by persistent observation in credibility context to obtain the data on the impact of trekking on natural environment with special emphasis to geomorphosites. Triangulation is applied at source as well as on methods for the present study which relies both on primary and secondary data. Revisit to the field objects is applied as the method to achieve conformability, essential for reducing the extant of biases (Baxter et al., 1997).

Figure 6. Spectacular Waterfall

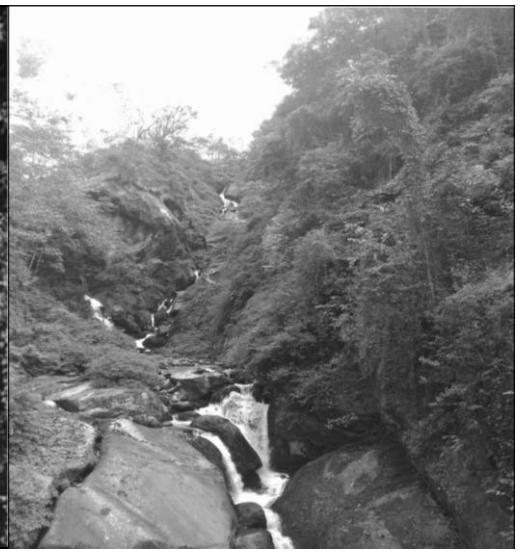

Figure 7. Amazing Cascade

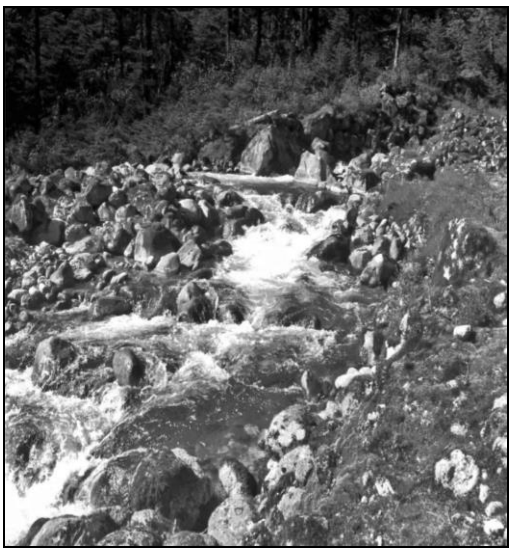

Figure 8. Riverine Geomorphosites

Figure 9. Typical Glacial Valley

The satellite images of the area have been procured from USGS Earth Explorer site. A number of layers have been generated by using district planning map, tourist map of Sikkim etc by the process of vectorization using QGIS software. The Digital Elevation Model (DEM) from Yuksam to Goeche La trekking route of West Sikkim district is created with 1:100000 scale. Data updation is completed by field survey using GPS Essential software of android mobile version application. Path analysis by using Google Earth software is applied to obtain DEM data in KML format. After generating DEM, the satellite images of band IV and V of LANDSAT-8 have been downloaded from USGS Earth Explorer. The equation of NDVI which is used in raster calculator is (Band V – Band –IV)/(Band-V+ Band IV). By using QGIS software, slope map and elevation maps have been prepared with the help of DEM data and raster analyze tool. The total length and average slope of trekking route, direction of slope, elevation of start and end point, highest point of the trekking route also have been enumerated using QGIS software by using Profile tool (Table 2). The relation between speed and walking time is found varying on the basis of the steepness of slope of the trekking route.

Table 2. Segment wise topographical character of the trail
(Data source: Image Analysis and GPS Survey undertaken during Field Work, 2017)

Trekking Segment	Track Length (km)	Starting Elevation (m)	Ending Elevation (m)	Maximum Elevation (m)
Yaksum to Sachen	10	1780.37	2321.65	2321.65
Sachen to Tshoka	9	2321.65	3544.13	3566.13
Tshoka to Dzonri	6	3544.13	4007.62	4043.65
Dzonri to Thansing	8	4007.62	3939.03	4104.44
Thansing to Lamuney	4	3939.03	4184.80	4188.26
Lamuney to Goeche La	7	4184.80	4961.83	5002.66

Questionnaires have been prepared which consisting direct and open ended questions to conduct the ethnographic surveys. Adventure tourism associates (like guides, yak operators, cook and porters), hotel and lodges operators and shopkeepers selling tea and other beverages were among the sampled respondents in the survey. Trekkers' survey and local people survey have also been conducted using structured questionnaire (Thomas, 2016). The participant observation method is undertaken by opting trekking opportunities from Yaksum to Goeche La with different group of trekkers before monsoon and after monsoon. Secondary data have been collected from different reports of publications. Data on trekkers have been derived from Yuksam Police Station as well as from some sampled hotels. A number of associations of trekkers have been consulted for triangulation of information derived from field and also for cross verification purpose. The nature of the whole work is empirical and ethnographic combining quantitative and qualitative methods.

RESULTS DISCUSSIONS

Trekkers' arrival rate in Yuksam to Goeche La trekking corridor in West Sikkim is increasing rapidly. Near about two thousand domestic and foreign trekkers visit the area in every month of trekking season in post monsoon period from mid October to December and pre monsoon during March to mid of June. Adventure lovers arrive Yuksam for trekking and experiencing simultaneously the beauties of nature and geomorphosites. Kanchenzongha National Park is already designated as a Biosphere Reserve in this region, which bears unique natural and cultural significance. Based on the elevation and topographic characteristics, the plant community of Kanchenzongha

National Park can be broadly categorized into wet temperate broad leaved forest, temperate conifer forest, sub-alpine forest, alpine scrub and alpine meadows (Subba et al., 2016). Climatic variation and different topographical landscape characteristics provide a diversity of Rhododendron species.

Annually the trekking corridor has to bear the activities of about 2000 travelers (from minimum 2 to maximum 16 per trekking group) and average 500 trainees of Himalayan Mountaineering Institute from Darjeeling. They are accompanied by nearly 300 supporting staff (including porters, cooks and guides depending on number of trekkers in each groups) in the trekking season generating enormous impact on mountain environment. The maximum impact is however generated from the movement of about 140 dozen yak per year along with horses. A sustainable plan is needed for preservation of nature in the region to minimize the adverse effect of trekking activities. Goeche La is specifically famous for trekkers because:

a. Various mountain peaks of Eastern Himalaya e.g. Kanchenzongha (8586m), Rathong (7349m), Kabaru (7353m), Pandim (6691m) and Jupano (5650m) are visible.
b. The beauty of Samiti lake which is the source of Prek Chu river.
c. Various types of Rhododendron species.
d. Migratory birds and animal view during trek.

Kanchenzongha National Park has been notified as a biosphere reserve in the year 2000 by Indian Ministry of Environment and Forest. It has an area of 2129 sq. km with altitudinal variation from Yuksam (1780m) to Mt. Kanchenzongha (8586m). The national park also listed in IUCN list as II type category of biosphere reserve (Dam, 2013). The slope of this area ranges from moderate to steep which make the route vulnerable to landslides depending on lithology and characteristics of the slope facets to be trekked to reach Goeche La pass (Figure 10). The table 3 represents the major landslides detected on various segments during the field work.

Table 3. Detection of Landslides along the Trek Route (Data source: Field Survey, Nov, 2017)

Trekking Segments	Number of Landslides	Remarks
Yaksum to Sachen	0	Low elevation zone, a stretch of 10 km., covered at an average speed of 2km./hr.
Sachen to Tshoka	3	This is transition of two hills between which Prek Chu river flows. Landslides are found on the slope descending to riverbed. No such slide on rising slope crossing the river is found due to gentle gradient of waning slope.
Tshoka to Dzonri	2	This is a zone of rectilinear slope and major landslides are on the trekking route itself bringing hazard for the trekkers'
Dzonri to Thansing	1	This is a downhill segment where the only significant landslide is found generated due to making way for the trekkers and particularly the Yaks accompanying them.
Thansing to Lamuney	0	Permanently frozen ground and the lithology of the area being responsible for no major landslide in this stretch.
Lamuney to Goeche La	0	Waxing slope of higher altitude which is much more stable.

Infrastructure and superstructure provided in Goeche La trek route is still at its juvenile stage. Trekkers have to be well-equiped with information generating instruments by their own because there is no intermediate provision to convey them on weather condition, vulnerability situation of slide prone areas or any other matters relevant to their requirements (Priskin, 2001). The elevation profile (Figure 11) of the trekking trail further reveals why most of the trekkers are compelled to back from

midway of trekking. This particular trek demands extreme body fitness of the trekkers. Initially the whole trekking programme from Yuksam to Goeche La and return to Yuksam requires eight days. After two days the trekkers reach above 3000m elevation zone and face difficulties due to paucity of oxygen and adverse weather condition.

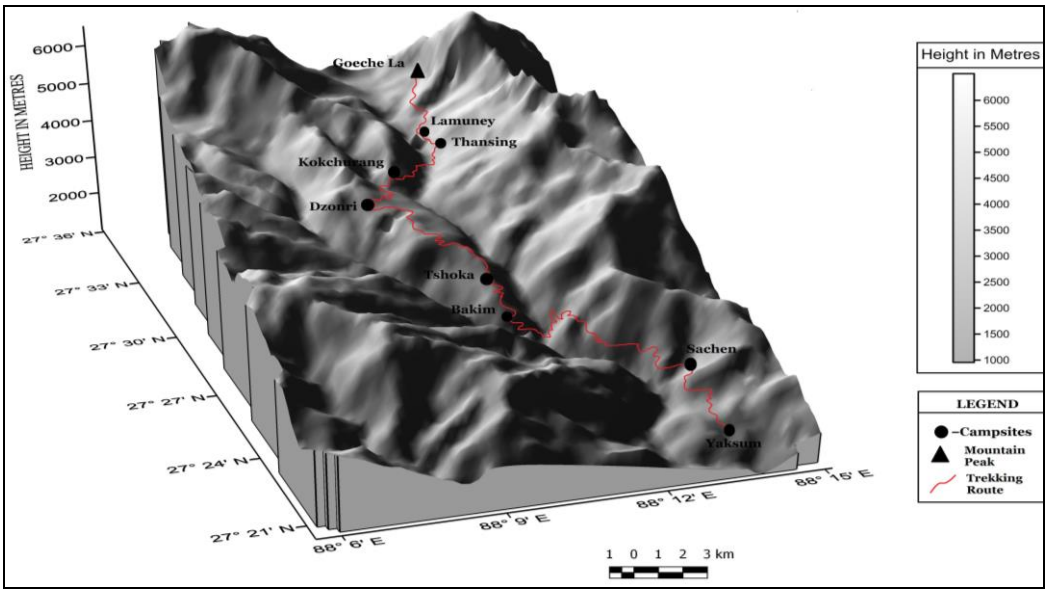

Figure 10. Digital Elevation Model representing terrain characteristics

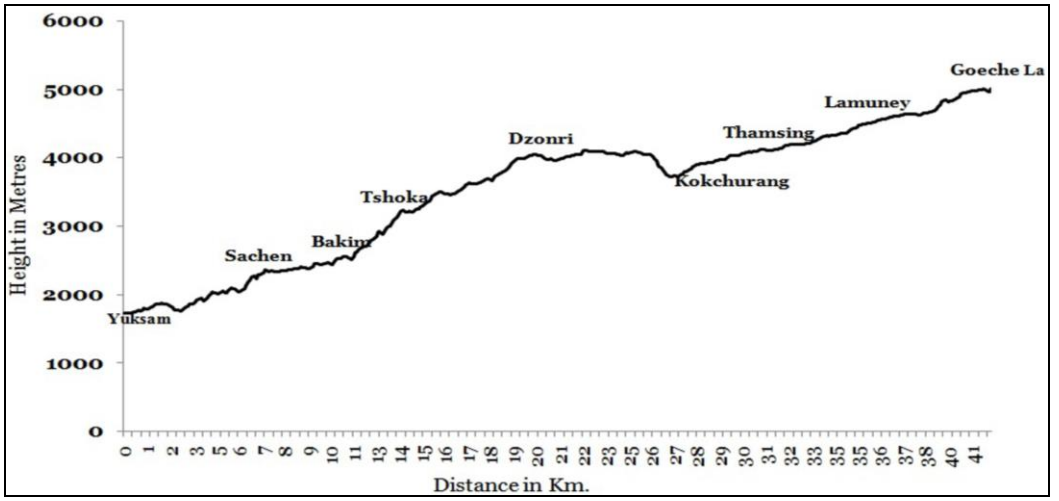

Figure 11. Elevation profile along the trek route from Yuksam to Goeche La

Trekking time also differ along this trekking corridor segment to segment due to the variation of slope and elevation of different segments of the trek (Table 4). Trekking segment of day-3 from Tshoka to Dzonri and day-6 from Lamuney to Goeche La are reported as more difficult segment of entire trekking schedule. Day -4 from Dzonri to Thansing and Day-7 from Kockchurang to Bakim are identified by trekkers as

moderately difficult in the whole trekking route. The trekking corridor has several campsite and location offering the exprience of amazing geosites and geomorphosites (Table 4). Each and every of such sites are none but the geotourism paradise.

Campsite infrastructure is not presently enough to earn trekkers' satisfaction. Lack of waste management planning in campsite not only pollutes environment but also arising health hazards. The trekking corridor is transferred into nearly a garbage bin. Geotourists are interested primarily in natural areas endowed with geomorphosites depending on factors like sensitivity,adapting ability and feedback capacity in the individual level (Irimus et al., 2011). So maintenance of environment around campsite is very important both for trekkers and geotourists. Five indicators were used to derive the satisfaction level of the trekking group surveyed on the campsite accommodation by using Likert 11 point scale (Table 5).

Table 4. Trekking speed as representative of terrain difficulties
(Data source: Participant Observation, 2017)

Day	Segment	Major geosites and geomorphosites on trek route	Trekking speed/ Day	Remarks
1	Yuksam to Sachen	Low height waterfalls	10	Generally 6 hours trekking. Slope ranging lies between from 10° to 20°.
2	Sachen to Tshoka	Waterfall, landslides	9	Easy trek upto Bakim. After Bakim slope gradually increases upto 30°.
3	Tshoka to Dzonri	Glacial lakes, conspicuous landslides	6	Moderate to difficult trek. Generally it takes 8 to 9 hours. Ascent of slope upto above 45°.
4	Dzonri to Thansing	Mountain peaks, Exposed rocks.	8	Moderate trek. It takes 7 hours with a decent mostly through scarp slope
5	Thansing to Lamuney	Sculptures made by Prek Chu river	4	Trekkers' starting trek after lunch. Easy trek. Slope is below 20°.
6	Lamuney to Goeche La	Glacial lake,moraine mountain peaks, and cold desert	7	Starting trek from camp at around 3.00 a.m. for watching sunrise view at Goeche La pass and returning back. Ascent of slope upto 40°.

Table 5. Trekkers' satisfaction survey outcomes (N=41) (Data source: Field Survey, 2017-2018)

Indicators	Level of Satifaction										
	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Overall accommodation status of Trekkers Hut			4	9	6	12	5	2	3		
Quality of furniture provided with			14	11	7	8	1				
Drinking Water						15	16	5	4	1	
Cooking Provision					11	20	5	6			
Quality of Latrine			10	5	11	11	4				

The influx of trekkers built up pressure on the rhododendron species (Chettri et al., 2005). Presence of components like polyphenols and flavonoids in the rhododendron wood are fireprone and thereby readily utilized by the trekkers for cooking and heating the camp. Out of 36 species of rhododendron 8 species are already declared endangered for the demand of firewood and trekking road construction (Singh et al., 2014). NDVI analysis of the trekking corridor reveals that density of forest considerably decreases in between 2014 and 2018. In Figure 12, an overlay is made to represent the change of land cover which is alarming indeed. Field investigation reveals the role of Yaks specifically for the forest depletion along the trek route.

In different terrains, the impact of grazing is more as the animals get more time to consume vegetation on their way. Highest species diversity is noticed between 3000 metres to 4000 metres which is extended from Tshoka to Dzonri trekking segment. The species availability decreases from above 4500 and 2500 metres downwards (Singh et al., 2003). A number of other factors are also found responsible for the depletion of forest in Yuksam -Goeche La trekking corridor including climate change and various anthropogenic activities (Singh et al., 2014).

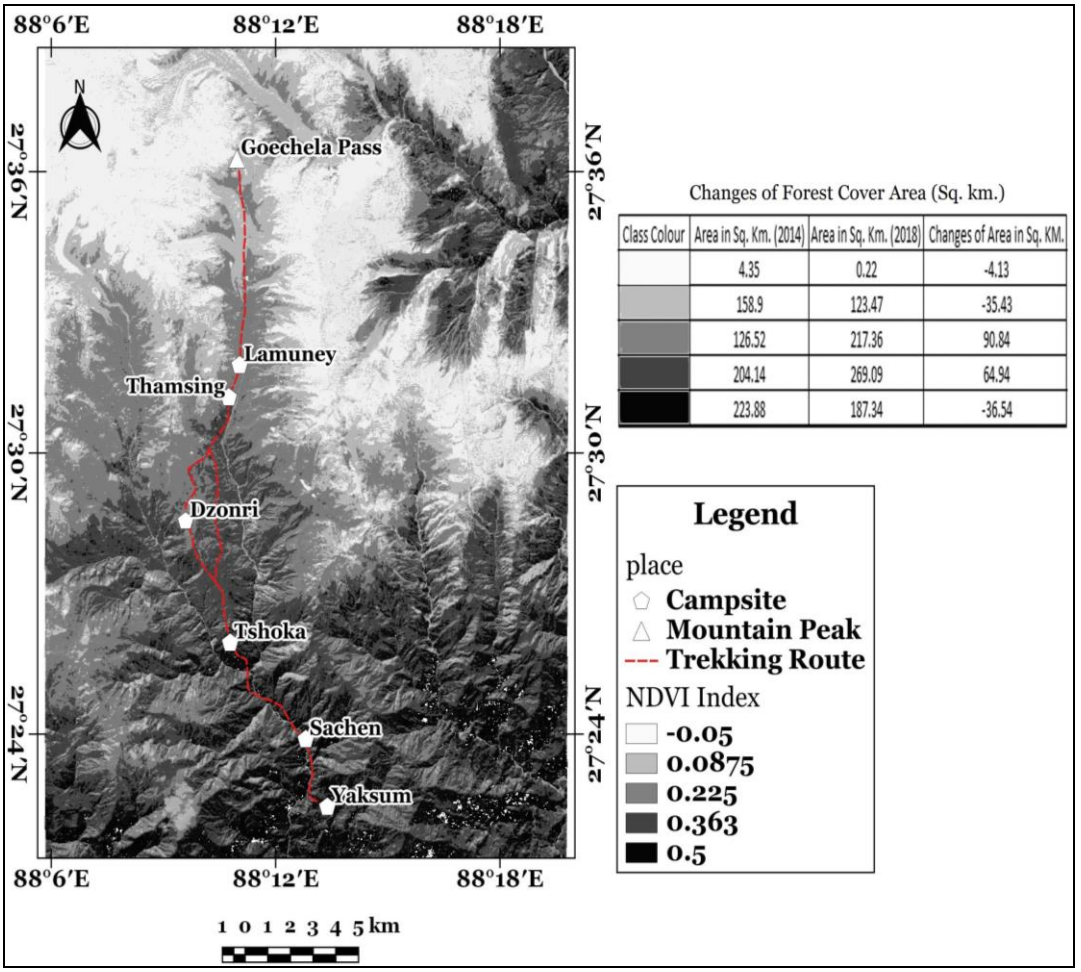

Figure 12. Overlay result of NDVI maps

CONCLUSION

From the symbiosis of trekking and geotourism at Goeche La, urgent need for geoconservation planning arises.Carrying capacity assessment is needed to enumerate the stress on environment for the increasing of trekking activities. Sustainable trekking development has become important strategic goal. The following are recommendations derived from field studies in this context:

a) detail documentation of prominent georelief locations (Zhensikbayeva, 2018) using the tools of geoinformatics.

b) development of sites with considerable geotourism values in terms of quality of geomorphosites.

c) permanent trekkers hut construction at suitable places on route with reference to carrying capacity analysis.

d) ensure community participation (Neto, 2003) at maximum extent to manage trekking and geotourism guiding on such sites.

e) sound disaster management plan to rescue the trekkers, if emergency arises.

The economy of Sikkim depends on trekkers' influx and their activities. Sikkim state is famous for mountain view of Himalaya and Alpine forest with Rhododendron species diversity. For such reasons there found large number of trekkers' influx in every year. The rapidly growths of trekkers' in the study area could be managed with the materialization of the recommendations put forwarded with divercification of their activities through geotourism promotion. Sustainable trekking strategies and techniques following the essential norms of geoconservation may lead to a healthy symbiosis of trekking and geotourism, essential for a backward area development.

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GEODIVERSITY AND GEOHERITAGE ASSESSMENT IN HULU LANGAT DISTRICT, SELANGOR, MALAYSIA

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Abstract: Assessment of valuable geological resources is critical in ensuring sustainable utilization of resources at geological sites for education, tourism, recreational and conservation purposes. This research aims to develop a comprehensive method of assessing heritage resources of geological sites based on four values, scientific, aesthetic, recreational and culture in Hulu Langat. The assessment method employed in this research utilised conservation geology approach in order to to establish criteria for the four values that incorperating knowledge of other discipline, namely ecology, history and economic. Specific weightage are given for each criterion in the four values, with an empahis on scientific significance. Based on the total score, each geological sites are classified into geofeature, geosite or geotop. Additional data consisting of basic info and environmental functions, support the classification of assessed geological sites. In Hulu Langat, it was found that most of the geological sites are geofeatures. However additional data obtained shows that they also already function as a recreational area or water catchment and located within forest reserve. Therefore, the geofeatures are proposed as sites for geotourism and as conservation area. The study also recognised the assessment method developed using gelogical landscape approach in this study be able to captured the intangible and tangible significant of the geological sites.

Keywords: assessment, geological site, geotourism, geodiversity, geoheritage

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INTRODUCTION

Heritage assessment of a geological site is a classification process of geological sources and natural landscape according to the importance of the heritage level. This assessment process has been used for more than a decade in Malaysia within the context of conservation geology to identify the intrinsic value of geological features and the heritage value of the site (Komoo, 2000; Komoo, 2003; Komoo & Md Desa, 1997; Sarman et al., 1999; Unjah, 2003). To produce an effective heritage assessment of a geological site, several value criteria must be considered, namely, scientific, aesthetic, recreational and cultural value criteria. The geological landscape concept (Komoo & Othman, 2001) and the scientific assessment criteria (Reynard et al., 2007; Rovere et al., 2010) are used as tools to assess the scientific aspect of a heritage site. With regard to the heritage assessment of a site based on the aesthetic, recreational and cultural aspects, the criteria are collated from a combination of various disciplines (Armenski et al., 2012; Brilha, 2016; Dwyer & Kim, 2003; Goffi, 2013; Kane, 1976; Leopold, 1969; Pereira et al., 2007; Vengesayi, 2003). Incorporating various concepts into conservation geology when conducting a heritage assessment of a geological site is necessary to achieve the sustainable use of natural resources in Malaysia.

The heritage assessment process must be conducted systematically to provide basic understanding and awareness of the importance of geological sites to the public around Hulu Langat District. The pivotal role of these sites in sustaining the natural processes of a geological site was the main issue that was accorded due attention. This idea followed the acknowledgment that a geological site is a crucial and concrete evidence of the formation and evolution of the earth's surface through the processes of rock formation, fossils and various landforms (Doyle et al., 1994). The landscape and geological features ascertained to have a high value were considered important assets for conserving permanent forest reserves (PFRs) for ecotourism, recreation and education (Leman et al., 2007). Furthermore, a geological site must be well preserved to ensure that the scientific value from the geological and geomorphological evolution process and the added advantage from the aesthetic, recreational and cultural values could be appreciated by not only the current but also the future generation.

The forest reserve area around Hulu Langat is a biodiversity habitat which mainly functions as a water catchment area supplying clean water to the residents around Klang Valley. This forest reserve can also be categorised as a recreational forest area which supports the local and national tourism industry, allocates a provision for setting up a natural recreational site, expands public amenities and increases public awareness of the significance of protecting nature (Hussein et al., 2013; Leman et al., 2007). The population growth and the rapid development of land use around Klang Valley resulted in increased demand on Hulu Langat's tourism sector. This progress has had a positive effect on the economy, especially on the tourism industry, but it had a negative effect on nature itself. As such, heritage assessment is needed to balance the use of the geological site in Hulu Langat between research, recreational tourism and conservation purposes. Beside, it is also important to address the relationship between geotourism with biodiversity and local people which seem to be lack among the existing research (Hakim & Soemarno, 2017). This research paper intends to examine the effectiveness of the heritage assessment method by using the conservation geology approach, which is a combination of the geological landscape concept and the concepts of various other disciplines (namely, biology, history and economy). The approach allowed the heritage assessment method to be employed in scientific and non-scientific aspects of research to determine the type of geological site which would eventually be used either for geotourism or conservation. To date, researchers remain unaware of the significance of a

large part of the geological site around the Hulu Langat District owing to the absence of a specific assessment of the results from the geological heritage evaluation conducted. The locality and heritage value of most geological sites have been identified (Zabidi et al., 2001). This effort protected not only the geological site but also the surrounding physical landscape and the people affected by unscrupulous and inadequate development.

RESEARCH LOCATION

Hulu Langat District (Figure 1) is situated southeast of the state of Selangor between Kuala Lumpur and Negeri Sembilan. Its coordinates are longitude 3.294292˚ and latitude 101.9012˚. The area is approximately 82,620 hectares, making it the fifth largest district in the state of Selangor. Hulu Langat's administrative borders encompass two local authorities, namely, the Ampang Jaya Municipal Council and the Kajang Municipal Council. With regard to the terrain of this locality, the geographical nature of the area has evolved. The landscape has undergone a crucial transformation; it was a lowland area initially before the formation of hills, which formed mountains over time. Igneous (volcanic and plutonic) and metamorphic rocks (Hawthornden Schist, Jelebu Schist, Kenny Hill Formation) are the main geological units that shape the landscape of the earth in Hulu Langat (Norhayati & Juhari, 2000). A total of 44.87 percent or 35,343.14 hectares of the area are composed of dipterocarp forest. A total of 31,109.84 hectares of the forest have been declared a Permanat Forest Reserve (PFR). The PFR consists of Sungai Lalang (17,027.77 hectares), Hulu Langat (13,843.52 hectares), Jerloh (203.62 hectares) and Batu Putih Selatan (34.93 hectars).

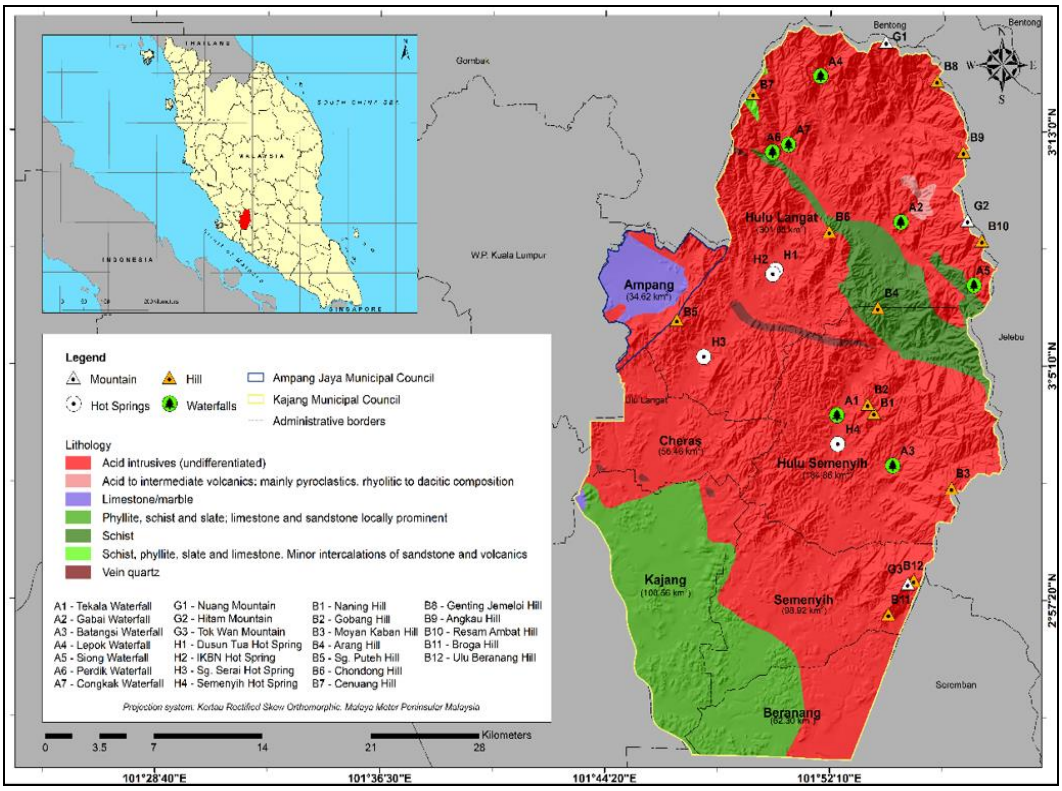

Figure 1. Map showing the location of an identified geological site locality in Hulu Langat District

ASSESSMENT METHOD

Current heritage assessment of a geological site

The current assessment process within the conservation geology context involved the classification of the geological heritage sources and the major landscape areas. This classification process was conducted according to the significance level of a site considering unique geological features and vital changes to the earth's surface. The method of assessment of geological heritage sites usually focuses on geological criteria detailing the importance of the use of scientific evaluation methods for conservation and management. The reason behind this emphasis was that the heritage assessment method was strongly influenced by the geodiversity aspect during the classification process. The various methods applied in the heritage assessment of a geological site were developed by researchers at the local and international levels (Komoo et al., 2001; Reynard et al., 2007; Sharples, 1993; Sharples, 2002). This assessment approach centred on the scientific aspect of the geological sources rather than the non-scientific factor. The geological heritage resources in Malaysia are divided into 6 geodiversity, namely, rock, mineral, fossil, primary structure, secondary structure and landform diversity. The framework for the heritage assessment of a geological site incorporated scientific, aesthetic, cultural and recreational value components (Komoo, 2000). The assessment method employed included qualitative and quantitative data obtained through field observation, analysis and interpretation of the various processes and critical geological and geomorphological features and phenomena of a certain site. Nevertheless, the focal point of the current assessment method was qualitative descriptive research, which chronicled geological and geomorphological processes and phenomena. Furthermore, an absence of a scoring system when interpreting the heritage value level of each geological site was noted.

Assessment based on the conservation geology approach

The review of the heritage assessment aspect of a geological site based on the conservation geology approach was conducted using both indirect and direct surveys. Indirect survey involved mapping the earth's surface (such as topography, aerial photographs, satellite images and geological maps) to identify the locality of a geological site. The mapping technique has its advantages because it allows a greater view of an area compared with a field survey. This technique assisted in obtaining a preliminary description of the earth's surface and the lithology of the area being researched prior to conducting a direct survey. The mapping of the geological heritage locality completed by a Zabidi et al. (2001) aided the process of distinguishing the geological site to be valued. A total of 26 geological sites were identified around Hulu Langat District and categorised according to landform diversity: waterfalls, hot springs, hills and mountains that have the potential to be transformed into a site for geotourism or for conservation.

Table 1. General information on geological sites (Data source: Komoo et al., 2004)

Part 1: General Information on Geological site		
Type of Geological site Mark the type of geological site (example: waterfall, hot springs, mountains etc.)	**Name of Geological site** Name of the geological site that has been identified	**Diversity code** Written as an acronym and in capital letters (example: BT-Batuan)
State code Refers to the state where the geological site is found (example: 10 – Selangor).	**District and Village** Write down the name of district and village where the geological site is found	**Coordinates** Latitude and longitude. A projection system on a national and international level.

On the basis of the data obtained from the indirect survey, four geological sites were chosen, namely, the Sungai Tekala and the Sungai Congkak waterfalls and the

Semenyih and Sungai Serai Hot Springs (Figure 2).A direct survey was conducted using the geological heritage source field assessment form. Geological site heritage assessment was performed by geologists and final-year geology students. The assessment form was divided into three parts: 1). general information of a geosite, 2). information on heritage characterisation and 3). information on the management of a geosite. Parts 1 and 3 (Tables 1 and 3) focused on explaining the general data and the management of a geological site on the basis of literature reviews and field observation. Alphanumeric data from both parts encompassed the type of geosite, the name of geosite, the diversity code, the state, district and administrative division code, coordinates, land use status and accessibility and development proposals. The data in this alphanumeric form were stored in a database using a geographical information system to enable spatial analysis (for example, classification and selection) of a geological site heritage assessment to be conducted with ease (Reynard et al., 2007; Reynard et al., 2016).

Figure 2 Image of four geological sites chosen for the study namely, the Sungai Serai Hot spring (a), Semenyih Hot Springs (b), Sungai Congkak (c) and Sungai Tekala (d) waterfalls

To conduct the heritage assessment of a geological site, the assessment component was consistently based on a set of scientific, aesthetic, recreational and cultural values (Komoo, 2000). With regard to Part 2, information about heritage characterisation was the criteria developed to conduct scientific, aesthetic, recreational and cultural assessment of a geological site (Table 2). The framework for the heritage assessment of a geological site was established based on the conservation geology approach, which incorporates criteria from various disciplines. Each value set was accorded a score between 1 and 5 (Rovere et al., 2010; Rovere et al., 2011).

Table 2. Heritage characterisation information for scientific, aesthetic, recreational and cultural criteria (Data source: Armenski et al., 2012; Brilha, 2016; Dwyer & Kim, 2003; Goffi, 2013; Komoo & Othman 2001; Kane, 1976; Leopold 1969; Pereira et al., 2007; Vengesayi, 2003)

Part 2: Heritage Characterisation Information	
Scientific Assessment Criteria	
General Landscape ▪ Mountains (peaks, ridges and plateau) ▪ Hill (peaks, ridges, plateau and rolling) ▪ Plain (alluvial, coastal) ▪ Island (individual, group) ▪ Waterfall (cascade, steep cascade, rapids, single fall, double fall and almost vertical fall) ▪ Hot springs	**Geological Terrain** ▪ Igneous (plutonic, volcanic and hypabyssal) ▪ Metamorphic (massive, foliated) ▪ Sediment (clastic-massive, clastic-layered, carbonate, evaporates and unconsolidated)
Internal Process ▪ Lifting (plutonism, diapirism and isostatic adjustment) ▪ Compression (tectonic plate boundary) ▪ Wrenching rifting (tectonic plate boundary) ▪ Volcanism (eruption, flow)	**External Process** ▪ Weathering (physical, chemistry and biochemical) ▪ Erosion (glacier, water, wind, waves and biogenic) ▪ Deposition (slope, stream, lake, swamp, shallow marine and deep marine) ▪ Mass movement (fall, slide and flow) ▪ Extra-terrestrial (crater)
Temporal Evolution ▪ Geological age (Precambrian, Mesozoic, Tertiary and Quaternary) ▪ Maturity (old, mature and young) ▪ Types (static [fossil], active)	**Special Features** ▪ Structure ▪ Water quality ▪ Temperature ▪ pH ▪ Chemical contents ▪ Landform size
Aesthetic Assessment Criteria	
Viewpoint ▪ Different viewpoint ▪ Height (*various levels*) ▪ Distance in view ▪ Total viewpoints	**Main landform view** ▪ Placement (*no other landform*) ▪ Clear (*no obstruction*) ▪ Other environmental features (*natural/saturated builds*)
Panorama quality ▪ Environment (appeal to the ordinary) ▪ Appeal ▪ Uniqueness	**Presence of water resources and vegetation** ▪ Water colour ▪ Water cleanliness ▪ Water volume ▪ Forest ▪ Bush ▪ Water movement sound
Combinations of objects and colour variations ▪ Colour contra ▪ Natural colour ▪ Natural appearance ▪ Manmade appearance	**Human influence** ▪ Erosion ▪ Urbanisation rate ▪ Industrial area ▪ Draining place ▪ Presence of garbage
Proximity to the landforms ▪ Feel/touch the texture ▪ Warmth ▪ Coolness	**Composition and temporary factors** ▪ Comfortable ▪ Presence of shadow ▪ Presence of cloud ▪ Presence of wind ▪ Presence of animal sounds ▪ Presence of manmade sounds
Recreational Assessment Criteria	
Exposure	**Accessibility**

▪ Human activity (unrestricted recreation) ▪ Natural process (weathering and so on) ▪ Manmade disaster ▪ Natural disaster	▪ Road network (*high* accessibility) ▪ Small street (*not paved/tarred/trailed*) ▪ Main street (*paved/tarred*) ▪ Transportation (*bus, car and so on*)
Public facilities ▪ Information counter ▪ Carpark ▪ Public toilet ▪ Restaurant ▪ Signboards ▪ Resthouse	**Safety aspects** ▪ Near health centres ▪ Mobile health services ▪ Public safety ranger ▪ Warning signboards
Recreational appeal ▪ Trekking ▪ Climbing ▪ Camping ▪ Picnic ▪ Bathing/swimming ▪ Cycling ▪ Observing wildlife (birds and so on)	
Cultural Assessment Criteria	
Importance of religion ▪ Religious myth ▪ Religious site ▪ Local tradition	**Importance of history** ▪ Archaelogy site ▪ Prehistory ▪ Historical site ▪ Early settlement (Orang Asli Village, traditional village) ▪ Tourism site ▪ Agriculture
Importance of art and literature ▪ Art ▪ Carving (wood, stone and so on) ▪ Poems ▪ Folklore	

The explanation for each given score was based on the example recommended by researchers (Pereira et al., 2007; Reynard et al., 2007; Rovere et al., 2010; Rovere et al., 2011) and was adopted and modified within the assessment framework to be synchronised with the geological heritage source in Hulu Langat. The scientific value was an aspect that could be directly identified by geologists and geomorphologists (Table 4). On the other hand, the non-scientific values (namely, aesthetics, recreational and cultural) referred to various other disciplines from the geological field (Table 5). The conducted assessment was based on bibliographical data and simple criteria (Reynard et al., 2007) obtained from various non-scientific concepts. Although the main focus was the scientific value of a geological site, the non-scientific element was crucial in highlighting the relationship between the geological landscape (scientific) and the aesthetic, recreational and cultural aspects of the site itself.

Table 3. Information regarding geosite management (Data source: Komoo et al., 2004)

Part 3: Geosite Management Information		
Land Use Status Mark the current land use status for local geological sites (example: permanent forest reserve and so on)	**Intuitive** Mark the accessibility level to the geological site locality (example: high, low and moderate)	**Development Proposals** Mark the development proposals for the identified localities (example: reserve site and so on)

Table 4. Criteria for evaluation of scientific values that are adopted and modified
(Data source: Rovere et al., 2010, 2011)

	1	2	3	4	5
Integrity (INT)	Low conservation effects due to human activities and natural processes	Low conservation due to human activities	Destruction of the earth's surface occurs, but the landscape integrity is preserved	Conservation is good due to human intervention	Good conservation due to natural conditions
Representative ness (REP)	Moderate in explaining the process or formation of the earth	Good in explaining the process or formation of the earth	Reference site (scientific reading) to describe the process or formation of the earth	Site is used as a reference to describe the process or formation of the earth	Outstanding and extraordinary site that is used to describe the process or formation of the earth carefully
Rareness (RAR)	Rarely found on a local scale	Rarely found on a state scale	Rarely found on a country – level scale	Rarely found on a regional scale (example: scale of Southeast Asia)	Rarely found on an international or global scale
Scientific Significance (ScS)	Important on a local scale	Important on a state scale	Important on a country-level scale	Important on a regional scale	Important on a global scale

Table 5. Criteria for evaluation of non-scientific values that are adopted and modified
(Data source: Reynard et al., 2007)

	1	2	3	4	5
Aesthetic (AES)	Moderate appeal in explaining the aesthetic aspects of human intervention	Good appeal in explaining aesthetic aspects due to natural processes	High appeal in explaining the aesthetic aspects in relation to natural and human processes	Aesthetic site is important in relation to the process and formation of the earth	Extraordinary and superior aesthetic site that shows the intrinsic value in the process and the formation of the earth
Recreation (REC)	Moderate in explaining recreational aspects	Good in explaining recreational aspects in connection with natural processes	High in explaining the recreation aspect as it relates to the natural and human processes	Recreational sites are important in relation to aspects of the process and the formation of the earth	Exceptional recreational sites that relate to aspects of the process and the formation of the earth
Cultural (CUL)	Moderate in explaining a cultural trait	Good in explaining cultural characteristics but not in relation to the shape of the earth	Sites that have insignificant cultural features in relation to the earth's terrain	Sites that have tangible cultural features in relation to the earth's terrain	Anthropic shaped terrain with high cultural relevance

RESULTS AND ANALYSIS OF ASSESSMENT

The assessment conducted on the four selected sites to determine the type of geological site in Hulu Langat produced scores with different values. The scientific assessment (Figure 3) score for the entire geological site was moderate compared with the recreational and aesthetic value scores, which were much higher than the cultural value

score. Although the scientific assessment score was moderate as a result of certain scientific significances (such as geological terrain, internal/external processes and special features), its rarity was common on a local scale. Nevertheless, the integrity of a geological site was still preserved, especially as a waterfall locality, because it is situated in Hulu Langat's PFR area, away from the settlement's saturated area. The recreational (Figure 5) and aesthetic (Figure 4) values recorded the highest assessment score, especially at the Tekala River and the Congkak River waterfall areas. These results were attributed to the good development and maintainance of the waterfall areas, which were designated as green recreational areas by the State Forestry Department in 1978 and 1992 and by Selangor Tourism in 2005, thereby ensuring that the aesthetic view of the rainforest was sustained. The high accessibility of the waterfall locality, which is situated close to the Sungai Lalang and Hulu Langat main road, was one of the factors for the high recreational and aesthetic value scores. However, the recreational and aesthetic assessment scores for the Sungai Serai and Semenyih Hot Springs locality were lower than the scores for the waterfall areas. Private land ownership and the location of the hot springs, which is in the vicinity of a settlement's saturated area and agricultural region, resulted in the lower scores for these two values.The cultural assessment (Figure 6) aspect projected the lowest score (below 1.5) for the overall geological site assessed. The low cultural value was caused by insufficient information and written evidence of history, religion, art and literature aspects that could be related to the locality of the geological site. The score obtained from the assessment was applied to determine the type of geological site (geofeatures, geosite and geotop) for geotourism and conservation (Table 7). The end result of the assessment on the four identified sites revealed that the locality of a geological site was at scales 1 and 2, which were only for geofeatures. The numerical assessment results or scores for the geological heritage site in this research are listed in Table 6.

Table 6. Scores for geological site heritage assessment according to diversity by using the geological conservation approach in Hulu Langat District, Selangor

Code	Name of Geological Site	Latitude/ Longitude	Scientific Score	Aesthetic Score	Recreational Score	Cultural Score	Total Score [SCI+ AES+REC+CUL/4]
BT/ST/ RB-10/A1	Sungai Tekala Waterfall	3°3'30.02"N 101°52'19.00"E	2.13	2.67	2.53	1.40	**2.18**
BT/RB-10/A7	Sungai Congkak Waterfall	3°12'32.18"N 101°50'36.67"E	2.15	2.80	2.99	1.32	**2.32**
ST/RB-10/H3	Sungai Serai Hot Springs	3°5'26.70"N 101°47'40.62"E	1.67	1.76	2.08	1.07	**1.65**
ST/RB-10/H4	Semenyih Hot Springs	3°2'32.37"N 101°52'20.47"E	1.74	1.75	1.91	1.14	**1.64**

Table 7. Geological site scales based on the criteria of the heritage assessment

Evaluation Criteria	Geological Site Scales				
Scientific (SCI) Aesthetics (AES) Recreation (REC) Cultural (CUL) [(SCI+AES+ REC+CUL)/4]	1	2	3	4	5
	Geofeature		Geosite		Geotope
	Low	Average	High		Very High
	Very common	Common	Uncommon	Rare	Outstanding Rare
	Contains useful scientific record that enhances knowledge and is suitable for research purposes	Contains important scientific record and suitable for education and research purposes	*Rare*. In terms of scientific record, special geological or landform features, significant occurrence or distribution, special ecological function or a combination of any of these.		*Unique*. In terms of scientific record and special geological features

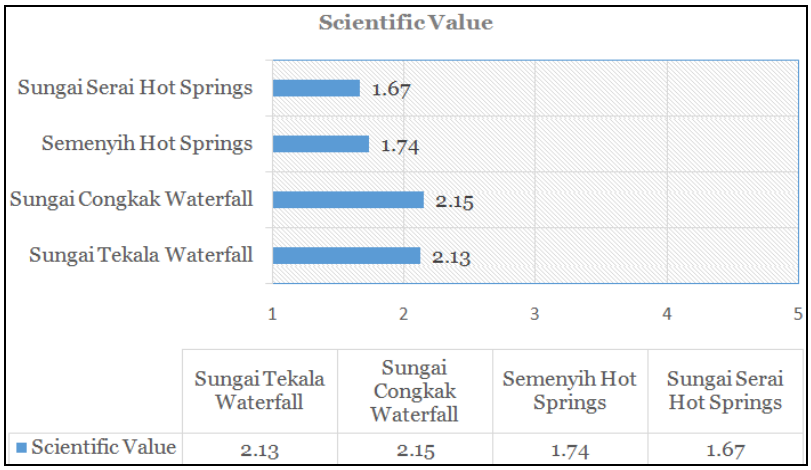

Figure 3. Scientific assessment value between four selected geological sites

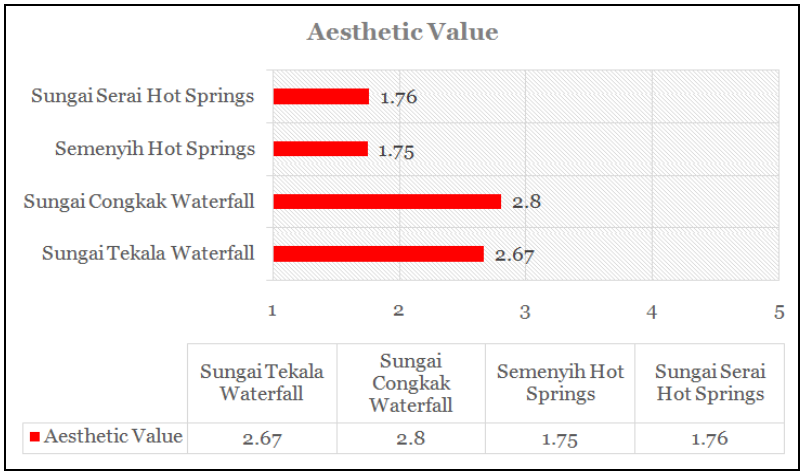

Figure 4. Aesthetic assessment value between four selected geological sites

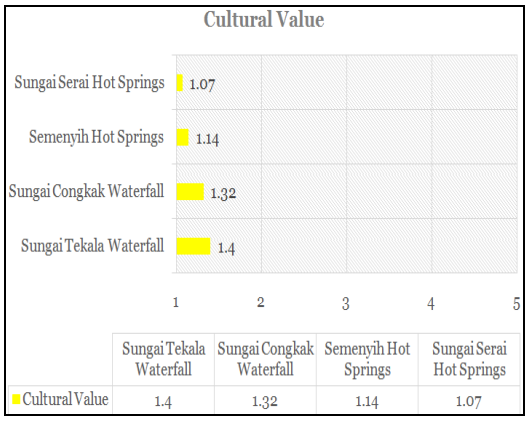

Figure 5. Recreation assessment value between four selected geological sites

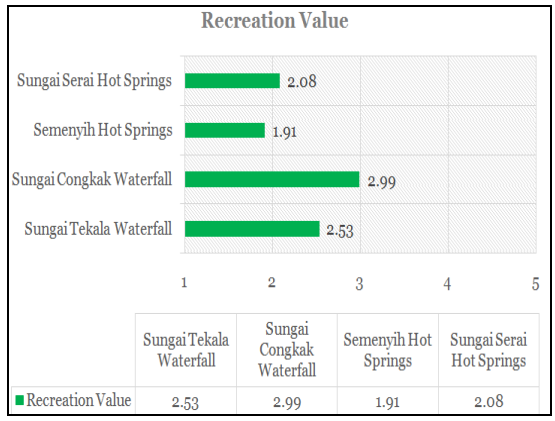

Figure 6. Cultural assessment value between four selected geological sites

CONCLUSION

The main focus of this research paper was to determine the method that is used to assess the geological heritage site in Hulu Langat for the purpose of geotourism or conservation. The development of a marking or scoring system based on the quantitative measurement of scientific, aesthetic, recreational and cultural values was used to test the validity of the heritage value by using the conservation geology approach. This approach was the result of the combination of the geological landscape concept with various other disciplines (such as biology, history and economy). The results of the assessment on the locality of the four sites chosen for this purpose show that these sites are suitable geofeature sites because each site possesses a scientific record that could increase public awareness and plays an important role in enhancing education and research portfolios. The high recreational and aesthetic values also increased their suitability for use as a geotourism site in addition to being conserved because of the importance of their ecological system. The other identified localities around the Hulu Langat area with waterfalls, hot springs, hills, mountains and dams are also major factors in determining the significance and the type of geological site to be allotted as sites for tourism, recreational or conservation purposes. The assessment of each of these sites was merely an approach in determining the importance of a particular geological site. Continued effort in conserving areas with valuable natural resources has to include all layers of society to allow the current and future generations to benefit from the fruitful results.

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MODEL OF LOCAL POPULATION PERCEPTION IN SUPPORTING COASTAL TOURISM DEVELOPMENT AND PLANNING IN BALI

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Abstract: The aims the research is to investigate the perception of local population about the benefits of personal received from the Coastal Tourism. This study also proves the effect of personal benefits on the support of coastal tourism development and planning in Bali. This research is a quantitative research and data were collected through distributing questionnaires to predefined respondents. Coastal Tourism had a positive impact and supported the development and planning of Coastal Tourism in Bali. The negative impact perceptions did not significantly affect on the Coastal Tourism development.

Key words: Personal Benefits, Development Support, Planning Support

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INTRODUCTION

Tourism is one sector of the economy in Bali, that has been proven to provide benefits both to the surrounding community, and to the government. Countries that have tourism potential have been vying to utilize the tourism sector to generate foreign exchange, because the tourism sector has more export dimensions. In addition, tourism is believed to in addition to generate foreign exchange (economic impact), can also cause socio-cultural and environmental impacts. Bali is one of the world famous tourist destinations that highlight the cultural tourism based on the Hindu religious pilot of Trihita Karana. Bali has a variety of tourism resources, namely Cultural Tourism, Coastal

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Tourism, Nature Tourism, Ecotourism, Agro Tourism, Convention Tour, Village Tour and more. The beginning of tourism in Bali is known by tourists, one of which is the beauty of beaches such as Kuta beach and Sanur beach. Bali has 10 very beautiful beaches, Coastal Tourisms, which are the target of domestic and foreign tourists visits, namely Tanjung Benoa Beach, Pandawa Beach, Dreamland Beach, Legian Beach, Nusa Dua Beach Bali, Sanur Beach, Tanah Lot Beach, Jimbaran Beach, Kuta Beach Bali and Lovina Beach.

The development of the Coastal Tourism should provide an opportunity for the community, especially for the local population to engage in tourism economic activities, thus improving their welfare. The involvement of the local people in tourism is indispensable because the local people are the major stakeholders in the development of tourism destinations (Hanafiah et al., 2013). Their perception is very important to evaluate the current situation of the destination (Cottrell & Vaske, 2006). Research on attitudes to local people in tourism development becomes an interesting topic for researchers, as there is a belief that local people will support tourism development if they receive a positive impact from tourism Pavlic et al., (2015).

Based on the above description, research on the perception of local population in supporting the development and planning of Coastal Tourism in Bali is very relevant. This study refers to Perdue et al., (1990, 1991) model, which has never been applied in Bali Coastal Tourism research. This research explores the perception of local population about whether the benefits of tourism can be received in their life in the area of Coastal Tourism. The study will also explore the extent of their support and involvement in Coastal Tourism development and planning. This research is supported by a team of researchers that have expertise in the field of tourism management so that it is expected to provide value to the stakeholders.Tourism is a complex industry, providing employment opportunities, sources of tax revenues and involves various economic activities. Tourism is an activity related to social, cultural, economic and environmental activities (Godfrey & Clarke, 2000; Ilieș & Ilieș, 2015).

Tourism has become a source of socio-economic change in many developing countries. Tourism is multi sector, and can be a mean of economic exchange, social and cultural benefits, and has many aspects and types (Mowforth & Munt, 2003). Tourism growth has a significant effect on economic benefits such as creating employment and additional income, in both host countries and countries of origin (Delibasic et al., 2008).

Tourism is an industry that has an environmental, social, cultural and economic impact. The phenomenon of tourism needs to get serious attention especially in planning, for proper decision making (Belisle & Hoy, 1980; Liu, & Var, 1986; Liu & Var; 1987; Sheldon & Var, 1984). The study generally recognizes that tourism has a positive impact but on the other hand, tourism also has negative impacts on social, environmental issues, such as congestion, crime, security issues and pollution (Kovács et al, 2013; Rogerson, 2018). There are several ways to categorize the impact of tourism. Kreag (2001) in his research book, the impact of tourism is divided into seven general categories of economic, environmental, social and cultural, noise and congestion, service, taxes and public attitudes (Archer & Cooper 1994).

Inskeep (1991) argues about the impact of tourism written in a book entitled Integrated Development and Sustainable Tourism Planning. The impact of tourism is separated into economic, political, socio-cultural, environmental and ecological impacts. The impact of tourism is broadly divided into two categories, namely economic and environmental impacts. However, the impacts of tourism are most often grouped into three categories, which are economic impacts, physical or environmental impacts, and social impacts (Ap & Crompton, 1998; 1992; Mathieson & Wall, 1982). Since 1970, many studies have analyzed the attitudes and perceptions of the community towards tourism

development. The studies initially investigated the positive impacts of the tourism economy and ultimately on the attitudes of local population and toward the other impacts of tourism. Pizam (1978) stated the importance of analyzing citizens' attitudes toward the negative impacts of tourism development as well as the need to provide a solid foundation for the development of high-quality tourism to satisfy both citizens and tourists alike. In the 1980s scientists continued to analyze the attitudes of society, to the economic and social, positive and negative impacts of tourism through the application of factor analysis with inadequate reliability performed by Belisle and Hoy (1980). Based on the THAID model, Brougham and Butler (1981) prove that the positive and negative effects of tourism do not have the same impact on all the locals.

They also found significant differences in the impact of tourism on the nature of the local population. Using the same methodology Sheldon & Var (1984) point out six key determinants for residents in North Wales: negative social impacts, economic income, visitor stereotypes, apartment purchases, cultural impacts and environmental impacts of tourism development. The personal benefits that local population receive from tourism activities are related to their support for development. Research on the personal benefits of tourism impact has been made in China by Yingzhi et al., (2014). In analyzing the impacts of tourism on the individual benefits of the local population, it was based on the exchange theory developed by George Homans in 1960. Social Exchange Theory is basically an individual rational behavior, both to gain respect and to avoid punishment. Social Exchange theory emphasizes the role and function of humanitarian and emotional needs in personal communication and social exchange process. Yingzhi et al., (2014) have found that there is a significant relationship between the perception of personal benefits and the impact of tourism in China. Personal benefits relate to the benefits of resources, environmental protection, participation in decision-making in tourism.

The local resident is the most essential determinant of the sustainability of tourism destinations. According to McKercher (2003), sustainable tourism development can be identified as four pillars, namely (1) sustainable economy, i.e. economic efforts to generate profits now and in the future, (2) sustainable ecology that is the harmonious development with the essence of ecological processes, 3) a sustainable culture is the development that improves the quality of life, harmonious with the culture and values as well as maintaining with the self-identity of the community and (4) sustainable society is development designed to provide economic benefits to the local population and to increase its material well-being. The four pillars indicating the development of sustainable tourism industry is an effort to balance the economic value derived by the tourism industry and the benefits gained by the local population, in the preservation of the environment and the preservation of socio-cultural values of local population.

In 1990 the interest for research in the field of tourism increased significantly. But there are different approaches and methodologies to identify the problem. Perdue et al., (1990) examined the model of the perception and impact of tourism as well as citizens' support for tourism development. The findings ware showed that as long as people enjoy the personal benefits of tourism development, they will support the tourism development policies. By applying the Social Exchange Theory, Ap (1992) analyzes the reasons for the positive and negative perceptions of the impact of tourism on the local population. The results of the study were found that as long as the exchange of resources between residents and tourists is high and balanced, then the impact of tourism will be positive from the perspective of the local population. Sook-Fun & May-Chiun (2105) in his research on the involvement of local people in sustainable rural tourism in Kuching, provide strong evidence that the importance of local involvement in the development of sustainable rural tourism. Research on the perception of local

populations will arouse the interest of tourism stakeholders about the importance of local people's involvement in achieving sustainable tourism development.

Community-based tourism development is development by involving local communities as key stakeholders (Manjula & Rinzing, 2014). However, in general, bottom-up planning concepts are usually implemented by top-down policy due to lack of awareness in some communities. Communities participating in planning to implementation levels are often catalyzed by external forces such as non-governmental organizations, incentives for local populations, and little exploration of what people think about their role in tourism development.

MATERIALS AND METHODS

This research uses a quantitative approach based on the principle of positivism. This study examines perceptions of the impact of tourism on local populations in support of Coastal Tourism development and planning. The conceptual framework in this study refers to the Perdue Model et al., (1990). In this study variable personal characteristics are not considered because it is assumed homogeneity level is relatively high. Based on previous research from Yingzhi et al., (2014) found that there is a significant relationship between the perception of personal benefits and the impact of tourism in China. Personal benefits relate to the benefits of resources, environmental protection, participation in decision making in tourism. Mello et al., (2015) found that the benefits of a person had a significant positive effect on the perception of the positive impact of tourism.

The benefits of personal positive impact and negative impact are able to predict the development support. Furthermore, it was found that the benefits of a person development support were able to predict planning support coastal tourism. From the above analysis can be formulated research hypothesis as follows: personal benefits have a positive and significant impact on the positive impacts and negative impacts of the Coastal Tourism; personal benefits have a positive and significant impact on Coastal Tourism development support; positive impacts and negative impacts have positive and significant impacts on Coastal Tourism development support; development support has a positive and significant impact on Coastal Tourism planning support.

The population in this study are local residents in 10 Coastal Tourism site in Bali, namely: Tanjung Benoa Beach, Pandawa Beach, Dreamland Beach, Legian Beach, Nusa Dua Beach Bali, Sanur Beach, Tanah Lot Beach, Jimbaran Beach, Kuta Beach Bali and Lovina Beach. The sample size is set according to the formula 5 to 10 times the number of research kostruk indicators. Based on the provisions of the formula, the sample size was determined to be 5 x 24 (number of indicators) = 96 rounded to 100. Sampling technique using Non Probability Sampling approach with purposive sampling technique. Data were collected by distributing questionnaires to respondents. Descriptive analysis is used to determine the characteristics of respondents and description of respondents' perceptions of research constructs. Hypothesis test using Structural Equation Modeling (SEM), with Partial Least Square (PLS) approach and Smart PLS version 3 software application program.

RESULTS DISCUSSIONS

Most of respondent's age spreads in the range of age 20 years to 30 years (54%), education respondents spread mostly at high school education level (59%). Most of the respondents' occupations (62%) are related to Coastal Tourism. In general, respondents give good perception to research construct. The research constructs are Personal Benefit (PER.BENF), Positive Impact (POS.IMP), Development Support (DEV. SUPP), and Planning Support (PLN.SUPP). However, on the other hand, the (NEG.IMP) did not

agree that Coastal Tourism has been resulted the negative impacts. This also means, the Coastal Tourism in their residence area provides personal benefits, positive impact, support the development and planning of Coastal Tourism in Bali. The result of analysis by using Smart-PLS3 program shows that all factor loading values > 0.60 with PV < 0.05, its means that all construct indicators in this research can be considered valid to meet the covergent validity criteria as shown in the following table 1.

Table 1. Outer Model (Data source: Output Smart-PLS3, 2018)

Variabel	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
X1.1=> PER.BENF	0,692	0,675	0,095	7,250	0,000
X1.2=> PER.BENF	0,647	0,627	0,113	5,742	0,000
X1.3=> PER.BENF	0,661	0,639	0,134	4,930	0,000
X1.4=> PER.BENF	0,710	0,700	0,082	8,676	0,000
X1.5=> PER.BENF	0,654	0,662	0,085	7,663	0,000
Y1.3=> POS.IMP	0,703	0,684	0,110	6,363	0,000
Y1.4=> POS.IMP	0,825	0,827	0,052	16,001	0,000
Y1.5=> POS.IMP	0,673	0,653	0,133	5,054	0,000
Y2.1=> NEG.IMP	0,624	0,614	0,141	4,438	0,000
Y2.2=> NEG.IMP	0,827	0,815	0,076	10,880	0,000
Y2.3=> NEG.IMP	0,838	0,826	0,075	11,237	0,000
Y2.5=> NEG.IMP	0,650	0,616	0,180	3,622	0,000
Y3.1=> DEV.SUPP	0,751	0,748	0,068	10,992	0,000
Y3.2=> DEV.SUPP	0,794	0,785	0,082	9,686	0,000
Y3.3=> DEV.SUPP	0,708	0,692	0,100	7,051	0,000
Y3.4=> DEV.SUPP	0,693	0,673	0,109	6,382	0,000
Y4.1=> PLN.SUPP	0,720	0,676	0,170	4,247	0,000
Y4.2=> PLN.SUPP	0,786	0,738	0,162	4,909	0,000
Y4.3=> PLN.SUPP	0,731	0,710	0,181	4,041	0, 000
Y4.4=> PLN.SUPP	0,703	0,638	0,215	3,276	0,001

Discriminant Validity Test

Discriminant Validity test shows (Table 2) that the square root value of AVE (0.738, 0.741, 0.673, 0.738, 0.736) is greater than the correlation of each construct. Thus indicating that the proposed model is no problem seen from discriminant validity.

Table 2. Cross Loading (Data source: Output Smart-PLS3, 2018)

Variable	Dev.Supp	Neg.Imp	Per.Benf	Pln.Supp	Pos.Imp
DEV.SUPP	0,738				
NEG.IMP	-0,150	0,741			
PER.BENF	0,365	-0,349	0,673		
PLN.SUPP	0,279	-0,303	0,519	0,738	
POS.IMP	0,405	-0,247	0,522	0,343	0,736

Inner Model Feasibility Test

Q-Square (Predictive Relevance)

Q-Square (Predictive Relevance) measures how well the observation value generated by the estimation model and its parameters. The Q-Square value> 0 indicates the model has good predictive relevance. Conversely, if Q-Square <0 indicates the model has poor predictive relevance. The Q-Square (Predictive Relevance) value can be calculated (Cottrell & Vaske, 2006) as follows:

$Q^2 = 1- (1-R^2_1) (1-R^2_2) (1-R^2_3) (1-R^2_4)$
$Q^2 = 1- (1- 0,197) (1-0,122) (1-0,078) (1-0,272)$
$Q^2 = 1- (0,803) (0,878) (0,922) (0,728)$
$Q^2 = 1 – 0,47 = 0,53$ atau 53 %

Based on the calculation of the Q-square is 0.53 or 53% which can be interpreted that the model has a very good observation value. This means that 53% of the relationships between constructs can be explained by the model, and the remainder is influenced by the constructs not examined in this study. The last one is to find the value of Goodness of Fit (GoF) which must be calculated manually (Cottrell & Vaske, 2006) as follows:

$GoF = \sqrt{AVE} \times R^2$
$GoF = \sqrt{} 0,659 \times 0,167 = 0,33$

According to Tenenhaus (2004), GoF small value = 0.1, GoF medium = 0.25 and large GoF = 0.38. From the results of the calculation of GoF, which obtained the numbers of 0.38 (medium-strong) and Q2 by 53% gives an indication that the quality of research models eligible forwarded for the phase of hypothesis testing.

Specific Indirect Effects

This analysis aims to determine the significance of indirect relations between variables.

Table 3. Specific Indirect Effects (Data source: Data processed, 2018)

Variable	Original Sample	Sample Mean	STDV	T-Value	P-Value
PER.BENF => NEG.IMP => DEV.SUPP.	0,002	0,002	0,047	0,033	0,974
PER.BENF => POS.IMP => DEV.SUPP.	0,153	0,165	0,070	2.178	0,030
PER.BENF => NEG.IMP => DEV.SUPP => PLN.SUPP	0,000	0,001	0,016	0,027	0,979
PER.BENF => DEV.SUPP => PLN.SUPP.	0,059	0,075	0,049	1,209	0,227
PER.BENF => POS.IMP => DEV.SUPP => PLN.SUPP	0,043	0,054	0,030	1,445	0,149

Teble 3 shows that there is only one significant indirect relationship that is significant: Personnel Benefit => Positive Impact => Development Support where P-Value 0.030 <0.05. Thus it can be stated that the Positive Impact construct fully mediates the relationship between Personnal Benefit and Development Support.

Hypothesis testing

The results of the analysis show that two hypotheses were rejected are the influence of Negative Impact on Development Support and the influence of Personal Benefit on Development Support. While four hypothesis were accepted that is the influence of Development Support on Planning Support, the influence of Personal Benefit on Negative Impact, the influence of Personal Benefit on Positive Impact and Positive Impact influence on Development Support. Through the bootstraping process in Smart PLS program 3, the hypothesis test can be seen in Table 4.

The research results showed that the personal benefits have a strong influence on the positive impact of coastal tourism development. The relationship means, the greater the private benefit received by the local population, the greater the positive impact felt by the local population from the development of the Coastal Tourism. The research results showed that the Personal Benefits do not significantly affect the support of coastal tourism development. This relationship means that the increased personal benefits received by local residents are not followed significantly by the increased support of coastal tourism development (Kuqi, 2018).

Tabel 4. Path Coefficient Sumber: Output Smart-PLS.3, 2018

Variable Relationships	Original Sample (O)	Sample Mean (M)	Standard Deviation(STDEV)	T Statistics (|O/STDEV|)	P Values
Development Support=>Planning Support	0,279	0,327	0,095	2,928	0,004
Negative Impact =>Development Support	-0,004	-0,002	0,128	0,035	0,972
Personnel Benefit =>Development Support	0,211	0,225	0,117	1,796	0,073
Personnel Benefit =>Negative Impact	-0,349	-0,369	0,091	3,829	0,000
Personnel Benefit =>Positive Impact	0,522	0,550	0,065	8,085	0,000
Positive Impact=.>Development Support	0,294	0,298	0,120	2,448	0,015

The Personal Benefits do not affect significantly the support of coastal tourism development in Bali. This relationship means that the increased personal benefits received by local residents are not followed significantly by the increasing support of coastal tourism development (Ilieş & Ilieş, 2015). The positive impact of coastal tourism development has a significant effect on the support of coastal tourism development in Bali. The higher the positive impact of Coastal Tourism, the higher is the support of development of Coastal Tourism in Bali.The results of this research also indicate that the development support has significant effect on the support of coastal tourism planning in Bali. The higher the development support effort, the higher the motivation in supporting the planning of Coastal Tour in Bali by local people.

Research Implications

The negative impact was found to be insignificant in efforts to support the development of coastal tourism in Bali. Personal benefits do not have a positive and significant impact on the support efforts of Coastal Tourism development in Bali. The rejection of the two proposed hypotheses is a phenomenon that needs to be investigated through further research. The research results also indicate that the negative impacts are still smaller than the positive impacts of coastal tourism activities in Bali, so the intention to support Coastal Tourism by local residents is ongoing. The implications of this study's findings are that there should be an ongoing reduction of the negative impacts, through the indications that shape the construct.

CONCLUSION

Local residents mostly feel that they have personal benefits, and they feel that Bali Coastal Tourism has a positive impact as well as a negative impact. They argue that development support and planning support from local people is urgently needed. Personal benefits can not directly grow the intention to support the development and planning of Coastal Tourism in Bali. Local residents' intends to support development and planning when they feel the positive impact of Coastal Tourism in Bali. Increase personal benefits for local people: Efforts to increase personal benefits are to provide local residents access to tourists, provide opportunities in the Coastal Tourism sector to local residents, conserve the environment, engage in solving coastal tourism problems, and provide economic benefits. Increase positive impact for local people: Efforts that can be done to enhance the positive impact of coastal tourism development in Bali are to provide economic benefits to small businesses, provide landscapes and recreation, maintain cultural identity of the population, improve the quality of public services and improve living standards of local people.

Aknowlegments

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POST-EARTHQUAKE STRATEGIC TOURISM PLAN FOR THE MUNICIPALITY OF BOLÍVAR, MANABÍ, ECUADOR

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Abstract: The objective of this research is to improve tourist management after the earthquake on April 16, 2016 in the Bolívar canton, by proposing a strategic plan that responds to existing problems. The methodology employed consists of four phases: (1) post-earthquake diagnosis; (2) determine the main strengths, weaknesses, threats, opportunities and strategic positioning of the territory; (3) identify strategies based on long-term sustainable tourism planning; and the (4) proposal of the strategic plan, which as a result allowed the identification of 9 programs supported by 19 projects aimed at the improvement and reactivation of tourist attractions, basic services and commercialization.

Key words: Strategic planning, sustainable tourism, natural disasters, intervention strategies

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INTRODUCTION

Tourism has become one of the most important industries in Ecuador in recent times, because it is an important source of foreign currency and contributes to the diversification of income among recipients. Tourism (Kuqi, 2018), has a great potential and plays an important role in meeting the main objectives related to, employment, sustainable economic and social development. Acording to Reyes et al., tourism is a strategic factor for economic development of the country. Tourism has an important

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interface role due to its complex connections to the other socio-economic sectors, to its superior use of the available resources, therefore it stimulates the local economic development, stimulating the socioeconomic system (Morar, 2012).

Domereski (2003) states that planning is a vital element in promoting tourism activities in local communities without significant damage to the environment. The nature conservation has historically been debated within the context of the biodiversity (Pletsch, et al., 2014). Learning natural values of biodiversity and geodiversity is a necessity (Bâca, 2018), because education is the basis for all planning activities, recovery and conservation of natural heritage. Morinero et al., (2013) maintain that planning is an essential process in public administration, connecting economic growth with sociocultural and environmental impacts brought by tourism.

Moreover, Moreno (2013) maintains that tourist site management must be closely related to its conservation, visitor capacity, and general commitment with all stakeholders in the development of a tourist site. For this to happen, it is necessary to assure management processes based on tools such as strategic plans that are in line with sustainability principles. At present, the small number of scientific studies addressing innovation in tourism management models represents a serious problem (Elia & Suarez, 2015). This reality makes it necessary that institutions create strategic plans as an adequate tool for improving tourism management and for developing new tourism activities or enhancing the ones already in existence. Planning must be established on the basis of sustainability and equity, and its main objective should be to use natural and cultural resources appropriately, which in turn will improve the quality of life for local people. Tourism types and forms typologies are aiming at more effective tourism policies (Morar, 2012), also at targeting alternative local and regional development plans and marketing strategies. Planning, as stated by Doumet & Yánez (2014) in reference to managements strategic lines, enables the creation of models for monitoring tourism activities, resulting in the development of adequate procedures especially in conservation areas. It must be taken into account that the tourism industry, as argued by Monterrubio et al. (2014), "*can generate changes by itself, or in symbiosis with other change agents*" such as organizations and institutions in charge of fomenting strategic plans.

Ángeles (2012) and Barra & Gómez (2014) define strategic plans as the most common tool for optimizing resources and obtain most consistent results by setting short-term goals with achievable tasks. For this reason, Tur-Viñes and Monserrat (2014) suggest that "tourism plans must be adaptable to every business, institution and organization for which it was created. Their flexibility must be present in every management aspect from logistics to the implementation of procedures, improving the general management and tourism reactivation. Tourism typology of the forms and types constitutes a very important tool for tourism management and planning (Morar, 2012), being essential elements in local development policies through tourism.

According to Orgaz (2013), over the years, there has been an interest in working towards developing new forms of tourism; that is the origin of sustainability and the importance of taking sustainable development activities into practice. At a time when the global economy is in a very varied period of time, the efforts for orientation for sustainable economic development have the advantage (Kuqi, 2018) of providing new solutions for decision-makers who, encourage debate on sustainable economic development. Bermejo (2014), citing the definition established by the Brundtland Report (1987), "*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs*." points out that this principle can be implemented in different productive sectors, namely tourism. Madrid (2015) points out that tourism sustainability promotes and balances the

benefits for the environment, society, and private and public tourism investments, aiming at ensuring an optimal development looking into the future.

After the devastating earthquake that took place in Chile in 2010, there is evidence of adequate planning, emphasized by PNUD Chile (2010) "Support for early post-earthquake/tsunami recovery occurred in February 2010". The objective was to empower local communities to manage a sustainable recovery process after the earthquake.

The reactivation of Chile started with a baseline study on the impacts caused by the earthquake and tsunami in communities. They identified vulnerabilities, needs and risks according to threat type, which were linked to vulnerable territories and zones. The main needs and risks established in the initial study were revised for a classification of problems and needs. A general objective for an early recovery plan was formulated as follows: "reinforce the institutional and community development for physical, productive and emotional recovery". Japan was struck by an 8.9 earthquake in 2011. Gandia (2012) reports the execution of a tourism activity analysis after the disaster. He continues to state that this type of disasters is caused by tectonic activity and climate change, and it is impossible to avoid their occurrence. It is up to people to create tools for diminishing their negative effects by creating cooperation and planning culture.

In order to reactivate the tourism sector, Japan invested in strategic planning, which was well accepted by the people because of their awareness of the importance of tourism for the economy. The plan was executed by means of a baseline study that enabled the decision making on the necessary actions to reactivate tourism.

Both Chile and Japan showed high levels of tourism planning after a severe earthquake, and showed that with planning, it is possible to fully recover from this type of disasters through sustainable use of natural and cultural resources by cooperatively working with all stakeholders. According to Rodriguez-Rodriguez (2012), after experimenting the earthquake in Colombia in 1999, they proposed seven basic principles for spatial planning after a disaster. This guideline should be used in all types of planning. The principles go as follows: integral development, community participation, transparency, celerity, efficiency, sustainability, and decentralization. Therefore, it is necessary the integration and publication of planning actions involving all stakeholders.

The spatial characterization of a territory is obtained from a large number of factors, as argued by Silva et al., (2012), which consequently result in the definition of forms of occupations and territory use. Spatial planning is regarded as highly important because of the need for a correct use of territories for contributing to sustainable development. On April 16, 2016, an earthquake of magnitude 7.8 on the Richter scale shakes the northwest coast of Ecuador; the event caused great losses to the tourism sector. The National Secretary of Planning and Development of Ecuador (SENPLADES, 2016) recorded losses of USD 3344 million in total, money that would be required to rebuild the affected areas that harm more than 21,000 people directly and indirectly. In the province of Manabí the hotel, food and entertainment sector was destroyed by 80%. In the tourism subsector, a total reconstruction cost of 97 MM USD (9.4% of the productive sector) was estimated, which includes the cost of the immediate response to the event, the reconstruction of assets and the lost flows. The subsector had significant effects on assets: 22.2% of total assets recorded in 2014 were lost in the affected area. 98.6% of these damages are concentrated in small companies. The assets that were most affected correspond to buildings and facilities belonging mainly to small businesses, micro-enterprises and individuals. The reconstruction of assets in the tourism sub-sector amounts to USD 76.8 million. The losses for the tourism subsector are estimated at USD 19.5 million, which represent close to 13.3% of the annual sales prior to the earthquake (General Secretariat of Risks of Ecuador, 2016).

The cost of rebuilding this infrastructure sector amounts to USD 862 million, a figure that represents 25.8% of the total amount of the reconstruction of the country. Of this amount, 89.6% corresponds to the reconstruction of assets, 7.3% to additional costs and 3.1% to lost flows. Likewise, 31.2% of cost corresponds to water and sanitation, 28.3% to transportation, 22.7% to electricity and the remaining 17.7% to telecommunications (General Secretariat of Risks of Ecuador, 2016). García et al., (2016) maintain that the post-earthquake tourism industry in Manabí must be restated and adjusted to the existing reality. It is necessary to diagnose current tourism resources, evaluate damages, identify problems and causes of stagnation in the tourism industry, recognize the needs of service providers who were affected by the earthquake, redesign new products oriented to increasing local demand, and implement strategies to foster the industry through communication and destination marketing. The scholar also claims that the Municipality of Bolívar has sufficient natural and cultural resources, which have not been suitably developed. In addition, there are no adequate procedures that interlace public and private institutions for strengthening and managing the tourism industry in a more efficient manner.

It is possible to affirm that an inadequate management results in insufficient basic services. This is also reflected in the lack of tourist facilities and businesses. In the absence of clear methodological procedures, the tourism industry is affected by poor implementation of sustainable development plans, inaccessibility to tourist resources, no tourist signs and unawareness of environmental management actions by the communities. There is currently deficient planning in the canton of Bolívar. Tourism management is visibly stagnant; this reality has even worsened after the earthquake on April 16th 2016. The municipality does not have a mechanism for responding to natural disasters. It is thus of utmost importance that the municipality have a strategic plan, which restructures and improves tourism management based on current needs.

The above-mentioned problems justify this research by validating the need for identifying and implementing strategies that are addressed towards activating tourism in Bolívar after the last earthquake. This can be possible through the creation of new products and services based on strategic planning that must be adapted to the local context. This research comes as the result of executing a Research and Development project (I+D+i, in Spanish) designed to improve local tourism management and wellbeing. Through a strategic tourism plan, it will be possible for Bolívar to see a recovery after the earthquake, and promote its tourist attractions more sustainably. We propose that only through planning, development and rigorous management, the benefits of tourism can be optimized. Furthermore, through the mitigation of risks, resources will be protected, creating jobs and positioning Bolívar towards an efficient post-earthquake management.

MATERIALS AND METHODS

The methodology of this study enabled the creation of a strategic plan directed towards improving the tourism management in Bolívar after the April 16th earthquake. Our initial point was a diagnosis of the current situation of the local tourism management after the earthquake. We evaluated the conditions of the resources and facilities, and identified problems in connection with tourism management. Planning is thus conducted in order to identify sustainable strategies through the implementation of programs and projects directed toward improving the tourism management in Bolívar. For the purpose of this paper, we followed the methodologies published from The Ecuadorian Ministry of Tourism (2007); Ecuadorian Strategic Plan for Tourism Development (PLANDETUR, 2020); Methodology for Formulating Local Development Strategies (Silva & Sandoval, 2012); Japan: Encouraging Tourism and Improving the Image of the Destination.

Analysis of the Before and After a Natural Disaster (Gandía, 2012); Chilean National Tourism Strategy (Chilean Government, 2012); Preliminary Design of the Tourism Development Plan for Selected Municipalities in the Province of Mayabeque, Cuba (Echarri & Bulnes, 2015). We present a summary of our methodology in table 1.

Table 1. The proposed methodology for a strategic plan design for the Municipality of Bolívar

PHASES	ACTIVITIES	TOOLS AND TECHNIQUES
1. Situational baseline study of current tourism management in Bolívar after the April 16th earthquake.	1. IN-SITU information survey activities on: socioeconomics, environment and culture. 2. Inventory and categorization of natural and cultural tourism assets. 3. Problems and causes affecting management after the April 16th earthquake.	▪ Maps, global positioning system (GPS) and geographical information system (GIS). ▪ Photographic record. ▪ Tourist destination inventory forms from the Ministry of Tourism. ▪ Interviews. Surveys.
2. Determine the strategic positioning of the tourism management in Bolívar.	4. Identify the problem and solution to strategic positioning.	▪ Technical visits. ▪ Brainstorming. ▪ SWOT analysis.
3. Identify strategies.	5. Determine the strategies directed toward strengthening tourism management and recovery after the earthquake.	▪ Revision and analysis of collected data.
4. Establish the strategic plan proposal.	6. Establish the programs and projects that enable the fulfilment of strategies. 7. Evaluation and monitoring of the strategic plan proposal based on the identified problems.	▪ Spatial and Territorial Development Plan of Bolívar. ▪ Technical document of plan design for improving tourism management. ▪ Strategic plan matrix.

The proposed methodology is composed of the following phases:

Phase 1: Situational baseline study of current tourism management in Bolívar after the April 16th earthquake: in-situ information compilation of various aspects such as socioeconomics, environment and culture for carrying out a situational baseline study of tourism management in Bolívar. An inventory of Bolivar´s tourism resources is performed with the aim of verifying their current conditions and existence. In this phase, we used maps, GPS, GIS, photographic and written records collected by means of a technical inventory forms from the Ministry of Tourism. The final part consisted of a categorization of resources and identification of their potential for tourism after the earthquake. We identified the problems and causes affecting tourism management after the April 16th earthquake through surveys, interviews to public employees of the Bolívar Department of Tourism, tourist managers (private and customers/visitors) to identify problems, causes and consequences, all of which will enable the improvement of the tourism management.

Phase 2: Determine the strategic positioning of the tourism management in Bolívar through a SWOT analysis, which identified the strengths, opportunities, weaknesses and threats of current tourism management. The most relevant findings enabled us to pinpoint the problem and suggest strategic solutions.

Phase 3: Identify strategies that are oriented to enhancing tourism management in Bolívar and recovery after the earthquake on the basis of a revision and analysis of previously-collected data. Thus, strategy selection sought to improve the current positioning to achieve expected results.

Phase 4: Establish the strategic plan proposal for improving tourism management in Bolívar by considering the actions and indicators that enable the fulfilment of programs and projects based on the strategies to mitigate and eliminate the identified problems. The plan must be linked to the Spatial and Territorial Development Plan of Bolívar for evaluating and monitoring the execution of the strategic plan proposal.

RESULTS DISCUSSIONS

Phase 1: Situational baseline study of current tourism management in Bolívar after the April 16th earthquake

We present the details of the evaluation and characterization of the study area through the gathered information on geographical aspects, as shown in Table 2.

Table 2. Bolívar General Information
(Source: Spatial and Territorial Development Plan, Municipality of Bolívar, 2015)

Location Astronómica	**O degrees, 50 minutes and 39 seconds south, and 80 degrees, 9 minutes and 33 seconds west**
Limits	**North**: Chone **South**: Portoviejo and Junín **East**: Pichincha **West:** Tosagua
Main Territories	Calceta (urban), Quiroga y Membrillo (rural)
Area	537.8 Km^2
Population	40.735
Hidrography	Carrizal River (main)
Temperature	25,5º C (mean annual temperature)
Annual precipitation	1.300 mm.
Height	21 - 400 m.a.s.l.

In-situ information collection of socioeconomic, environmental and cultural aspects

Bolívar has, to a large extent, an agricultural economy. Its main products are cocoa, coffee, and citrus. The topography is flat in the low lands and irregularly broken in the uplands. The mountains are known for having been a natural reservoir for forest with diverse vegetation and pleasant weather conditions. However, over the last years, some areas have been degraded due to timber exploitation and enlargement of the agricultural frontier for cattle and swine breeding.

In terms of the culture, Bolívar still has vibrant expressions of popular Manabí cultures, being a mixture of autochthonous ancestral roots and the acculturation effects of the Spanish conquest. The traditional gastronomy still prevails with exquisite dishes such as the famous tonga (chicken stew and rice wrapped in plantain leaves), free-range chicken soup and stew, cuajada (soft cheese), among others. Unfortunately, the public clock, one of the main tourist attractions, collapsed during the April 16th earthquake.

Inventory and categorization of natural and cultural assets

We here present the tourist resources and attractions of Bolívar registered and categorized after the earthquake using inventory forms from the Ecuadorian Ministry of Tourism. The results are shown in table 3. We confirmed that the earthquake in fact affected a large number of tourist assets in Bolívar. An example of this are the San Agustin Temple, the Los Platanales bathing establishment and Abdón Calderón Park.

Other attractions collapsed (e.g. Public Clock and Luis Félix López Archaeological Museum), overall constituting a significant loss for the local tourism sector and culture. Despite the adverse consequences of the last disaster, there are still several natural

resources such Mil Pesos Mount and the large number of waterfalls. With an adequate tourism management, they could become an important piece for the recovery of tourism in the area in a sustainable manner.

Table 3. Tourist attraction inventory of Bolívar

No.	Attraction or resource name	Category	Current condition	Rank
1	Balneario de agua dulce Los Platanales (Bathing establishment)	Natural site	Damages to facilities	II
2	Balneario de agua dulce Los Almendros (Bathing establishment)	Natural site	Preserved	II
3	Cascada Chapulí (Waterfall)	Natural site	In deterioration	II
4	Cascada Julean(Waterfall)	Natural site	In deterioration	II
5	Cascada La Mina (Waterfall)	Natural site	In deterioration	I
6	Cascada Primera Piedra (Waterfall)	Natural site	In deterioration	II
7	Cerro Mil Pesos (Mount)	Natural site	In deterioration	I
8	Clay handicraft processing	Cultural manifestation	Preserved	I
9	Finca Agroecológica Sarita (Agricultural farm)	Cultural manifestation /Natural site	Preserved	II
10	Iglesia Santa Marianita de Jesús (Catholic church)	Cultural manifestation	Structural damages	I
11	Monumento a Simón Bolívar (Monument)	Cultural manifestation	Preserved	II
12	Monumento al Balsero (Monument)	Cultural manifestation	Preserved	II
13	Museo Arqueológico Histórico Luis Félix López (Archaeological museum)	Cultural manifestation	Collapsed during the earthquake	-
14	Paraje Natural y Cultural Quinta Colina del Sol (Natural site)	Cultural manifestation /Natural site	Preserved	II
15	Parque Central Abdón Calderón (Central park)	Cultural manifestation	Structural damages	II
16	Parque Ferroviario (Railway park)	Cultural manifestation	Preserved	II
17	Parque de Membrillo (Park)	Cultural manifestation	Preserved	I
18	Parque de Quiroga (Park)	Cultural manifestation	Preserved	I
19	Plaza Cívica (Public square)	Cultural manifestation	Structural damages	II
20	Puente Rojo (Bridge)	Cultural manifestation	Preserved	II
21	Reloj Público (Public clock)	Cultural manifestation	Collapsed during the earthquake	-
22	Represa Sixto Duran Ballén (Dam)	Cultural manifestation	Preserved	II
23	Templo San Agustín (Catholic church)	Cultural manifestation	Structural damages	II

Problems and causes affecting management after the April 16th earthquake

We carried out interviews and surveys for identifying the problems and causes affecting the tourism management in Bolívar. Participants were the people involved in local tourism activities and some representatives from the Tourism and Planning Departments of the Bolívar District. We gathered the following information:

- The Spatial and Territorial Development Plan is currently being publicized, despite the fact that it should have been applied since 2015.
- There is no record of a technical document comprising a strategic tourism plan for adequate management.
- One of the main causes for inefficiency in local planning is the limited budget, especially in the sectors that generate income such as agriculture and tourism.
- The tourism sector does not have long-term planning. The actions only address current needs.

We conducted surveys to the private tourism sector (21 establishments), using the

required sample size for inferential statistics. Results are as follows:

- 88% of tourism establishments have been affected by the April 16th earthquake.
- 82% have basic services, but not in optimal conditions. 53% of establishments lacked drinking water, followed by 29% internet service, 12% telephone service and 6% electricity.
- 41% have expressed that they have never been visited by the Bolívar Department of Tourism for evaluation purposes.
- 76% of business owners think that the Department of Tourism could significantly contribute to solving their problems, while 24% agree that the department could not give them the appropriate support.
- Currently, 82% of the establishments have problems such as lack of training (22%), and marketing, and basic services (18%), respectively, whilst 6% reported financing problems.
- 71% stated that the Department of Tourism is not adequately using their resources.

All of our results are evidence of the need for implementing a strategic plan that improves the tourism management in Bolívar joining forces with public and private businesses. An adequate tourism management will benefit local communities and will enable the execution of sustainable projects that use resources (especially nature) in a suitable manner. Surveys were conducted aiming at identifying the profiles of different visitors. Because of the relevance of identifying the type of visitors and gathering the related information, it will be possible to suggest feasible tourism projects. In determining the sample size, we used the following equation for unknown population (González & Conde, 2011):

$$n = \frac{Z^2_{\alpha/2} * p * q}{d^2}$$

We established a 95% confidence level, a probability of occurrence (p) 0.5, a probability of failure (q) 0.5 and a margin of error (d) 0.09. The calculated sample size was 120 participants. Their answers shaped the visitor's profile shown in table 4.

Table 4. Visitors' profile

Sex	Men 53%, Women 47%
Age	26 – 35 years old 32%
Job	General employees 22%
Education	High school degree 55%
Number of visits	3 -5 times 44%
Length of stay	2 days 37%, 1 day 32%
How they heard about Bolivar´s attractions	Word of mouth 32%, Internet 30%
Travelling conditions	Accompanied by other people 72% (Family 37%), Alone 28%
Transportation	Car 56%, Public transportation 41%
Visitor´s motivation	Nature and landscape 25%, meet family and friends 19%, traditional food 18%
Suggestions for a more pleasant stay	New tourist attractions 23%, Improve facilities at existing attractions 20%, Improve service 14%
Nivel de satisfacción en su visita	Neither unsatisfied nor satisfied 34%, Satisfied 27%

Results show that the people who visit Bolívar are aged between 26-35, and are general employees. When visiting a tourist attractions, they are usually accompanied by family members. They mainly come to see natural resources and landscapes. Most of them suggest that there should be new attractions and improvements in the quality of service in existing destinations. Visitors believe that by improving services, the level of satisfaction will increase, which is now at an intermediate level. Now it is important to show picture abaut the earthquake in the center of Calceta: Figure 2 shows the total

destruction caused by the earthquake to two important tourist resources of the Bolívar canton: the Public Clock and the Archaeological / Historical Museum, Luis Félix López and Figure 3 illustrates house destruction and rescue and reactivation activities.

Figure 2. Public monument

Figure 3. House destruction

Table 5. SWOT analysis

Strengths	Weaknesses
1. Available Spatial and Territorial Development Plan. 2. Agricultural and livestock activities. 3. Large number of standing resources and attractions after the earthquake. 4. Urban areas with basic services for the tourism sector 5. Transportation for traveling in and out of Bolívar. 6. Water availability. 7. Good highways for connection with other districts. 8. Potential agrotourism farms. 9. High level of hospitality. 10. Rich biodiversity and beautiful landscapes. 11. Varied traditional gastronomy. 12. Considerable number of recreational sites for sports. 13. Tourism companies willing to improve their service quality. 14. ESPAM- MFL University.	1. Few attractions with good infrastructure. 2. Unawareness of agrotourism potential. 3. No tourist signs. 4. Unsatisfactory basic services. 5. Polluted rivers. 6. No tourism organization and planning. 7. Department of Tourism Limited budget 8. Little information, and marketing of tourist attractions. 9. No strategic plan for tourism management. 10. No integrated management between tourism companies and local government. 11. Very few tourism projects. 12. Untrained personnel in tourism companies. 13. Water not suitable for human consumption.
Opportunities	**Threats**
1. Ministry of Tourism as the regulatory body of tourism in Ecuador. 2. Ecuadorian laws dealing with tourism development. 3. Growing trend in nature-related tourism, adventure and ecotourism. 4. Increasing demand for agricultural and livestock products. 5. Public funding sources (local government, BE, CFN, IESS) 6. Support for foreign investment. 7. Connections with domestic tourism projects 8. Support from the Provincial Government. 9. ONGs.	1. Weather conditions during the rainy season. 2. Earthquakes. 3. Risk of infectious and contagious diseases 4. Financial instability in the local government 5. Global economic crisis. 6. Political instability. 7. Similar attractions and services in neighboring districts. 8. Growing social insecurity. 9. Setting up a business involves a lot of red tape 10. Local emigration. 11. Low interest in alternative tourism supply

Phase 2: Determine the strategic positioning of the tourism management in Bolívar

After obtaining the results from the baseline study, we were able to determine the positioning of Bolívar in terms of its current tourism management. The SWOT analysis show the main strengths, weaknesses, opportunities and threats of the tourism management in Bolívar as shown in table 5.

Identify the problem and solution to strategic positioning

The identification of the problem and strategic solution are based on the strategic positioning that is obtained as a result of the main factors established in the SWOT analysis (Tables 6 and 7).

Table 6. Main Strengths, Opportunities, Weaknesses and Threats

Strength	#3 Large number of standing resources and attractions after the earthquake
Opportunity	#3 Growing trend in nature-related tourism, adventure and ecotourism
Weakness	#9 No strategic plan for tourism management
Threat	#7 Similar attractions and services in neighboring districts

Table 7. Strategic Positioning

	Opportunity	Threat
Strengths	Offensive strategy	Defensive strategy
Weaknesses	**Reorientation strategy**	survival strategy

From the SWOT analysis, we found that the greatest weakness and threat must be countered through strategies that are based on the most important strengths and opportunities for an appropriate tourism management in Bolívar.

Strategic Problem

If similar services and products continue to be available in neighboring districts, considering the lack of a strategic plan in Bolívar and despite the fact that a large number of attractions are still standing after the earthquake, the territory will not be able to take advantage of the growing trend in ecotourism.

Strategic Solution

New proposals for minimizing the effect of the availability of similar attractions in neighboring districts should emerge, using the majority of resources and existing tourist attractions. This will overcome the lack of a strategic plan for tourism management in Bolívar.

Phase 3: Identify strategies

Determine the strategies directed toward strengthening tourism management and recovery after the earthquake

The strategic positioning establishes the need for implementing reorientation strategies because they allow the reduction of weaknesses. We present a list of strategies as follows:

- Reinforce the Department of Tourism in the local government.
- Establish institutional relationships among communities and the public and private sectors aiming at a sustainable tourism management.
- Execute projects promoting and providing information on the existing attraction in Bolívar.
- Establish a plan of action for natural disasters affecting the tourism sector.
- Improve and provide basic services in the area (with an emphasis on drinking water and sewage system).
- Cleaning programs at tourist sites and solid and liquid waste management.

- Implement a tourist signage program in the district.
- Execute tourism projects based on sustainability principles.
- Develop new tourist attractions based on novel modalities such as gastronomy, nature, adventure and ecotourism.
- Continually train service providers and potential entrepreneurs on technical aspects related to tourism.
- Establish a program aimed at renovating resources and tourist attractions that were affected by the April 16th earthquake.
- Add value to tourist resources and attractions that highlight the differences between Bolivar attractions and those in neighboring districts.
- Implement awareness-raising and sensitizing activities on environmental protection with the local communities.
- Manage non-refundable resources from domestic and foreign organizations for tourism projects in the area.

Phase 4. Establish the strategic plan proposal

The strategic plan is aimed at improving the tourism management in Bolívar through a partnership work between the public and private sectors, and the local community. The goal is to promote the conservation of natural and cultural tourism resources.

The mission: improve the tourism management in Bolívar through the application of a strategic plan that addresses current needs in developing tourist attractions and resources for integrating the public and private sectors involved in tourism activities.

The vision: promote Bolívar as a reference for tourism management with a successful model based on strategies in favor of sustainable development and the wellbeing of local communities.

The values: service capacity, work quality, commitment to society, discipline, efficiency, continuous improvement and responsibility.

The strategic goals in the plan are divided into three main axis:

Social Axis: implement tourism projects that generate jobs for improving the quality of life of local people.

Environmental Axis: implement environmental principles of sustainability in all tourist attractions for ensuring their conservation and availability for future generations.

Economic Axis: consolidate the tourist sector as one of the main direct and indirect sources of income for local people, utilizing the multiplying effect for positive outcome demonstrated by the industry.

Establish the programs and projects that enable the fulfilment of strategies

We established 9 programs and 19 projects based on the problems in the current tourism management in Bolívar. The details are shown in table 8.

Territorial planning: strategies for tourism development

As a strategy to strengthen the tourism sector of the Bolívar canton, a tourist zoning is established trying to plan the territory affected by the earthquake of April 16, 2016, was designed according to the three tourism environmental units, considering the type of agricultural activities that in it develops, as well as urban-rural areas where socio-productive activities are encouraged (Figure 1). The established zones are the following:

a) Tourist core zone.
b) Agritourist use zone.
c) Sustainable use zone

d) Wildlife and conservation zone
For more facility, we show the map whit the different zone:

Table 8. Programs and Projects

Programs	Projects
1. Organizational and institutional empowerment of the Bolívar Department of Tourism	1. Improvement of internal processes.
	2. Reinforcement of technical capacities in human resources.
	3. Elaboration and application of a data collection system for tourism variables.
2. Interinstitutional coordination for sustainable development	4. Effect of sustainable tourism on the local economy.
	5. Interinstitutional coordination for local tourism management.
3. Tourism information system	6. Periodic restructure of tourism inventory.
	7. Elaboration of a web page.
4. Reinforcement of integral security in tourism	8. Action plan for disasters affecting tourism.
	9. Elaboration of preventive measures for improving safety during natural disasters.
5. Infraestructure and tourism facilities	10. Provision and improvement plan for basic services at main tourist attractions.
	11. Highway improvement plan for local tourism routes.
	12. Signage plans for urban and rural roads.
6. Development and reinforcement of sustainable tourism	13. Sustainable tourism project proposals in rural areas of Bolívar.
	14. Implementation of sustainability principles at main tourist attractions existing after the April 16th earthquake.
	15. Promotion of cultural identity.
7. Innovation in tourism attractions	16. Added value and innovation plan in local tourism activities.
8. Capacity development in human resources for sustainable tourism	17. Technical training plans for tourism service providers.
	18. Training of the importance of preserving the local environment.
9. Sustainable tourism development fund	19. Management of funds for public and private initiatives and sustainable tourism in communities.

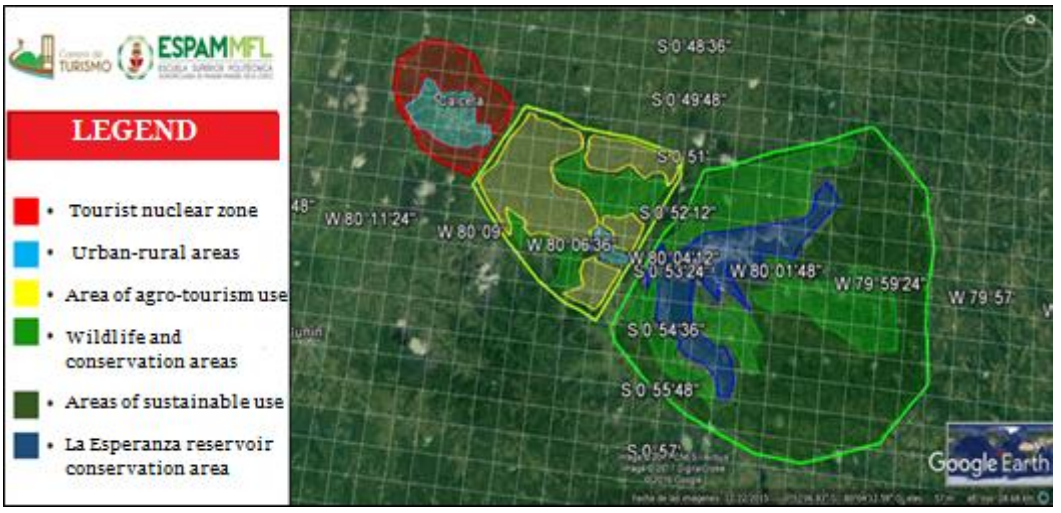

Figure 1. Tourist zoning of canton Bolívar
(Source: processing on topographic map 1: 100000 and orthophotomap)

The strategic plan proposal for improving tourism management in Bolívar after the earthquake contains a chronogram, activities, indicators, budget and actors responsible for executing programs and projects. This enables the evaluation and monitoring of aspects such as the fulfillment of indicators established for each project, elaboration of programs and projects within the appropriate timeline, and according to the chronogram. In addition, based on the budget, the plan will serve to guarantee that expenses by programs and projects are not higher than what it was established. It is worth noting that the Bolívar Department of Tourism is the actor responsible for evaluating and monitoring all of the aforementioned aspects.

CONCLUSION

Based on the diagnosis, we verified that the April 16th earthquake affected a great number of tourism establishments, tourist attractions and basic services that make reactivation of tourism harder. Tourism planning is one of the most inefficient areas of local tourism management. An evidence of such a reality is the lack of planning tools for addressing current problems and needs. There is little interinstitutional work between communities and the public and private sectors for developing tourism activities, with no execution of sustainable tourism projects. With regards to the established strategies, we proposed 9 programs and 19 projects that are based on the SWOT analysis, the Spatial and Territorial Development Plan, Municipality of Bolívar (2015) and the Ecuadorian Strategic Plan for Tourism Development (2020).

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CONTEXTUALISING SPORT AND TOURISM IN CENTRAL AFRICA: PROSPECTS AND CHALLENGES

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Abstract: Sport has been an integral part of the African lifestyle, and as such, in transitioning economies like those in the Central African subregion, where many people are not part of the mainstream economic activity, sport serves as a useful socio-economic getaway. In fact, the concept of sport-related tourism has grown significantly in prominence in the African context, especially in recent times. This is because, despite the existing issues linked to economic hardships, sport events are well-attended, providing a useful platform to kick-start certain socio-economic activities that are linked to local and regional tourism development. This article explores the stakeholder views on promoting tourism through sport, using Cameroon as a case study. Documentary reviews, incorporating semi-structured in-depth interviews with stakeholders involved in sport and tourism domains, reveal a set of structural challenges, as well as illuminating opportunities for development. The study has implications for policy and planning linked to sport tourism development in the Central African subregion.

Key words: Sport, tourism, challenges and prospects, tourism development stakeholders, Cameroon

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INTRODUCTION

Several studies have argued that the continued integration of sport activities and tourism has seen much emphasis being placed on the concept of sport tourism, leading to its rapid growth in the global economy in recent times (Bob & Swart, 2010; Gonzalez-Ramallal et al., 2010; Fourie & Santana-Gallego, 2011; Hinch & Higham, 2011; Ilies et al., 2014; Kennelly & Toohey, 2014; Taleghani & Ghafary, 2014; Marumo et al., 2015; Reis et al., 2015; Odounga-Othy & Swart, 2016; Njoroge et al., 2017; Nyikana, 2016; Ilies et al.,

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2018; Nyikana & Tichaawa, 2018; Tichaawa et al., 2018). The aforementioned studies have consistently provided the narrative on how the growth experienced by global sport tourism has largely been influenced by the consistent, but parallel, growth of both sport and tourism respectively, and the important roles that both have played in global economic conditions. Resultantly, their frequent overlapping has contributed to the significant developments in sport tourism, particularly in the developing world context (Fourie & Santana-Gallego, 2011; Tichaawa et al., 2018; Zang et al., 2018), and with specific reference to destinations in the sub-Saharan Africa, where sport is seen as a way of life, in the face of limited socio-economic opportunities. The existing research has equally begun to acknowledge that, in Africa, sport tourism has the potential to ignite and promote the socio-economic restructuring of urban and rural economies (Swart & Bob, 2007; Honary et al., 2010; Lesjak et al., 2017; Tichaawa et al., 2018). In their study, Bob and Swart (2010), for example, identified the crucial part that sport plays in tourism's role as an urban regeneration tool for such destinations, further confirming the symbiotic nature of the two and its relevance thereto. However, combining sport and tourism as a means to rejuvenate ailing economies in Africa, in particular, has proven to be somewhat cumbersome, given that it is often viewed as being simply an overlap between two different areas of the economy (Weed & Bull, 2004;Tichaawa et al., 2018). Kennelly and Toohey (2014) note the historical separation of the agencies and departments responsible for sport and tourism as one of the key impediments to the prosperity of sport tourism in the developing context, suggesting that, often, the endeavours in this regard fail, due to the lack of planning being geared towards collaboration in this regard. In essence, the lack of collaboration is mostly common at the levels of planning, policy and especially in the implementation of those plans and policies (Nyikana & Tichaawa, 2018). Other studies (Weed & Bull, 2004; Tichaawa et al., 2018) have underscored how, irrespective of the similar interests between the two, specific liaison is often limited, or, at times, non-existent, and, therefore, highly compromising of the mutual advantages and benefits that otherwise would have been accrued by both those in tourism and those in sport. Such accrual is in line with the framework designed by the likes of Standeven and De Knop (1999), Gammon and Robinson (2004), and Weed and Bull (2004).

In this study, we argue that, despite the rapid growth experienced by sport and tourism on the African continent, and specifically in Central Africa, limited research exists on the examination of the effective linkages for sport and tourism. This is in spite of the growing focus on the hosting of small-scale and major sport tourism events in the subregion (Tichaawa & Bob, 2015; Njoroge et al., 2017; Swart et al., 2018). The hosting of events in the region has been justified by the perceptible gains that have been observed by the developed countries, in terms of which small-scale, major and mega-events are seen as expediting socio-economic development linked to infrastructure development, and general tourism benefits, especially for the local population, among other publicised benefits. In fact, the observations made on sport tourism in the developed world show how sport event-hosting is seen as a sustainable objective for tourism development, especially for the local communities, because the investments that are made in the initial stages are made with the intention of serving the communities in the long term (see Swart & Bob, 2007; Gibson et al., 2012; Csoban & Serra, 2014; Nyikana et al., 2014). Given the fact that not all destinations have the capacity to host both major and mega-events (Ziakas & Costa, 2011), developing countries are often encouraged to consider a portfolio of events that considers smaller-scale events (Swart & Bob, 2007; Gibson et al., 2012; Tichaawa et al., 2018). This study is argued from this perspective, while also considering that, in Central Africa, many people have a very limited involvement in the mainstream economy, and that, as such, sport serves as a getaway from their daily economic hardships

(Pannenborg, 2008). Citizenry in this region are greatly dedicated and committed to, as well as passionate about, sport, particularly football, which, therefore, points to the existence of sport development opportunities (Pannenborg, 2008; Tichaawa & Swart, 2010). To the above effect, we seek to determine the prospects and the challenges associated with sport tourism in the Central Africa subregion. The above is achieved by way of examining the nature of the stakeholders involved in tourism and sport in Cameroon. The focus on Cameroon is considered appropriate, given the fact that it is the largest economy in the region, with a strong history in sport both locally and internationally (Pannenborg, 2008; Tichaawa & Swart, 2010). The paper is structured, initially, to provide a background of the subregion, followed by a theoretical grounding in the research. The paper continues with a literature review of sport tourism, and of the opportunities and challenges that either promote, or hinder, sport tourism development. A brief overview of the methods adopted follows, while a discussion of the findings and the recommendations is provided. Lastly, conclusions are drawn, based on the findings noted in the study.

THE CENTRAL AFRICAN SUBREGION IN CONTEXT

The Central African subregion has been identified as an area that possesses great potential as a sustainable tourism destination, even though it still lags behind in comparison to Western, Eastern and Southern Africa (Kimbu, 2011; Kimbu & Tichaawa, 2018). In his work, Kimbu (2011) argues that the subregion has been unable to position or promote itself properly, despite being made up of traditionally endowed nations like Cameroon and Gabon, Equatorial Guinea, Chad, and the Congo, among others. According to Swart et al. (2018), sport, and specifically sport tourism events in this region, has been identified as an alternative form of revenue generation, given the inability to maximise the current potential that it possesses as far as tourism development is concerned. Moreover, the lack of recognised linkages between sport and tourism within the economies concerned means that there is seldom any effective collaboration, so that, subsequently, many sport tourism policy initiatives prove unsuccessful (Kimbu, 2011; Nyikana & Tichaawa; 2018, Swart et al., 2018). The above could be linked to Kennelly and Toohey's (2014) suggestion that sport and tourism, within such a context, have two separate cultures, which are especially linked to funding, with sport traditionally receiving much public sector subsidy and intervention, whereas tourism is largely private sector- driven. Nonetheless, sport tourism remains a key priority area in the subregion, with the sector being earmarked to assist in the socio-economic and political transformation objectives involved (Swart et al., 2018). To contextualise the situation further, Swart et al. (2018) suggest that the region still grapples with concerns about the lack of infrastructural development, the limited ancillary facilities, and an inability to capitalise on the branding opportunities presented by such events, which is a view that is closely shared by Kimbu (2012) in prior related work. Numerous challenges exist for the development of a vibrant sport industry, which, in turn, affect tourism's potential in the region (Kimbu, 2012; Tichaawa et al., 2018). These, and other, challenges are explored later on in the current paper.

THEORETICAL BASIS

The theoretical basis of the present research endeavour emanates from the design of the stakeholder theory. According to Garrod et al. (2012), the stakeholder theory is not a new phenomenon, as it is largely considered one that has been widely used in business and tourism studies, as well as being a generally accepted topic in terms of past political discourses and academics. Freeman is a researcher who is credited with contributing significantly to the theoretical development of the concept, particularly in the 1980s

(Garrod et al., 2012; Lewis, 2006). Later, Presenza and Iocca (2012) posit that the theory has evolved in reference to the various groups and individuals who can affect an organisation, as well as in terms of the behaviour of management in response to such groups and individuals. According to Freeman (2001:38), "stakeholders are those groups or individuals who have a stake in, or a claim on, a firm, within the ambit of the business discipline involved". Garrod et al. (2012) then show how the success of a development or organisation largely hinges on the ability to address the requirements and aspirations of a wider array of groups that normally have their own particular interests in the said development. The above commentators suggest that the stakeholder theory directs the organisations to optimise the benefits of their operations, through effectively engaging with all their legitimate stakeholders. In summation of the broad theoretical overview, the aforementioned analysts suggest that stakeholders be distinguished into primary and secondary stakeholders, with the primary having formal, official and contractual links to the development, whereas the secondary stakeholders are those with no formalised links.

In the tourism context, Aas et al. (2005, p. 31) define a stakeholder as "anyone who is impacted on by development positively or negatively". According to Garrod et al. (2012), the stakeholder theory, while being developed largely in regard to the study of business strategy, has, in recent times, been incorporated in tourism planning and policy, as well as in some forms of collaborative actions, like destination marketing in particular. Given the complex nature of tourism, which is a fragmented industry in terms of which tourism products basically involve interaction between a large numbers of suppliers coming from a wide range of economic sectors, the theory is necessary, especially regarding the management of the stakeholders (Garrod et al., 2012). Specifically in the sport tourism and events context, Presenza and Iocca (2012) note that stakeholders in the sport and events management field comprise those individuals and groups who have a stake in an event and its outcomes, which is inclusive of all those who participate in the production of the event, the sponsors and the grant givers, the host community and its representatives, as well as any other persons who are impacted on by the event. Garrod et al. (2012) affirm that the stakeholders in the sport tourism context are also drawn from the private sector, the public sector, and those who are involved in voluntary work, which further complicates the process of sport tourism development. The above is exacerbated further in the developing nation context, where constant reshuffles in the socio- and geo-political arrangements are a frequent occurrence.

In any case, and in relation to any development, it is critical, firstly, to identify all stakeholders, and then to review what their respective agendas are regarding the development (Presenza & Iocca, 2012). By doing so, the managers and other authorities are able to balance the needs and expectations of all the stakeholders concerned. Grimble (1998) stresses the need to conduct a stakeholder analysis, as doing so facilitates the recognition of the different interest groups involved, with it also helping to identify and resolve any standoffs or conflicts of interest occurring in reference to the sport event. As mentioned earlier, in the tourism field, the delivery of relevant offerings is complicated by the fragmented nature of the industry, which, typically, involves the interactions that are engaged in by a large number of suppliers from different economic sectors, including accommodation, tour operation, transport, entertainment, visitor attractions, and events, among others (Garrod et al., 2012). According to Presenza and Iocca (2012), the success of tourism, and of tourism events in particular, is largely dependent on the fruitfulness of planned interactions between the event owners and other stakeholders. The absence of such interactions, or the laxity in the emphasis thereon, inevitably leads to sport tourism events not achieving the same result in terms of contributions to both local and regional tourism development.

Sport tourism events, when successfully managed, can play a significant role in the socio-economic development of regions (Presenza & Iocca, 2012; Radicchi, 2013). Radicchi (2013) suggests that sport tourism events have the potential to serve as crucial resources for development in developing countries.

Specifically, sport events are seen as providing a valuable platform for socio-economic growth, especially as they are linked to employment opportunities for locals, to infrastructural development, and to improved access to information, as well as to the effective branding for a destination, which ultimately leads to enhanced destination attractiveness (Hemmonsbey & Tichaawa, 2018; Nyikana & Tichaawa, 2018). Besides the above, Nyikana and Tichaawa (2018), as well as Tichaawa (2017), note how sport events provide an ideal environment on which local businesses can capitalise for the opportunity provided, particularly in terms of those that are small and medium-sized, which, in turn, assists the economy of the local areas where such events are hosted.

However, for the above to be achieved, strong collaboration and cooperation on the common objectives is required among the relevant stakeholders (Nyikana & Tichaawa, 2018), which is the central theme for the current study. Historically, Grimble's (1998) work notes how many projects and events have failed to come to fruition, because of non-cooperation between the stakeholders, or due to stakeholders having otherwise raised concerns regarding their perceived beliefs in potentially being adversely affected by the changes caused by collaboration.

To overcome such challenges, a positive spirit of dialogue and collaboration is encouraged among the stakeholders involved in the sport and tourism disciplines (Aas et al., 2005), particularly in the Cameroonian context (Kimbu, 2012; Nyikana & Tichaawa, 2018). In the context of the arguments presented, the main standpoint is that, for sport to be effectively used in the promotion of tourism in a context like Cameroon, the relevant stakeholders should, firstly, be identified and profiled in relation to what their interests are in the process. Moreover, such stakeholders are crucial in providing useful information that could be used in determining the challenges and prospects of sport tourism, as in the present study's case.

LITERATURE REVIEW

The available literature on sport tourism development states that the most common type of sport tourism activity consists of events ranging from small-scale, through major, to hallmark and mega-events (Bama & Tichaawa, 2012; Swart & Bob, 2007; Gibson et al., 2012; Csoban & Serra, 2014; Tichaawa & Bob, 2015). However, according to Gibson et al., 2012, developing countries, like those in the Central African subregion, have specifically targeted the hosting of small-scale and major events, based on the belief that such hosting might expedite development in key economic areas like infrastructure, as well as accrue tourism benefits for the local people, and thereby assist in ensuring sustainability in relation to tourism development on behalf of the local communities. In their study, Nyikana and Tichaawa (2018) point to the economics and to the wider tourism benefits that can be accrued as a key premise considered by the developing nations in their adoption of an aggressive approach towards sport tourism events hosting. The above is particularly seen in the case where such benefits are seen as strategic objectives, in both the short and the long term (Briedenhann, 2011; Nyikana & Tichaawa, 2018; Tichaawa & Harilal, 2016; Tichaawa et al., 2018).

However, the key challenge, according to Ziakas and Costa (2011), is that not all destinations can host major and mega-events, due to the lack of capacity and the mixed results associated with such events. Instead, destinations, particularly in the developing context, compile a portfolio of sport events that is mainly targeted at a series of small-

scale events (Ziakas & Costa, 2011; Gibson et al., 2012; Nyikana, 2016). Some scholars (see, for example, Hinch & Higham, 2011) have, in the past, emphasised that such targeting is due to small-scale events having either proven to comprise a viable sector of an existing tourism industry, or having provided a reason to visit a certain community, if, previously, no viable tourism sector existed in the area concerned. Moreover, sport tourism, and small-scale events in particular, are recognised for their ability to create economic value for the community concerned, with most of the expenditure involved being attributed to the accommodation and catering sectors.

Gibson et al., (2012) strongly hold the view that, unlike in the case of mega-events, small-scale sport tourism events tend to utilise the already existing facilities, as well as attracting visitors, who are otherwise unlikely to have visited the area, to the host community's locale. In addition, such small-scale events tend to provide an income for the local businesses, both in terms of the tourism industry and beyond.

In many developing countries, like Cameroon, the promotion of sport tourism, especially in terms of small-scale sport tourism events, is seen as a strategic development objective for the government concerned (Csoban & Serra, 2014). For example, the Cameroon government is actively involved in developing such events through participation in sport (Tichaawa & Swart, 2010; Tichaawa & Bob, 2015; Tichaawa et al., 2018). Hinch and Higham (2001) advocate the integration of sport and tourism in terms of government policy, strategic planning, the development of facilities and services, urban planning, and promotion, because of the obvious interrelationship and overlap between the different aspects concerned, as was previously highlighted. Misener et al. (2013) concur that, in recent times, due to the growing emphasis on improving the amount of participation in social and sport policy at many destinations, sport development has become a focus point for policymakers.

The above is because governments see the development of sport as consisting of part of a broader programme of community development, beyond the actual sport itself. However, according to Nunkoo and Smith (2013), African governments tend to rely on achieving a certain amount of political support from their citizenry, as well as from other stakeholders, for their policies to prosper, especially in the case of those that are geared towards sport tourism development.

The above includes ensuring that the citizens have some capacity to mobilise themselves towards development, rather than just towards acquiring resources once-off (Misener et al., 2013). In the above regard, sport is seen as a key vehicle for development in communities, because community development broadly occurs through sport participation, as guided by the relevant policies (Misener et al., 2013).

Jakovlev et al. (2017) point out that, in present times, given the global market and its contemporary conditions, the relationship between sport and tourism is seen as a strategic point for advancing the goal of world tourism. However, Devine et al. (2011) contend that tourism planning and policy development tend to take place within a framework that is so complex that it is beyond any single public sector organisational unit's scope. For example, Misener et al. (2013) suggest that sport development occurs at multiple levels, including at the levels of local organisations, of individuals whose focus is on the specific requirements of sport, of national agencies, of volunteers, of the public, of the commercial sectors, as well as of transnational organisations, whose main roles include establishing policy and exerting influence through funding. More importantly, it is the organisational partnerships and collaborations between the stakeholders that assist in maximising the complex phenomenon that is sport tourism (Misener et al., 2013; Kennelly & Toohey, 2014). As such, the development of sport tourism should be considered as an issue that exceeds the ambit of sport and tourism

agencies alone. The researchers in question argue that sport and tourism exist within the expanse of a broad political arena that also includes public agencies that are involved in making and delivering policy in such areas as events, outdoor recreation, and heritage, among others. They, therefore, suggest that the linkages between sport and tourism, especially in relation to collaboration, are likely to be highly sensitive to the political climate within the destination or country concerned, giving rise to discussion regarding its challenges and prospects.

MATERIALS AND METHODS

The current study employed a qualitative research design, wherein in-depth, face-to-face semi-structured interviews (on a one-on-one basis) were held with the stakeholders involved in sport and tourism, within the government and private sector sport tourism in Cameroon. The above was done with a view to soliciting relevant information for the study's objectives from among the key resource personnel who could provide insights regarding sport and tourism development in context. Accordingly, sixteen (16) interviews with stakeholders from different tiers of government and the private sector were conducted, in Douala, Yaoundé, Bamenda, and Buea, being four (4) of the country's major cities (see Table 1 below for the relevant details).

Table 1. List of stakeholders interviewed (n=16)

Sector	Organisation	Place	#
Major sponsor	MTN Cameroon	Douala	2
National government	Ministry of Tourism and Leisure	Douala	2
Provincial government	Ministry of Sport and Physical Education (Regional Delegation)	Douala	2
Private sector	Accommodation establishment owner	Yaounde	2
Private sector	Tour guide	Buea	2
NGO	Table tennis coach	Yaounde	2
Private sector	Sports agency – football agent	Douala	2
Local government	Local economic development – local council	Bamenda	2

A purposive sampling technique was initially used to select the stakeholders, on the basis of their knowledge of sport and tourism development objectives, and on their perceptions and experiences of, as well as their roles and activities in, sport tourism generally. Moreover, the selection criteria were also based on the organisations for which they worked, and their involvement in sport and/or tourism, accordingly. A snowball technique was then employed, wherein the selected respondents were asked to refer the researchers to other stakeholders whom they knew would possess the required information around the topic. All of the interviews were conducted personally by the researchers, with, in some cases, a translator, who was conversant in the domains of sport and tourism, being used to assist with the French–to–English language interviews.

The interviews were conducted with prior consent having been sought from all the respondents, and a general interview guide having been made available to all the participants, with the guide containing the broad themes to be explored in the interview process. All the interviews took place at a predetermined location, which was deemed suitable for both parties, and which, in most cases, was the workplace of the respondents. The interview guide was developed as a means of keeping the interview within a specific corridor of focus and scope, while also allowing for reasonable flexibility to probe certain aspects further, and to seek clarification regarding certain issues raised. The adoption of such an approach ensured that the experiences and expertise of the interviewees were

explored in depth, with the purpose of obtaining a wealth of information. The questions posed were largely informed by a combination of the objectives of the study, as well as by a thorough literature review process, which revealed the broad themes of focus. Typical questions asked included: 'How is your organisation involved in developing sport/tourism?', 'According to your knowledge, do relationships exist between the ministries of sport and tourism in Cameroon?', Why does your organisation sponsor sport-related events?', and 'What are the challenges to developing a vibrant sport tourism sector in Cameroon?' The interviews were approximately between 45 and 55 minutes long. The respondents were made aware, prior to the interview commencing, of the electronic tape recorder that was used to record the responses in the interviews.

In addition to the above, the researchers made notes to supplement the recorded work, and to further highlight some of the key issues raised during the interviews. The recordings were later downloaded onto a computer, transcribed verbatim, and thematically analysed in terms of the content analytical technique. The keywords that were selected from each transcript were converted into meaningful themes that were then analysed, in line with the predetermined objectives of the research. Throughout the process, the transcripts and themes were constantly checked against the recordings and the notes made by the researchers, in an effort to ensure reliability and validity. Historical documents and policy papers were then used to contextualise the results.

RESULTS DISCUSSIONS

The results generated from the interviews based on prospects and challenges were grouped into themes, namely: infrastructure development; informal trading opportunities; branding opportunities; domestic tourism opportunities; and the disconnect between sport and tourism officials, as detailed below.

CHALLENGES

Limited infrastructure

As mentioned previously, a key area for sport development, which serves as a useful purpose for tourism, is infrastructure development (Gibson et al., 2012; Nyikana & Tichaawa, 2018). Infrastructure is a key area for tourism-related concerns, and, in Central Africa, like much of the rest of the African continent, it is still an area that requires much investment (Kimbu, 2012; Tichaawa & Bob, 2015; Schmitz & Tsobgou, 2016; Tichaawa, 2017). The results clearly showed that infrastructure generally, but specifically that which was linked to sport, was considered as a major challenge linked to sport tourism development. The respondents point to the poor state of sport-related infrastructure that exists as a challenge. The criticism of such infrastructure was linked to its state in the country, as was revealed by a respondent asking the question: "How can you develop sport tourism in the country with the poor state of sport facilities in the country?" The roads and transport infrastructure leading to the current sport venues themselves were considered to be substandard, to say the least.

The above-mentioned area is worthy of attention, with it being of great concern if sport tourism is to be developed as a vibrant sector for Cameroon and the neighbouring countries. The interviewees argued that, in a country like Cameroon, where the tourism infrastructure and superstructure is largely underdeveloped, owing to structural issues, sport can assist in expediting some of the related development. While the existing situation might change, owing to the hosting of the 2019 Africa Cup of Nations (AFCON), the concerns that were shared by the stakeholders were mainly linked to the extent of the maintenance of the related infrastructure, and to how the local citizens would be likely to benefit accordingly. In addition, the stakeholders' arguments were,

ergo, the fact that sport and tourism often share the same facilities and infrastructure, and, as such, any investment in the sport infrastructure would, in any case, most likely serve to fast-track tourism development. For example, a senior manager of MTN Cameroon (a major sponsor of sport development in Cameroon, and in the subregion under investigation), when quizzed on the main challenges to sport tourism development in Cameroon, noted that "there are very few people or organisations that invest in sport, and big companies are not really putting their money into sports like football, perhaps because of the lack of professionalism of the sports federations. So, therefore, the main challenge is the lack of development in infrastructure, because the state (i.e. the government) is currently focusing on investing on major events, like the AFCON, but more is needed in the local context, in terms of amateur football or sport."

The main issues raised by the stakeholders in relation to the infrastructure and its development are that, while the development of sport might assist in enhancing the tourism infrastructure, and vice versa, many grey areas still remain, especially in terms of the current sociopolitical climate in Cameroon. For example, a representative from the national tourism office (i.e. the Ministry of Tourism and Leisure) mentioned: "There is a lack of harmonisation, due to the involvement of so many different ministers, like those of sport, tourism, transport, culture, etc. So the lack of collaboration between them means that no one person will be able to provide requisite infrastructure, and these are people who are in charge of [the] improvement of [the] sports infrastructure." Another main issue to emerge was that, while some investments had been made in the sport infrastructure, the leveraging thereof tended to be minimal, in the sense that, despite stadium upgrades being done, scant follow-up investments occurred beyond those that were made in terms of the stadium and the space in which to develop sport. Within such a context, it is evident that, while there is true potential for sport to be used as a tool to promote tourism, in certain contexts the situation is complicated by the sociopolitical complexities within the government structures, as was evidenced in the current study. As Rogerson (2013) argues, the absence of committed investment in complementary facilities for tourism and sport, and which was specifically linked to the infrastructure responding to the needs of tourism development, remains a key impediment for a sport tourism-led economic drive in much of sub-Saharan Africa.

Insufficient financing of sport tourism events

A major challenge that was mentioned by all the stakeholders interviewed was the lack of finances involved, which they perceived to challenge the development of sport tourism. On the one hand, the respondents mentioned that, while the local populace was enthusiastic about sport, and attended events as a way of "escaping socio-economic realities", the limited investments made in such events (both amateur and professional), by both the government and the public sector, meant that the profiles of those attending such events were limited to those individuals whose main reason for their attendance was limited to the social, as opposed to the economic, effects thereof, resulting in non-leverage of the event. Resultantly, a lack of finance was perceived to have limited the growth, involvement and participation related thereto.

In addition, the documents that were obtained from government sources showed that the investments that had been made in terms of the development of sport were fairly recent, and, in most cases, short term, with the view to satisfying either the participant, or the event. The lack of a long-term view in regards to sustainable investment in sport denies the possibility of such investment being leveraged for local economic development and for entrepreneurial opportunities. However, the challenge cannot be viewed in isolation, as it is closely linked to the aforementioned challenges, in terms of the lack of investment in the existing infrastructure.

The disconnect in the management of sport and tourism

The disconnect, and the lack of integration and cooperation, in terms of policy and strategy emerged as a major challenge in the documentary analysis. The situation was further confirmed in the interviews that were conducted with representatives in the sport and tourism domains in Cameroon. As was previously raised in the literature review, a main constraint on the developing of sport tourism in Africa, and in using one domain to advance the other, is the lack of collaboration, in terms of which the two are viewed as a mere occasional overlap (Hinch & Higham, 2001; Weed & Bull, 2004; Hinch & Higham, 2011; Kennelly & Toohey, 2014; Taleghani & Ghafary, 2014; Tichaawa et al., 2018). In the current study, the representatives of the different organisations opined that their departments were solely there to focus on their mandate, being to promote and develop tourism and sport, because, as one respondent put it, "we are here to promote our sole mandate and [to] deliver on it". A similar view was held by a number of the stakeholders concerned, including policymakers in government and administrators. While the interviews indicated that the stakeholders involved acknowledged the significant role of sport tourism events as a means of transforming the host destinations, collaboration was noted as being essential (see Swart et al., 2018). However, the historical political separation of the two areas is often evidenced in the government structures, where, despite the common areas of interest, sport and tourism are often represented by different agencies and ministries, who operate independently of each other, and who, often, fail to collaborate (Kennelly & Toohey, 2014, Nyikana & Tichaawa, 2018). The above was, perhaps, the most commonly flagged constraint to sport tourism development in Cameroon mentioned by the respondents. The common perception of highly centralised decision-making, which tends to neglect the voices of those in the lower levels of government, was indicated as being very common. The envisaged symphony of the government, in terms of policymaking, and at various echelons of the government, which the Cameroonian government is striving to achieve, is rather far-fetched in terms of realisation. The stakeholders, in particular, felt that the "hierarchy in most departments assigned tasks to each person which they were to do on a daily basis without questioning, and anything beyond those tasks they were not to do … they cannot go against what the hierarchy asked them to do and were to only stay in that defined channel".

Despite the above scenario, responses were received from the respondents that showed that, at certain points, interactions occurred between the stakeholders, for example between the Ministry of Tourism and Leisure and the Ministry of Sport and Physical Education, in terms of the hosting of sport events (during the events themselves). However, the critique in the above regard is that the interactions were either highly coincidental, or very short-term in nature. For example, one stakeholder went as far as suggesting that, "when you bring regional people from sports, we discuss the benefits, but whatever we discuss will not mean anything, because they themselves do not have much to say as far as the planning and implementation is concerned. It is all done at the highest level." The above implies that there are some intentions to collaborate at the highest level, perhaps by the ministers concerned, but, at the operational level, the above only occurs coincidentally, and, even where it has been planned for, it is not practical enough to allow those working to fulfil their intentions.

OPPORTUNITIES

Promoting the informal business sector

Sport events have been noted as an effective vehicle for driving local economic development, especially through their ability to create employment opportunities for the

host communities involved, as linked to entrepreneurial and other business opportunities (Nyikana & Tichaawa, 2018). Indeed, some studies on business tourism in Africa (see, for example, Rogerson, 2011; Tichaawa, 2017) record the notable emergence of a low-income economy in terms of the informal sector, which is ever-present across the continent, and which is expanding to fill the event spaces as well. Tichaawa (2017) points out that the existence of the strong presence of local entrepreneurs, who capitalise on the events as a platform from which to sell their goods, whether they be of a formal or informal nature. The author, in particular, notes how, in Cameroon, a large increase has occurred in the number of informal traders, who are commonly referred to in the context concerned as 'buyam-sellams', and who use such events as a springboard for making economic gains from sport and tourism.

The traders buy items from the markets, and sell them at the stadium and its precinct, thereby capitalising on the opportunity for business that is presented by sport. In the current study, the respondents acknowledge that the sport events undoubtedly present opportunities for the transacting of informal business, especially regarding food and drink items, as well as sport-related merchandise.However, a different approach than before should be adopted to the above-mentioned area of endeavour, for there to be a meaningful impact on the host communities involved. As one respondent raised, a key challenge is "the failure and inability of stakeholders to come together [which] leads to a lack of focus beyond the event itself, unlike in other successful countries like South Africa, where event attendance is clearly leveraged to see how local people can be presented with business opportunities". Another respondent, from the Regional Youth and Sport Delegation, said: "When the athletes and their followers are not engaged in sport, they have to eat, they have to go to the informal markets to experience other things that they do not eat in their places of origin". The above shows that sport events in Cameroon and in Central Africa generally can play an important role in presenting entrepreneurial opportunities, particularly for unemployed youths and for the relatively well-educated populace of the relevant communities (Tichaawa, 2017).

Destination branding

The concept of branding of destinations through sport events is a relatively new one in tourism studies (Nyikana et al., 2014; Hemmonsbey & Tichaawa, 2018; Zang et al., 2018). According to Hemmonsbey and Tichaawa (2018), emerging destinations have concerned themselves with using sport as a platform for their branding activities, so as to be able to create memorable destination brands. The researchers concerned argue that the exercise is concluded on the basis of having realised how effective sport can be as a powerful agent for destination branding and profiling. Zang et al. (2018) also note that, in the case of many emerging destinations, sport and sporting events, in particular, feature as key elements of destination branding. In the current study, the interviewed stakeholders were highly critical of the inability to capitalise on sport to brand Cameroon as a desirable tourism destination.

For the most part, the inability is intensely linked to all the other aspects raised, as they felt that, for the relevant authorities to capitalise on the existing branding opportunities, collaboration, investment in infrastructure and a concerted effort by all involved would improve output. As an example of the above, a senior manager in the marketing section of MTN posed the question of the strategic maximising of branding opportunities, based on similar observations in other destinations: "The question of using sport to develop a country like Cameroon, especially in terms of tourism, is not being done right, because, in countries like Brazil, this has been done successfully, but, in Cameroon, nobody is investing in it. Cameroon is hosting the 2019 AFCON, but I'm still wondering what we are going to show people who come, or watch, the Cup."

A common feeling among the respondents was that, despite Cameroon being a very strong African football nation, basic branding and marketing activities still need to be undertaken. An instance of such would be the establishment of a football museum, for those who have followed the national team from its historic start of becoming the first African country ever to reach the quarter-finals of the FIFA World Cup in 1990, or from when they won a gold medal at the Summer Olympic Games of 2000 (Tichaawa, 2013). The respondents expressed a feeling that such products as the example given above would have a certain association with Cameroon, and that they would, therefore, assist in bringing sport enthusiasts to the country beyond the event itself. Tichaawa (2013) places the above view in context by saying that the historical success of the Cameroon national team, especially during the FIFA World Cup in 1990, captured the imagination of the world, as the country was then seen as an intriguing place to visit, with the national soccer team even being coined 'the Brazilians of Africa'.

However, the follow-up on the brand was lacking, which resulted in the significance of the image dying down over time, which was a point that was commonly raised by the respondents in the current study. Besides the above, Hemmonsbey and Tichaawa (2018) note that, in the developing countries, capitalising on the branding opportunities that are presented by sport is often complicated by the tendency to focus on other social issues, despite the fact that sport is seen as an opportunity for diverting such attention momentarily. Harilal et al. (2018) suggest that the above could largely be attributed to the fact that, often, countries such as Cameroon do not have the necessary supporting policies in place to capitalise on such opportunities. The lack of policies and guiding frameworks means that stakeholders cannot be mobilised to contribute effectively towards sport tourism development (Kimbu & Ngoasong, 2013).

Promoting domestic tourism

Sport tourism, and sport tourism events in particular, have been acknowledged for the multitude of benefits that they bring to hosting destinations, with a major benefit for the countries being their ability to kick-start, or to promote, domestic tourism (Swart et al., 2018; Tichaawa et al., 2018). The above is particularly important in the context of Cameroon, where, due to a lack of policies, as indicated above (Kimbu & Ngoasong, 2013, Tichaawa, 2017; Harilal et al., 2018), there tends to be a focus on international tourism, while the domestic tourism market is neglected. Such a fact flies in the face of the recent evidence suggesting the great potential for domestic tourism, especially in terms of it being linked to event attendance, because many people travel all over the country to participate in, and to attend, sport tourism events (Nyikana & Tichaawa, 2018). In the current study, the above was also evident, with all the respondents acknowledging the important role that sport tourism plays in promoting a culture of domestic tourism.

Interestingly, the respondents suggested that sport tourism participation in Cameroon is especially linked to the visiting of friends and relatives (VFR), who reside in different areas across the country. As one respondent indicated, "While there is a general lack of tourism culture in Cameroon, domestic tourism is important, because a lot of people travel from one area to another, usually spending three or four days at an uncle's or brother's place. They normally travel to that relative with things to sell which are not available in the local area. Then they also leave there having bought unique items which they can sell back in their normal place of residence. So, therefore, domestic tourism plays this important role, and sport events help promote this type of travel …"

CONCLUSION

The present study analysed the challenges and the prospect of developing sport tourism within the Central African subregion, with specific reference to Cameroon. The

study, which was focused on various sport and tourism stakeholders, took the form of stakeholder interviews. For the most part, the findings revealed that sport can assist a country like Cameroon and those in the region (i.e. Central Africa), through providing socio-economic opportunities, like infrastructure development, which, in turn, could potentially be expanded, to the overall benefit of tourism. Moreover, the stakeholders all acknowledged that sport, particularly sport events, presents an ideal platform for informal business activity, which is a much-needed requirement for unemployed youths, and, if harnessed as such, might lead to a vibrant entrepreneurial culture among those in need of such. In addition, the potential for sport to be used as a branding tool is acknowledged, even though the possibility of attaining success with such a tool remains a current concern for the stakeholders concerned. However, the key impediments to success include the disconnect in the policies that are linked to the development of sport and tourism, particularly in terms of the lack of collaboration between the ministries that are responsible for both. Such findings are generally applicable to the central African subregion, and especially to the Economic and Monetary Community of Central Arica (CEMAC), which is a subregion consisting of countries like Cameroon, Gabon, Equatorial Guinea, Chad, Congo, and the Central African Republic (Odounga-Othy & Swart, 2016, Tichaawa, 2017), because the countries share similar sociopolitical characteristics. Therefore, despite the great potential for tourism development that is shown by the countries identified, the existing structural challenges limit the potential of the region. The study, therefore, makes a modest contribution to the existing literature in terms of sport tourism development. For the subregion, it has become important, at a practical level, to leverage the opportunities presented by sport tourism, for example. The above could be achieved by establishing, and promoting, partnerships between the key stakeholders, such as those in the private sector and those in the public arena, especially in the arena of sport events. Doing the above would ensure that, irrespective of their differing objectives, there are mutual benefits to be gained by both the public and the private sector parties. The study, therefore, advocates for a more focused and integrative theoretical and practical approach to be taken, in terms of which the stakeholders purposefully plan collectively for sport and tourism development, with a view to promoting a sustainable sector that is able to benefit the local communities, and to improve visitor experiences in the communities.

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