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## **GeoJournal of Tourism and Geosites**

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## **AN EXPLORATORY INVESTIGATION OF VISITOR MOTIVATIONS TO THE BARBERTON - MAKHONJWA GEOTRAIL, SOUTH AFRICA**

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**Abstract:** Geotourism is a relatively new tourism niche, representing a distinctive form of nature-based tourism. South Africa has a wealth of geological resources, many of which form the basis for tourism attractions within the country, but limited research has been conducted on the actual geotourism market. By means of a questionnaire informed by the Self Determination Theory, this study aimed to understand the motivations of visitors to the recently developed Barberton Makhonjwa Geotrail in South Africa. The main findings revealed five main motivators including, to escape, for learning and novelty, to participate in activities and networking, for fun, and for personal importance. These findings have important implications for product development and marketing.

**Key words:** Geotourism, geotrail, visitor motivation, Self-Determination Theory

\* \* \* \* \*

### **INTRODUCTION**

Geotourism is gaining considerable momentum as a focus of academic debate (Ruban, 2015:1). As a result, definitions of geotourism are continually evolving (Hose, 1995; Dowling & Newsome, 2006; Sadry, 2009; Hose, 2012). The key tenets of geotourism emerging from such definitions include ‘geology’, ‘sustainability’ and ‘education’. Indeed, these tenets are succinctly embraced in the definition provided by

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\* Corresponding author

Dowling and Newsome (2006:3) who refer to geotourism as tourism that is geologically-based, conservation-focused, involving “an understanding of earth sciences through appreciation and learning”. Although a relatively new term, geotourism is certainly not a new form of tourism. People have travelled for centuries with the purpose of making connections with the environment and the geological features within it. Such geological features are numerous and diverse including mountains, volcanic and water features, mud volcanoes, salt domes, caves, sinkholes, kavirs and deserts, and erosion columns (Amrikazemi & Mehrpooya, 2006). In addition, Sadry (2009) also alludes to sites of interest that are a result of human intervention, such as mines, road cutting sites and stone houses, and adventure-based geosites. To date, academic contributions on geotourism have tended to centre on the development of geotourism products (Zouros, 2010; Farsani et al., 2011; Allan, 2016), and specifically geotrails (Wrede & Múgge-Bartolović, 2012; Norrish et al., 2014). Similarly, studies pertaining to the impacts of tourism on geosites are also abundant (Hose, 2007; Burne & Chapple, 2008; King, 2010; Farsani et al., 2011). Other avenues of investigation include promotional strategies for geotourism sites (Farsani et al., 2011) and geo-education (Farsani et al., 2017).

However, as with all tourism attractions, the success of geotourism sites requires an analysis of the market, thus a better understanding of demand. Although progress has been made in terms of the development of geotourist demographic profiles (King, 2010) and motivational typologies (Hose, 2007; Kim et al., 2008; Mao et al., 2009; Hurtado et al., 2014), literature still remains somewhat scant, with a paucity of studies concerning geotrails in particular. Furthermore, Ruban (2015) also observes an absence of inquiry in South Africa, and indeed the African continent as a whole, despite its wealth of geological heritage. Hence, the purpose of this study is to understand the motivations of visitors to engage in a geotourism experience at the Barberton Makhonjwa Geotrail in South Africa.

### Literature Review

The question of what motivates people to travel is fundamental to tourism marketing and development. Motivation theories are numerous (Cohen, 1972; Plog, 1974; Dann, 1981; McIntosh et al., 1995). Indeed, they play an essential role in understanding the reasons why tourists travel, in addition to the types of activities they engage in whilst being away from home (Allan et al., 2015). Motivation is a significant, yet complicated part of tourism demand and thus a key research focus in tourism. It has become increasingly important to re-evaluate tourist motivations over the past decade due to global economic integration, continuously improving communication, and rapid technological innovation (Harrill & Potts, 2002). Although the topic of motivation has been extensively studied in tourism, the discussion on motivation in a geotourism context is limited. Table 1 provides a summary in this regard.

**Table 1.** Geotourism motivation studies

Contributors	Outcome
Hose (2007)	Identified and differentiated between the ‘dedicated geo-tourist’ and the ‘casual geo-tourist’.
Kim, Kim, Park, and Guo (2008)	Developed four clusters of geotourists; escape-seeking, knowledge / novelty seeking; novelty-seeking and socialisation.
Mao, Robinson, and Dowling (2009)	Focused solely on geoscientists, who travelled alone and for the purpose of increasing knowledge.
Hurtado, Dowling, and Sanders (2014)	Developed a geotourist typology model adapted from Mckercher’s cultural typology model. Types included: incidental, accident, serendipitous, intentional and purposeful geotourist segments.
Allan, Dowling, and Sanders (2015)	Adapted the Self Determination Theory using the tenets of intrinsic motivation, extrinsic motivation and amotivation.

Hose (2007) proposed two main typologies within geotourism to include the ‘dedicated geotourist’ and the ‘casual geotourist’. The former places importance on personal education / intellectual gain and enjoyment, whilst the latter rather gives precedence to pleasure. Kim et al., (2008) sought to investigate motivations of geotourists to a cave in Korea. Based on a cluster analysis, their study proposed four categories of motivation including; escape seeking, knowledge and novelty seeking, novelty seeking, and socialisation. Within each cluster, the study further sought to draw up a demographic profile of such visitors, which also included elements of visitor satisfaction, preferences, and beliefs regarding cave resources. Mao et al., (2009) adopted a more targeted approach, exploring the motivations of geoscientists, specifically. Their research concluded that such tourists travelled alone and, unsurprisingly, for the purpose of increasing knowledge. Hurtado et al., (2014) applied an existing cultural tourism typology model proposed by McKercher (2002) in a geotourism context. Using a sample of geotourists visiting the Crystal Cave in Western Australia, their study concluded that such a model was indeed applicable to that of geotourism but with slight modifications (Table 2).

**Table 2. Geotourism typology model** (Source: Hurtado et al., 2014:612).

Motivation	Low		Medium	High	Very High
Geotourist	Incidental Geotourist	Accidental Geotourist	Serendipitous Geotourist	Intentional Geotourist	Purposeful Geotourist
Experience	Negative	Positive			

The 5-component typology represents the spectrum of geotourists according to their motivation and experience. Essentially, at one end of the spectrum is the ‘purposeful geotourist’ who is highly motivated with the primary purpose of visitation to gain knowledge and insight. This individual has a positive experience.

In contrast, at the other end of the spectrum is the ‘incidental geotourist’ who exhibits a low level of motivation with geotourism playing no meaningful role in destination choice, and whose experience is somewhat negative. Table 3 details the descriptors of each geotourist type within the continuum.

**Table 3. Descriptors of Geotourist Types** (Source: Hurtado et al., 2014:612)

Type of Geotourist	Descriptors
Purposeful Geotourist	Very high motivation / positive experience <ul style="list-style-type: none"> <li>• The main motivation for travel is to visit a geosite;</li> <li>• Has a positive experience based on their interest in the geosite;</li> <li>• Desires to learn more.</li> </ul>
Intentional Geotourist	High motivation / positive experience <ul style="list-style-type: none"> <li>• Motivation is influenced by the geo-site;</li> <li>• Additional motivations are also present;</li> <li>• They have a positive experience and enjoy the information delivery.</li> </ul>
Serendipitous Geotourist	Medium motivation / positive experience <ul style="list-style-type: none"> <li>• Geotourism plays a moderate role in the decision to visit a geosite;</li> <li>• Once on-site, they engage in a positive experience.</li> </ul>
Accidental Geotourist	Low motivation / positive experience <ul style="list-style-type: none"> <li>• Motivation is not influenced by geotourism;</li> <li>• This tourist may not even be aware of the geosite prior to visitation;</li> <li>• Once on-site, the experience encountered is positive.</li> </ul>
Incidental Geotourist	Low motivation / negative experience <ul style="list-style-type: none"> <li>• Geotourism plays no meaningful role in destination choice;</li> <li>• The experience encountered is negative.</li> </ul>

The final example of a geotourism motivation study highlighted in Table 1 is that by Allan et al., (2015) who asserted that the Self-Determination Theory (SDT) presents the most appropriate method for investigating geotourists' motivation in undertaking a geotourism experience, given that it incorporates a range of motivation theories (Cognitive Evaluation Theory, Organismic Integration Theory, Causality Orientations Theory and Basic Needs Theory) which emphasise the *type* of motivation and not only the total amount of motivation. The most significant distinction in SDT is made between 'autonomous motivation' and 'controlled motivation'. Autonomous motivation comprises both intrinsic motivation and the types of extrinsic motivation in which people have identified and integrated an activity's value into their sense of self (Deci & Ryan, 2008). Allan (2011) further alludes to autonomous motivation comprising the desire to act and participate in an activity with a full sense of 'choice' because it is interesting and exciting. When a person is autonomously motivated, he / she experiences self-endorsement of his / her actions, or volition (Deci & Ryan, 2008). In contrast, controlled motivation consists of both external regulation and introjected regulation. With external regulation, a person's behaviour is a function of external possibilities of reward or punishment.

In the case of introjected regulation, the regulation of the action has been partially internalised and aspects such as an approval motive, avoidance of shame, contingent self-esteem and ego-involvements motivate behaviour (Deci & Ryan, 2008). Controlled motivation, according to Allan (2011), can be summarised as a sense of selection based on pressure and constraints. As a result, controlled people experience pressure to think, feel, or behave in a specific way. In summary, SDT suggests that, "behaviours can be characterised in terms of the degree to which they are autonomous versus controlled" (Gagne & Deci, 2005:334). SDT further posits a self-determination continuum which ranges between three types of motivation; intrinsic, extrinsic and amotivation. When people participate in an activity because they find it interesting, fun and/or challenging, and the activity results in spontaneous satisfaction, the motivation for participation, is *intrinsic* in nature (Ryan & Deci, 2000:56). Gagne and Deci (2005:334) elaborate, claiming that when people are intrinsically motivated to do something, they act with self-direction and autonomy and are free from external forces. Intrinsic motivation measures include knowledge gain, enjoyment, escape from daily routine, relaxation, excitement, friendship, and a sense of wonder (Allan, 2011:56). *Extrinsic* motivation, on the other hand, is when a person engages in an intentional behaviour with the purpose to earn external rewards or avoid punishment (Allan, 2011). Extrinsic motivation measures include an analysis of the social, cultural and recreational benefits, importance to visit the site, the need to participate in order to be happy, the need of being occupied with activities, for status reasons, and because pressure exists to participate. Finally, *amotivation* refers to a lack of motivation and usually occurs when people do not realise that the outcome or reward is subject to their action (Deci & Ryan, 2008). The utility of this holistic approach to motivational analysis (i.e. the combination of various motivational theories), thus provided the rationale for the adoption of the SDT as a framework for understanding visitor motivations to the Barberton Makhonjwa geotrail.

## STUDY AREA

The Barberton Makhonjwa Geotrail is one of South Africa's most recently developed geotourism attractions. Forming part of the Barberton Makhonjwa Mountain Lands, the area is otherwise referred to as the Barberton Greenstone Belt and contains some of the oldest, well preserved rocks on earth, with the physical and chemical characteristics remaining substantially unaltered since their original formation (Ferrar & Heubeck, 2013:ix). The geotrail showcases some of the oldest rock formations (3.2-3.57

billion years) on earth dating back to the Archaean period of earth's history. In addition, some of the oldest preserved fossils of cyanobacteria, the foundation of life on earth, have been found here (BATOBIC, 2018). Besides its unique geology, the Region also supports a rich plant, animal and birdlife, and hence is one of South Africa's 20 biodiversity hotspots. Other cultural features include the scars of historical mining, stone-age shelters and artefacts, and ancient ochre mines (Ferrar & Heubeck, 2013). Indeed, the site is so important that UNESCO designated it a world heritage site in July 2018 (UNESCO, 2018).

Commencing in Barberton (Figure 1), the route follows the R40, extending 38km towards the Bulembu Border Gate with Swaziland. There are 11 designated sites along the route which represent different geological phenomena. These sites provide interpretive facilities to visitors to showcase the landscapes and geological features along the route. The majority of the sites have designated parking and interpretation panels, with many offering scenic viewpoints. However, there are currently no amenities along the route that promote visitor spend (such as retail outlets).

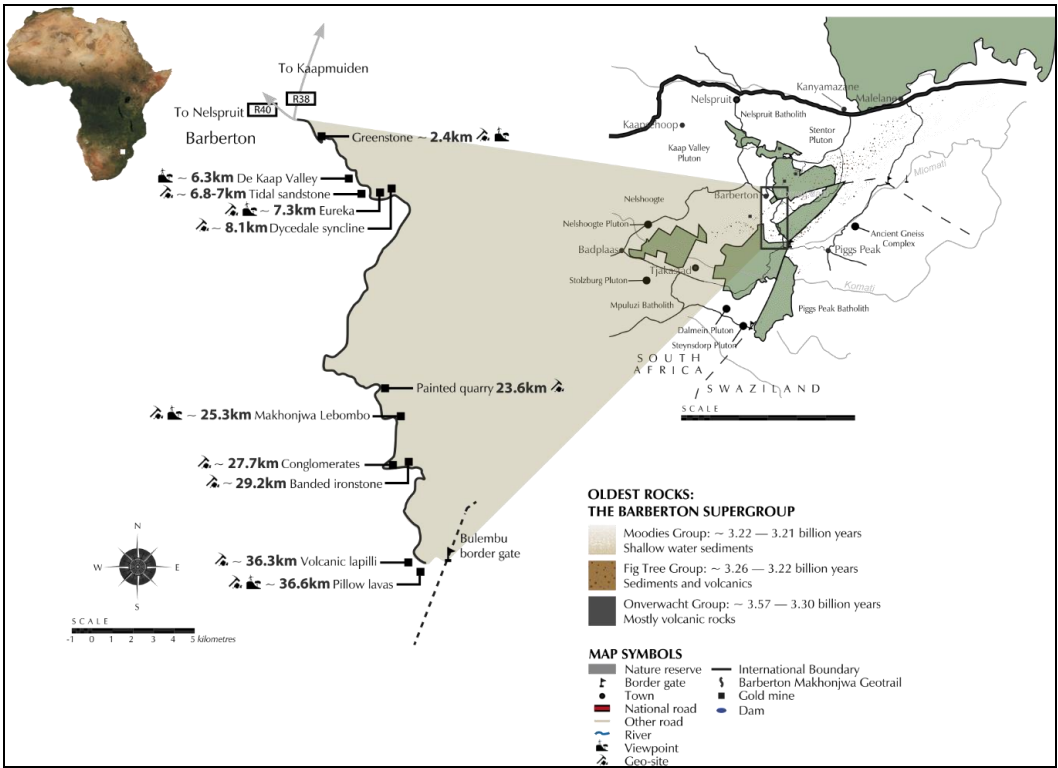


Figure 1. Barberton-Makhonjwa Geotrail (Source: BATOBIC, 2018)

METHODOLOGY

This study was quantitative and exploratory in nature utilising a survey research design. The target audience was ‘intentional’ visitors to the Barberton Makhonjwa Geotrail, as opposed to visitors simply using the route to access the border post to Swaziland. Due to the absence of a sampling frame, convenience sampling was utilised to determine a sample of 70 respondents. The questionnaire was adapted from Allan et al. (2015) and formed two sections. The purpose of the first section was to elicit demographic information from the respondents including age, gender, nationality, and place of



residence. The second section was designed to elicit visitor motivations. Questions were framed around the key constructs of the Self Determination Theory; extrinsic motivation, intrinsic motivation and amotivation. Using a five point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), respondents had to indicate their level of agreement for each motivational item listed under each key construct.

On-site self-completion questionnaires formed the primary data collection tool, and were administered over a 3-month period (April – June 2016). Trained fieldworkers were on-site to issue, clarify and collect the questionnaires. The majority of the questionnaires were completed at strategic locations on the trail such as viewpoints and parking areas. Data was captured on MS Excel and statistical analyses were performed in two parts. Firstly, a descriptive analysis was conducted to determine the frequencies of both demographic and motivator variables. Secondly, an exploratory factor analysis (EFA) was conducted on the motivator variables in order to identify the main motivators.

## RESULTS

The results of the study are presented in two main parts. Descriptive results pertaining to demographics and Likert scale ratings are firstly presented, followed by the results of an EFA.

### Descriptive results

In terms of demographics, the majority of respondents were male (60%) compared to females (40%). Respondents were primarily in the age bracket of 25-54, which made up a total of 64.4% of respondents. Other age groups included 18- 24 years (14.3%), 55-64 (12.9%), 65-74 (7.1%) and 75+ at 1.4%. In terms of nationality, the majority of respondents were South African (77.1%).

**TABLE 4.** Descriptive results of visitor motivations (\*Standard Deviation)

	Statement	1.	2.	3.	4.	5.	Mean /Sd*
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1	To learn new things		1.4	7.5	46.4	44.9	4.35/.682
2	To increase my knowledge		2.9	17.4	39.1	40.6	4.17/.822
3	To relax and rest		0	11.6	27.5	58.0	4.38/.909
4	To refresh my mental and physical state		4.3	18.8	23.2	49.3	4.09/1.121
5	To escape from the daily life routine		2.9	8.7	33.3	50.7	4.23/1.031
6	It is exciting		0	7.2	31.9	60.9	4.45/.632
7	To have fun		1.4	7.2	30.4	60.9	4.51/.699
8	To meet people with similar interests and hobbies		8.7	39.1	24.6	21.7	3.48/1.106
9	To travel with friends and my family	5.7	1.4	5.7	28.6	58.6	4.33/1.059
10	Because it is an exotic place	2.9	5.7	20.0	32.9	38.6	3.99/1.042
11	To explore new places	1.4	2.9	5.8	14.5	75.4	4.59/.846
12	Because it has many social, cultural and recreational advantages for me	0	8.7	26.1	34.8	30.4	3.87/.954
13	Because I believe it is personally important to me to travel to the site	1.4	4.3	23.2	30.4	40.6	4.04/.977
14	In my life I need this type of tourism activity to be happy	1.4	5.8	20.3	31.9	40.6	4.04/.992
15	I must be occupied with activities	2.9	5.9	30.9	35.3	25.0	3.79/1.002
16	To show others that I am a distinct person	17.1	12.9	31.4	17.1	21.4	3.13/1.361
17	Because my family and friends tell me to do this activity	28.6	17.1	24.3	15.7	14.3	2.70/1.408

International respondents (20%) were predominantly from Germany, Switzerland and Belgium. In terms of local travellers, the majority resided in Mbombela (Nelspruit) (32.9%) followed by Barberton (27.1%). This indicates that over half the respondents resided in areas within a 50km radius of the research area. Respondents were requested to rate 17 items related to visitor motivations on a Likert scale of 1 to 5. On this Likert scale, 1 represented *strongly disagree* while 5 represented *strongly agree*. The items on the scale represented the three SDT categories of motivation (intrinsic, extrinsic- and amotivation). The results are presented as percentages in Table 4 (with the exception of the mean and standard deviation). From the findings presented in Table 4 it is evident that respondents rated the following five main individual motivator variables as the highest; 'to explore new places', 'it is exciting', 'to have fun', 'to relax and rest' and 'to learn new things'. These results provide an insight into individual motivators. For a more inferential view of these motivators, an EFA was conducted, the results of which are presented in the following section.

**Table 5.** Results of EFA

Travel motivation	Component					
	F1	F2	F3	F4	F5	F6
	Escape	Family and friends	Learning and novelty	Activities and networking	Fun	Personal importance
<b>Cronbach Alpha</b>	<b>0.730</b>	<b>0.340</b>	<b>0.551</b>	<b>0.651</b>	<b>0.753</b>	<b>0.677</b>
<b>Mean</b>	<b>4.23</b>	<b>3.52</b>	<b>4.28</b>	<b>3.60</b>	<b>4.53</b>	<b>3.96</b>
<b>Standard deviation</b>	<b>2.183</b>	<b>1.234</b>	<b>0.844</b>	<b>1.110</b>	<b>0.661</b>	<b>0.959</b>
To relax and rest	0.814					
To refresh my mental and physical state	0.821					
To escape from daily life routine	0.437					
To learn new things			0.405			
To increase my knowledge			0.358			
To explore new places			0.818			
Because it is an exotic place			-.277			
It is exciting					-0.817	
To have fun					-0.906	
Because it has many social, cultural and recreational advantages for me						0.769
Because I believe it is personally important to me to travel to the site						0.826
In my life I need this type of tourism activity to be happy				0.203		
To show others that I am a distinct person				0.641		
I must be occupied with activities				0.866		
To meet people with similar interests and hobbies				0.571		
Because my family and friends tell me to do this		0.607				
To travel with family and friends		0.606				

### EFA Results

An EFA was conducted on the 17 motivator variables using a principal components factor analysis with Oblimin rotation and Kaiser normalisation. The factor analysis identified six distinct motivator factors as presented in Table 5. These six factors accounted for 69.25% of total variance. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.636 which indicates an acceptable correlation. Bartlett's Test of Sphericity also indicated a statistical significance at 0.001 (Df = 136).

The results presented in Table 5 show that there are six distinct motivator factors as perceived by the respondents at the Barberton Makhonjwa Geotrail.

**Table 6.** Component correlation matrix

Factor	F1	F2	F3	F4	F5	F6
F1	1.000	.023	.055	.140	-.242	.243
F2	.023	1.000	-.008	-.024	-.027	-.137
F3	.055	-.008	1.000	.017	-.129	.027
F4	.140	-.024	.017	1.000	-.180	.183
F5	-.242	-.027	-.129	-.180	1.000	-.198
F6	.243	-.137	.027	.183	-.198	1.000

Table 6 provides an indication of the component correlation between the six identified factors. The factors identified have relatively low coefficients, indicating that these factors are distinct, have few relationships with one another, and can be considered significantly distinct. There is however a minor relationship between Factor 1 and Factor 6. The main motivator factor was identified as *fun*. This motivator factor included the variables of excitement and to have fun; it also scored the highest mean as well as the highest reliability coefficient. This finding indicates that respondents were primarily intrinsically motivated as described by Ryan and Deci (2000) and may be considered serendipitous geotourists (Hurtado et al., 2014). Thus, the main motivator to the Geotrail is not necessarily geology itself, and the majority of visitors may not be purposeful geotourists, but rather tourists who want to have fun.

This motivator factor was followed by the need for *learning and novelty*. According to Hurtado et al., (2014) this may imply a purposeful geotourist, or a traveller that visits the site for the primary purpose of learning about geotourism. This may also be considered an intrinsic form of motivation as identified by Ryan and Deci (2000).

*Escape* was identified as the third main reason for respondents to visit the site and matches the escape seeking geotourist as identified by Hose (2007). This form of autonomous motivation (Ryan & Deci, 2000) may be both intrinsically motivated and extrinsically motivated. Thus, the respondent perhaps has a desire to get away from routine and to relax as the main intrinsic motivation, and the desire to visit the Geotrail may be the secondary motivation, which is extrinsic.

*Personal importance* aspects included the element of social, cultural and recreational advantages for the respondent and the belief that it is personally important to travel to the site. These intrinsic motivations indicate that these respondents are drawn to the site for recreational opportunities offered by the Geotrail.

*Activities and networking* fulfils the social desire of respondents who wish to spend time with people who have similar interests, either socially or in terms of activities. These respondents are also intrinsically motivated as described by Ryan and Deci (2000).

The motivator of *family and friends* was identified as the sixth motivator. However, due to a low reliability coefficient and the lowest mean, it cannot be considered a reliable measure of motivation for this study. This motivator was also the

only one which stood out as a controlled motivation and may be considered a form of amotivation as identified by Allan (2011).

## CONCLUSIONS AND MANAGERIAL IMPLICATIONS

Geotourism is a growing niche tourism market. As a result, geotourism has started to receive increased interest from researchers studying different aspects of this phenomenon. However, research into geotourism demand and motivation is somewhat scarce. The Barberton Makhonjwa Geotrail is a relatively new geotourism attraction in South Africa. As a geological site, it is well established due to its geological significance, but from a tourism point of view, it is comparatively novel.

Therefore, tourism related studies concerning this site are required for purposes of positioning it as a tourist attraction, as well as for the development of effective marketing and promotion strategies. To date, there is no information available regarding the people who are attracted to visit the Geotrail, nor what motivates them to visit. As a result, this study aimed to gain an understanding of the motivations of visitors that engage in a geotourism experience at this site.

Findings indicated that respondents were motivated to visit the Geotrail for five primary reasons, namely; to escape, to learn and for novelty, to participate in activities and networking, for fun, and lastly, for personal importance. All these motivator factors represent intrinsic motivation according to the SDT. One factor, namely family and friends, was identified as the sixth highest rated factor. However, it was not significant enough to warrant being listed as a main factor. This was also the only factor which was considered a controlled motivator as these respondents were effectively mandated to visit the Geotrail and did not do so at their own discretion. The local and provincial bodies responsible for managing and promoting the Barberton Makhonjwa Geotrail will need to take into account these key visitor motivations. Acknowledging such motivations will ultimately assist in determining the future development of products / services on the Geotrail (with a view to ensuring visitor satisfaction), in addition to the design of promotional activities that 'speak to' the primary motivations for visitation.

Opportunities for future research include the potential for a longitudinal study on the Barberton Makhonjwa Geotrail (given its infancy), to document trends and patterns in visitor characteristics and motivations over time. In the event of the Barberton Makhonjwa Geotrail being awarded UNESCO World Heritage Status, this could also present a further research opportunity in terms of the impact of its new status on visitation. Cross-border comparisons with other geotrails is also permissible.

Furthermore, unlike other previous studies such as Hurtado et al. (2014), this study did not aim to measure whether the existence of the Barberton Makhonjwa Geotrail serves as a catalyst for tourism to the wider destination; in this instance Barberton, or the Mpumalanga province itself. Thus, there is potential for future research in this regard.

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## **TOURISM, LOCAL ECONOMIC DEVELOPMENT AND INCLUSION: EVIDENCE FROM OVERSTRAND LOCAL MUNICIPALITY, SOUTH AFRICA**

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**Abstract:** A critical focus within the growing scholarship around tourism development and planning is that of tourism and local economic development (LED) planning. This paper investigates the nexus of tourism and LED planning in South Africa. Arguably, South Africa provides fertile territory for exploring this relationship because of the national importance of tourism for the economy as a whole and of a policy commitment by national government to the support of sub-national development planning. Evidence is presented from the Overstrand Local Municipality in the Western Cape, one of many small towns where tourism is a critical local economic driver. The evidence shows that tourism expansion can contribute to enhanced growth of the local economy as well as job creation for local communities. This said, the existing ownership structure of the local tourism economy is massively weighted to white entrepreneurs such that the local tourism economy cannot be described as inclusive.

**Key words:** local economic development, inclusive tourism, transformation, black entrepreneurs, Overstrand local municipality

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### **INTRODUCTION**

Over the past 40 years a noticeable international trend is the move away from centrally-driven approaches for economic development undertaken by national governments and their replacement by an array of local or ‘place-based’ development strategies initiated by sub-national tiers of government (Pike et al., 2006; Rogerson & Rogerson, 2010; Pike et al., 2011, 2014; Rogerson, 2014; Pike et al., 2015; Rodriguez-Pose &

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Wilkie, 2015). In particular, the practice of local economic development (LED) emerges as an increasingly common feature of international development planning, particularly in the context of trends towards decentralization – the deliberate transfer of resources away from central state institutions – and of changing structures of government and governance (Rodriguez-Pose & Tijmstra, 2007; 2009). In a turbulent changing environment for development planning it is argued there is an increasingly significant role for sub-national authorities, such as local governments, in territorial planning for local development and for attaining goals of economic ‘inclusion’ (Rodriguez-Pose & Wilkie, 2015, 2017). Although the precise meaning of the term is contested an ‘inclusive’ economy is defined as one that “expands opportunities for more broadly shared prosperity, especially for those facing the greatest barriers to advancing their well-being” (Benner et al., 2018: 6).

Arguably, sub-national tiers of government are gaining power and capabilities “to design and implement contextually tailored economic development strategies that reflect local socio-economic and institutional characteristics, conditions and realities” (Rodriguez-Pose & Wilkie, 2017: 151). This trend is significant as it is apparent that the “new capacity of subnational authorities to devise and implement territorially oriented approaches to development represents an important opportunity for regions and localities to mobilize their full economic potential” (Rodriguez-Pose & Wilkie 2017: 153). In many parts of the global North (as well as an increasing number of destinations in the global South) one popular focus for LED planning is tourism promotion (Butler & Rogerson, 2016). Agarwal et al. (2000: 252) observed as far back as 2000 that “tourism is widely recognised as an instrument of local economic development”. Currently, in the global South much policy attention surrounds the pro-poor credentials of tourism thus giving it often a significant role in strategies for poverty alleviation (Saarinen et al., 2013; Saarinen & Rogerson, 2014). Arguably, as pointed out by Saarinen et al., (2017) a critical focus within the growing scholarship around geographies of tourism development and planning is that of tourism and local economic development planning. Further, there is a parallel surge of writings and concern about the ‘inclusiveness’ of expanding tourism economies and destinations (Butler & Rogerson, 2016; Bakker & Messerli, 2017; Hampton et al., 2018; Scheyvens & Biddulph, 2018; UNWTO, 2018).

South Africa represents one of the most well - researched countries in the global South in terms of the policy and practices of LED (Nel & Rogerson, 2005; Rogerson, 2006, 2007a, 2010, 2014; Nel & Rogerson, 2016; Rogerson & Nel, 2016; Rogerson, 2018a, 2019). As argued by Nel and Rogerson (2005) for much of the period of South Africa’s democracy since 1994 LED planning has been undertaken, with varying degrees of commitment, and anchored on the defined principle of ‘developmental local government’ which was introduced in 1998. In terms of the country’s national Constitution all local authorities are mandated to implement Local Economic Development (LED) strategies which in most cases take on a pro-poor focus with the exception of South Africa’s metropolitan areas where market-based approaches are more in evidence (Rogerson, 2010; Nel & Rogerson, 2016; Rogerson, 2018b). Given the apartheid legacy of inequality and racially-structured economic exclusion (World Bank, 2018) the attainment of more inclusive pathways of development is prioritised increasingly in LED policy and practice. Over the past nearly 20 years, with varying measures of success and different degrees of commitment, most South African local governments attempted to undertake LED and embracing tourism promotion as one strategic intervention (Nel & Rogerson, 2016). In certain cases, however, local governments pass on the LED implementation mandate to local development agencies, many of which are engaged with the tourism sector (Lawrence & Rogerson, 2018, 2019).

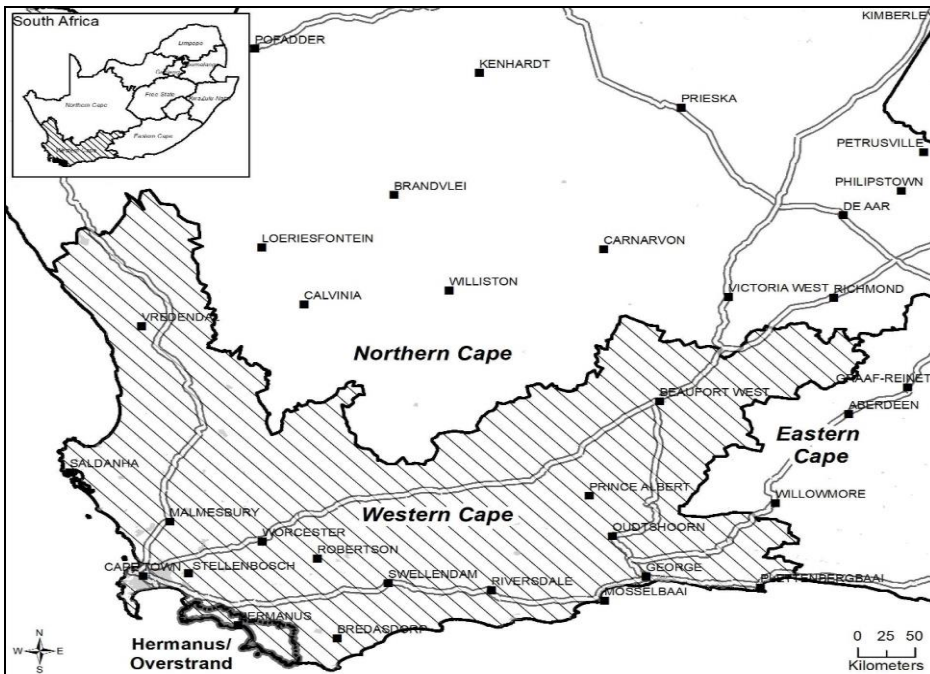
Overall, a recent national survey undertaken of LED strategies pursued across all the country's municipal authorities showed that the tourism sector is seen as a potential driver for achieving the objectives of local economic development (Rogerson & Nel, 2016). Indeed, across South Africa as a whole a remarkable 87 % of all local authorities were targeting tourism as a potential economic engine of local development (Nel & Rogerson, 2016). Tourism is a particular focus for development promotion in many small town municipalities of South Africa (Binns & Nel, 2002; Rogerson, 2002a, 2002b; Marais, 2004; Donaldson, 2007; Ferreira, 2007; Nel & Rogerson, 2007; Rogerson, 2007a; Halseth & Meikeljohn 2009; Donaldson & Marais, 2012; Rogerson & Rogerson, 2014; Rogerson & Harmer, 2015; Rogerson, 2016; Harmer & Rogerson, 2016; Irvine et al., 2016; Donaldson, 2018; Kontsiwe, 2018; Van der Merwe & Rogerson, 2018). For national government a major policy priority is to foster a more inclusive tourism economy by fostering the expanded participation of black tourism entrepreneurs (Department of Tourism, 2018a, 2018b). It is against this backdrop that the objective in this paper is to investigate the specific characteristics of tourism development and the role assumed by tourism as part of LED planning in one small town coastal municipality in South Africa's Western Cape province. Three sections of discussion follow. First, is a brief sketch of the case study area and a review of methodology and sources. This is followed by a detailed analysis of the key features and challenges of the Overstrand tourism economy. The third section focuses specifically on the question of how 'inclusive' is the Overstrand tourism economy both in relation to local planning objectives for inclusive development as well as wider national government initiatives for broadening the involvement in the tourism economy of South Africa's disadvantaged 'non-White' communities under apartheid.

### **CASE STUDY AND METHODS**

The Overstrand Local Municipality is situated south east of Cape Town in Western Cape province (Figure 1). According to the 2011 census the recorded population of the Overstrand was 80 432 with the largest town being that of the coastal community of Hermanus. The current estimates suggest that by 2017 the population had grown to 91 190 in total (Western Cape Government, 2017). In terms of racial composition, the most recent data shows 43 percent of the population as African (black), 29 percent as Coloured and 28 percent white. The fastest growth is amongst the African community mainly as a result of expanding rates of in-migration from poverty-stricken areas of Eastern Cape province (Overstrand Local Municipality, 2018a, 2018b). Geographically the Overstrand region is bordered by the Atlantic Ocean. Accordingly, tourism development in this local municipality is part of the 'blue economy' and wider national government initiatives for expanding coastal and marine tourism in South Africa (Rogerson & Rogerson, 2019).

Within the Overstrand Municipality are several tourism destinations including Hermanus, Kleinmond, Betty's Bay, Stanford and Gansbaai. The area encompasses a range of tourism assets including wine farms in the Hemel-en-Aarde Valley and the Walker Bay region, numerous natural protected areas which provide hiking and camping opportunities as well as a variety of marine activities most notably whale viewing and cage diving at Gansbaai with great white sharks. The urgency for LED planning in this municipality to become more 'inclusive' was underlined during 2018 by mass civil disturbances part of which was triggered by the absence of economic livelihood opportunities. Protests were led by poor residents from the area's black (Zwelihle) and coloured townships (Hawston), which were consolidated under apartheid planning. Underpinnings of the civil disturbances are the absence of affordable housing and (relatively) high levels of local unemployment, estimated as 23 percent for Overstrand as a whole but with youth unemployment rates exceeding 30 percent (Steyn, 2018a, 2018b, 2018c, 2018d, 2018e, 2018f).





**Figure 1.** Overstrand Local Municipality

In researching the local economy and issues pertaining to tourism reliance upon primary source material was necessary as economic development issues relating to the Overstrand region in general have not been the focus of much scholarly attention with the exception of works by Findlay (1997) on whale watchers and McKay (2017) on shark-cage diving at Gansbaai. At the outset an extensive documentary search was undertaken for relevant planning reports, the local Integrated Development Plan and existing studies on tourism in the municipality. In addition, relevant data concerning the changing tourism economy was accessed both through these reports and the (unpublished) IHS Global Insight data base which has been utilised successfully in other recent South African research on tourism (Rogerson, 2018).

The key local planning documents that inform this discussion are those relating to local development in the Overstrand municipality, most importantly the Integrated Development Plan (IDP) (Overstrand Local Municipality, 2012, 2014, 2018a, 2018b). Other relevant individual reports were accessed relating to proposed projects in tourism and of related developments including for aquaculture projects. Further primary material dealing with contemporary issues was secured by working through *The Village News*, the local Overstrand newspaper. The findings from these documentary sources are supplemented by and triangulated with a set of qualitative semi-structured key interviews which were undertaken with municipal officials responsible for the local tourism economy, tourism promotion and marketing.

In addition, further interviews were conducted with members of the local communities (including an established black tourism entrepreneur) as well as several key private sector stakeholders in the local tourism economy including the leader of a local think-tank (initiated following the protest actions) to improve the local tourism economy. For ethical reasons the names of our interview respondents are not disclosed.

### THE OVERSTRAND TOURISM ECONOMY: STRUCTURE AND ASSETS

A profile of the contemporary tourism economy of the Overstrand can be obtained through an analysis of the local level data which is extracted from the data base of IHS Global Insight. The available information for 2001-2015 is supplemented by the findings drawn from a number of recent investigations on the state of the local tourism economy which have been prepared for the local municipality (PricewaterhouseCoopers, 2010; Lloyd, 2018) as well as from material sourced from our stakeholder interviews. The major characteristics of the local tourism economy are presented and analysed on Tables 1-4.

**Table 1.** Overstrand Municipality: Purpose of Trip 2001-2015 (Source: IHS Global Insight data)

	2001	%	LQ	2006	%	LQ	2015	%	LQ
Leisure	73653	59.3	2.72	96515	60.2	3.41	119 292	55.6	3.02
Business	9830	7.9	0.79	12961	8.1	0.80	15 968	7.4	0.65
VFR	34359	27.7	0.51	46820	29.2	0.46	75 285	35.1	0.57
Other	6345	5.1	0.36	3997	2.5	0.27	3971	1.9	0.21
Total	124 187	100.0		160 292	100.0		214 517	100.0	

Table 1 reveals the growth of Overstrand as a tourism destination with the near doubling in total number of tourist trips recorded in the period 2001 and 2015. This said it is estimated that 81 percent of tourist trips to Overstrand are for a one night stay only (Steyn, 2018g). In terms of purpose of visit it is revealed that the Overstrand tourism economy is dominated overwhelmingly by leisure trips which accounted for 60 percent of all tourist trips in 2006. Between 2006 and 2015 a relative decline in the numbers of leisure trips is evidenced. During 2018 leisure visits to the Overstrand were boosted by the water crisis in Cape Town; in one municipal report it was remarked of 2018 trips that “there was a component of visitors who see the Cape Whale Coast as a short-distance local destination with the prospect of taking a bath and doing laundry high on the agenda” (Overstrand Local Municipality, 2018b: 22). Since 2001 it is apparent that VFR tourism has expanded in significance in the Overstrand. Nevertheless, the share of VFR travel which is recorded for the Overstrand is far below that of the country as a whole. Business tourism is of only minor significance in the contemporary Overstrand tourism economy, albeit there are a number of initiatives seeking to boost this segment which are associated with the establishment of several small conference venues at local hotels and in particular at the upmarket Arabella Golf Estate (Lloyd, 2018).

Another dimension of conference tourism is The Grail Centre at Kleinmond which is run by a faith-based organisation and targeted at the market of non-government as well as non-profit organisations. The calculation of location quotients shows clearly that Overstrand tourism economy is massively concentrated around leisure tourism with business and VFR travel of minimal significance. Across the different aspects of leisure tourism the interviewees asserted that the strength of the Overstrand region and especially of Hermanus was as ‘a *family-oriented*’ destination as compared to an ‘*aspirational destination*’ such as Franschhoek a fashionable food and wine destination situated in the heart of the Cape Winelands. The Overstrand IDP (2012: 85) acknowledges also the need to focus on enhancement of recreational facilities for the youth and family activities which it considered could be achieved “through development of harbours and caravan sites with tourism concentrations”.

Tables 2 and 3 unpack the data by origin of visit, whether domestic or international. Table 2 focuses on trips and Table 3 on bednights. Table 2 shows the dominance of domestic tourists in the Overstrand economy which represents the

continuation of a long history of the evolution of Hermanus as a domestic tourism resort (Lloyd, 2018). It is observed, however, that across the period 2001-2015 there is a relative reduction in the overall share of domestic as opposed to international trips from 80.1 percent in 2001 to 78.3 percent by 2015. This is a general reflection of the downturn in domestic travel since 2010 accompanying a downturn in the national economy. According to one report (Steyn, 2018g), most domestic visitors are either from the Western Cape (58%) or Gauteng (17%) which is South Africa's economic heartland. In terms of location quotients it is revealed that Overstrand emerges as relatively strong for international as against domestic travel. Unlike the national picture of international tourism which is dominated by regional visitors from sub-Saharan Africa the cohort of international tourists to Hermanus is comprised mostly of long-haul international travellers. In the research undertaken by PricewaterhouseCoopers (2010: 25) it was recorded that the "majority of international visitors come from Europe and the United Kingdom". More recent information points to the leading three international source markets are Germany (29 %), the United Kingdom (25%) and the United States (6%) (Steyn, 2018g). The Netherlands is further cited as a significant source market. Tour groups from China are also observed as growing in numbers particularly in Hermanus (but not other parts of the Overstrand) and most recently, the interviewees from the local destination marketing organisation have observed an upturn in visitors from Israel.

**Table 2.** Overstrand Municipality: Origin of Trip 2001-2015 (Source: IHS Global Insight data)

	2001	%	LQ	2006	%	LQ	2015	%	LQ
Domestic	99 478	80.1	0.96	126 364	78.8	0.94	167 915	78.3	0.98
International	24 709	19.9	1.19	33 928	21.2	1.25	46 602	21.7	1.05
Total	124 187	100.0		160 292	100.0		214 517	100.0	

**Table 3.** Overstrand Municipality: Bednights by Trip Origin 2001-2015 (Source: IHS Global Insight data)

	2001	%	LQ	2006	%	LQ	2015	%	LQ
Domestic	568189	62.5	0.86	834 825	61.7	0.81	626 569	50.9	0.81
International	341586	37.5	1.34	519 280	38.3	1.60	603 463	49.1	1.30
Total	909775	100.0		1 354105	100.0		1230032	100.0	

The rising significance of international tourism in the local Hermanus economy is particularly evidenced on Table 3 which focuses on bednight data. It is disclosed that the share of bednights accounted for by international as opposed to domestic tourists is considerably higher than that recorded by trip data demonstrating their longer average stay. By 2015 of the total estimated bednights (commercial and non-commercial) of 1.23 million almost half were accounted for by international visitors. The computation of location quotients shows clearly the significance of international tourists in terms of bednights in the area's range of commercial accommodation establishments – hotels, bed and breakfasts, guest houses, backpackers as well as a surge in Airbnb offerings. In interviews it was observed that the established larger accommodation establishments currently are seeking municipal intervention in order to curtail the continued growth of 'illegal' non-registered accommodation providers on grounds that such establishments function without the appropriate payment of local rates and taxes. Larger businesses consider that the municipality is not enforcing by-laws regarding guesthouses and (almost exclusively white-owned) Airbnb establishments such that bednights are 'taken away' from formal establishments with knock-on effects for local revenue and taxes. Key Overstrand tourism assets surround the area's spectacular natural beauty (sea vistas,

beaches, wine farms and biodiversity in terms of fynbos) and in particular that Hermanus represents one of the world's best locations for land-based whale-watching. In addition, Gansbaai is the most important base for shark-cage diving which is a popular 'bucket-list' item for many long-haul international tourists particularly from Europe and North America. Other adventure tourism activities in the Hermanus area include canopy tours, ziplining, parasailing, sand boarding, tubing and quad biking.

The demarcation of hiking trails and cycling pathways are further additions to the locality's tourism assets (Anon., no date; Withers Environmental Consultants and Urban Dynamics, Western Cape, 2017). Of particular significance is an ecotourism trail that traverses the Kogelberg Nature Reserve and includes the establishment of a network of (eco-) cabins for hikers (Anon., no date). Another recent initiative – launched in December 2018 - that impacts Hermanus is Cape Cycle Routes, which is a project of the Western Cape Government to expand the provincial tourism sector and create jobs by promoting cycling tourism. Overall, in the opinion of interviewee Hermanus deserves the title of 'adventure tourism capital' of South Africa.

**Table 4.** Main Festivals in the Overstrand Area

(Source: PricewaterhouseCoopers 2010: 19 and Overstrand Local Municipality, 2012: 87)

Month	Event	Type	Location
January	Blue Flag Festival	Eco-attraction	Hermanus
January	Total Sports Challenge	Adventure/Sport	Kleinmond
March	Cape Epic Mountain Bike Race	Adventure/Sport	Hermanus/Kleinmond
April	Hermanus Stanford Canoe race	Adventure/Sport	Hermanus/Stanford
April	Hermanus Harbour Museum Seafood	Cultural/Food	Hermanus
July	Hermanus Food & Wine Festival	Cultural/Food	Hermanus
August	Kalfie Fees	Cultural/Food	Hermanus
September	Hermanus Whale Festival	Ecotourism	Hermanus
September	Hermanus Half Marathon	Adventure/Sport	Hermanus
October	Stanford Birding Festival	Ecotourism	Stanford
November	Festival of the Gans	Ecotourism	Gansbaai
December	Hawston Sea Festival	Cultural/Food	Hawston

Culinary tourism is rising in importance as a result of the opening of a number of fine dining establishments particularly in the Hemel-en-Aarde Valley and Wine Route which it was stated recently had overtaken Paarl to be now the fourth most important wine route in South Africa. The respondents stressed that Hemel-en-Aarde is 'the Pinot Noir capital' of South Africa and was the only wine route with such a strong association to a particular type of wine. The growth of second homes and retirement communities also is noted as significant elements in the make-up of the Overstrand tourism economy. One of the least developed niches in the Overstrand tourism economy is cultural tourism which has prompted a number of initiatives to collect local stories and histories to build this focus (Lloyd, 2018). Cultural heritage potential exists in archaeological features of the Fernkloof Nature Reserve (Withers Environmental Consultants and Urban Dynamics, Western Cape, 2017). Major heritage potential exists in the Overstrand area, including the towns of Hermanus and Stanford but most importantly around Gansbaai. At Danger Point close to the town of Gansbaai there is the memorial to the sinking of the HMS Birkenhead troopship in 1852. This site is of international significance in terms of maritime heritage for it being the first maritime protocol that when abandoning ship the convention is of 'women and children first' (now named the Birkenhead Drill). A number of attempts have been undertaken to launch township tours in Zwelihle albeit these enjoy

limited success mainly because of the lack of any distinctiveness of a local township tour there as compared to, for example, Cape Town townships such as Khayelitsha or Langa.

At Hawston the potential is observed for the growth of church tourism and particularly so as one church has the Bible's Ten Commandments inscribed in High Dutch.

The regular hosting of a series of festivals and events throughout the year is critical also for boosting tourist spending in the Overstrand as well as day visitors drawn mainly from Cape Town (Table 4). Amongst the most significant festivals is the annual Whale Festival (2018 in its 27th year of operation) which is held in late September in order to celebrate the arrival from Antarctica of breeding communities of Southern Right whales in Walker Bay. Other festivals include the Fynarts Festival during June, Kalfiefee during August celebrating Afrikaans culture through drama and theatre, the Hermanus Wine and Food festival (held in October during 2018), as well as a myriad of smaller week-end sporting and cultural events in the towns and surrounding wineries (Pricewaterhouse Coopers, 2010). Our respondents noted that beyond the Whale Festival the most impactful is Kalfiefee. By contrast, the June Fynarts Festival was described by one interviewee simply as "*a wonderful way for locals to get together with a glass of wine*". The caveat was added, however, that over a longer period the potential existed for growth of this festival and to bring in tourism to Hermanus. The vital importance of events to Hermanus tourism is endangered by the 2018 community protest actions which caused blocking of the main R43 access road from Cape Town into Hermanus.

During early November 2018 after residents again blocked the R43 road into Hermanus with burning tyres and rocks the organisers of the Wines2Whales Mountain Bike Race decided to change the route of the last leg of the race to exclude Hermanus. The consequence was a dramatic downturn in local business with the loss of thousands of tourists, mountain bikers, support teams and spectators not visiting Hermanus (Steyn, 2018h). Looking forward, a further threat to Hermanus tourism is that the 2019 Cape Epic cycling event, one of the largest in the world, which is due to come to Hermanus for two days in March 2019 but is under threat because of safety concerns.

Overall, the key respondents reiterated that whilst Hermanus traditional strength was as a 'family' friendly tourism destination it was undoubtedly at present growing its reputation for its culinary offerings as well as for adventure tourism. Several challenges were raised for the continued health and development of the Overstrand tourism economy. The 2018 community protests following the negative knock-on effects for Hermanus of the droughts and of Cape Town's water crisis (which impacted international bookings in the Overstrand) had tarnished the image of the area, particularly as a 'family-friendly' tourism destination. The major promotional initiatives for the Overstrand in terms of expenditure were led by the local private sector which it was stated spends "*around R20 million in marketing Hermanus and surrounds as compared to the pittance spent by the municipality*". The vision of the marketing strategy for the Cape Whale Coast is for it "to be one of the top five preferred tourist destinations in South Africa" (Lloyd, 2018a: 4). In terms of implementation the central aims of the marketing strategy include, *inter alia*, the attraction of more return visitors, encouraging longer-stays, the promotion of a calendar of events/festivals, and ensuring "the efficient utilisation of resources in order to deliver against the tourism strategy" (Lloyd, 2018: 3).

In stakeholder interviews critical issues were discussed of inappropriately targeted marketing and of the failure of the local destination marketing organisation to aggressively promote Hermanus (as compared to other areas of the Western Cape) to attract the attention of visiting international travel writers. For example, in terms of overseas marketing Hermanus had missed out on international road shows recently

undertaken to India and Australia. One respondent stated that the local destination marketing organisation for Hermanus tourism “*does not apply the pressure to get the people who count here*” in terms of visiting VIPs. In support was cited the example of missing out opportunities to connect with 80 press agents from the United Kingdom visiting the Western Cape. In addition, key stakeholders reflected that Hermanus also was not maximising potential benefits from initiatives and marketing undertaken by WESGRO, the provincial marketing agency. It was argued that much greater effort in terms of marketing and signage could be given to the promotion and boosting of the Cape Whale Coast route and of the products linked to it. Respondents pointed to the success of the Midlands Meander in KwaZulu-Natal (see Lourens, 2007) as compared to the limited impact so far recorded of similar route tourism initiatives for the Overstrand.

Notwithstanding these issues, stakeholders argued that the major accommodation providers in the town operate at almost full occupancies particularly in peak season. High levels of occupancy are recorded not only at the top-end accommodation service establishments in peak season but also in budget accommodation. Certain municipal caravan parks in Overstrand, such as Gansbaai reported over 90 percent occupancy during the 2017 Christmas-New Year seasonal peak (Overstrand Local Municipality, 2018b: 15). Overall, it was recorded that for this period “camping at Overstrand camping resorts did well with a 90% occupancy rate” (Overstrand Local Municipality, 2018b: 16). This said, existing research on the nature of Overstrand tourism as well as the findings from our stakeholder interviews confirm that the core problem is that of seasonality which negatively impacts the local tourism economy. In particular during the months of May, June and July the local tourism economy experiences a major downturn in terms of tourist arrivals and accommodation bookings. The Overstrand IDP notes that one of the major challenges for the implementation of the municipal LED strategy is “a strong seasonal economy” (Overstrand Local Municipality, 2012: 22). The hosting of a number of festivals in these months has only partially addressed this issue which during 2018 was exacerbated by the community protest actions. One interviewee suggested the need to refocus some of the marketing initiatives undertaken by the local destination marketing organisation. One respondent argued that there was “*no point*” in marketing Hermanus in season as there “*are no 400 or 500 bedrooms to fill*”. It was argued that the feeling was widespread that for tourism promotion Hermanus had become ‘*complacent*’ and that there now was a need for a long-term marketing strategy for the region. One suggestion to address the seasonality issue was for the possible innovation of a winter pass for Hermanus which might offer discounts to attract out of season visitors along the lines of the observed success of similar initiatives recently undertaken by other South African destinations. The need for Overstrand to become a year long destination is acknowledged in the municipal IDP documentation which states as follows: “Over the years through many creative and innovative efforts in collaboration with the private sector the ever problematic and slow economic drive of the bane of seasonality has been a priority” (Overstrand Local Municipality, 2018a: 67).

**Table 5.** Overstrand Municipality: Total Tourism Spend  
(R’000s Current Prices) (Source: IHS Global Insight data)

Year	R ‘000s	% RSA
2001	553 359	0.07
2006	927 876	0.07
2015	1 877 789	0.08

Table 5 shows computed estimated total tourism spend for the Overstrand municipality. In the national context Overstrand represents an estimated share of close to 1 percent. Overall, by 2015 Overstrand was 11<sup>th</sup> ranked in terms of South African municipalities for numbers of leisure trips (1.6 % national total), 17<sup>th</sup> in terms of international trips (0.9 percent of national total) and 16<sup>th</sup> most important municipality in terms of national tourism spend (0.8 percent). In terms of estimated contribution of total spend to local GDP for Overstrand it is calculated that at least 50 percent is accounted for by tourism which places Overstrand amongst the top 10 most tourism-dependent municipalities in South Africa. Arguably, as the lead sector in the Overstrand economy tourism is the main driver for the growth of local employment opportunities. The largest individual employer in the area, however, is local government and followed by Abagold, which is a private sector enterprise engaged in aquaculture which is founded on the cleanliness of the local seawater. The rising significance of aquaculture is a distinctive facet of the Overstrand local economy (Overstrand Aquaculture Consortium, 2008).

The aquaculture sector began to develop in the late 1990s and headed by “entrepreneurs and private companies with limited support from government institutions” (Overstrand Aquaculture Consortium, 2008: 9). Fifteen years later a complete value chain, from hatcheries to export channels has been consolidated such that the local aqua-hub produces export quality world-class products. Indeed, aquaculture represents “one of the fastest growing industries in the area” and is significant locally as it “helped mitigate job losses in the agriculture sector” (Overstrand Local Municipality, 2018a: 67). Manufacturing activity in Overstrand is confined mainly to abalone processing and a number of establishments which are engaged in the production of wine, craft beer and gins. All these manufacturing operations have synergies with the local tourism economy in terms of offering factory tours and alcohol tastings. Abalone tours as well as visits to craft beer breweries, craft gin producers as well as the region’s high quality wine farms are an important aspect of the local tourism product.

Overall, for the Overstrand Local Municipality, tourism is a critical sector of the ‘blue economy’ alongside the illicit ‘mining’ as well as legal farming of abalone which drive the local economy and in particular of Hermanus its major tourism hub. The critical role assumed by tourism in Overstrand economic development is manifest most clearly in the municipal Integrated Development Plan (IDP). The IDP review strongly endorses the promotion of economic and social development and aligns its IDP objectives to those of the global Sustainable Development Goals. Successful tourism promotion is viewed as linked to several SDGs including 1 to end poverty, 3 to ensure healthy lives and promote well-being, 5 to achieve gender equality and most importantly SDG 8 “to promote sustained inclusive and sustainable economic growth, full and productive employment and work for all” (Overstrand Local Municipality, 2018a: 170-171). The next section turns to analyse the extent to which the tourism economy in Overstrand is inclusive.

### **INCLUSIVE TOURISM IN THE OVERSTRAND**

National government in South Africa has been engaged with several initiatives that are seeking to redress the racial patterns of ownership and of entrepreneurship in the tourism sector. Over the two past decades national government introduced a range of initiatives to deepen opportunities for involvement by small, medium and micro-enterprises (SMMEs) in tourism as well as to support wider objectives of transformation and of inclusion (Department of Tourism, 2018a, 2018b). These interventions have been geared to address the particular challenges and needs of black owned SMMEs in tourism. Of particular note has been the activities of the Tourism Enterprise

Partnership (formerly the Tourism Enterprise Programme) which provided SMMEs with skills development, market access and business support advice (Rogerson, 2007b). The Department of Tourism launched its own dedicated SMME support programmes with the goal of ensuring the sustainable development and growth of tourism enterprises that facilitates inclusive participation, job creation as well as strengthening the competitiveness of tourism destinations (Department of Tourism, 2018a). The programme accords acknowledgement that “effective enterprise support” would allow for the development of “black tourism related businesses” (Department of Tourism, 2018a: 31). Other innovative interventions have been the establishment of tourism business incubators to support start-up entrepreneurs (Rogerson, 2017).

**Table 6.** Major Accommodation Service Providers in the Overstrand

Name	Location	Ownership	Characteristics
Arabella Hotel and Spa	Kleinmond	African Pride – Protea Marriott	Four/Five Star, 145 rooms. Golf course and spa
The Grail Centre	Kleinmond	Non-Profit, Faith-based organisation	13 self-contained cottages
Windsor Hotel	Hermanus	Independently Owned	Three star, 70 bedrooms. Built on original site of the Sanatorium
Birkenhead House	Hermanus	Owned by Liz Biden and part of her Royal Portfolio of 5 hotels	Boutique Five star, 11 luxury rooms
The Marine	Hermanus	Owned by Liz McGrath Collection of 3 hotels	Boutique Five star, 40 rooms
Misty Waves Hotel	Hermanus	Privately owned	Four Star, 32 guest rooms
Harbour House	Hermanus	Privately owned	Four star, 48 rooms
Baleens Hotel	Hermanus	Privately owned	21 rooms
The Whale Coast Hotel	Hermanus	De Chatillion Collection	Four stars, 15 rooms
Marine Square Luxury Holiday Suites	Hermanus	Privately owned	Five star, 10 self catering suites
Hermanus Esplanade	Hermanus	Privately owned	2 star, 25 self catering units
Auberge Burgundy Guest House	Hermanus	Privately owned	Five star guest house, 19 rooms
Abalone Guest Lodge	Hermanus	Privately owned	12 rooms
Whale Rock Luxury Lodge	Hermanus	Privately owned	4 stars, 11 rooms
Schulphoek House	Hermanus	Privately owned	5 star guest house, 15 rooms
Hermanus Boutique Guest House	Hermanus	Privately owned	4 star, 17 rooms
Ocean Eleven Guest house	Hermanus	Privately owned	5 star guest house, 10 rooms
7 On Marine	Hermanus	Privately owned	Four star guest house, 10 suites
Sea Villa	Pringle Bay	Privately owned	Three star, 24 rooms
Blue Gum Country Estate	Stanford	Privately owned	13 rooms
Hermanus Backpackers	Hermanus	Privately owned	10 rooms – backpacker lodge
Zoete Inval Travellers Lodge	Hermanus	Privately owned	10 rooms, backpacker lodge
Kleinvlei Hermanus	Hermanus	Privately owned (?)	20 rooms, backpackers (self-catering and camping)
Stanford Valley Guest Farm	Stanford	Privately owned	18 units, self-catering and B and B
Uylenvelei Retreat	Gansbaai	Privately owned	15 rooms, self-catering and tents with communal facilities
Gansbaai Boarding Lodge	Gansbaai	Privately owned	13 rooms, B and B and dorm rooms
Grootbos Lodge and Nature Reserve	Gansbaai	Privately owned	5 star, 29 suites, nature related activities (includes 2 villas of 4 and 6 bedrooms)



These incubators are viewed as key vehicles for transforming the South African tourism sector in terms of making it inclusive and accessible to new entrants. The overall goal of national government is to create a conduit for economic inclusion by building the competitiveness of tourism businesses for increased sustainable jobs and economic growth and development. The above raft of policy initiatives seek to transform tourism local economies by increasing the participation of Black entrepreneurs. However, as is the case for much of tourism in small town South Africa (particularly in areas outside of those formerly designated as Homelands), the historical development of tourism in Overstrand is almost exclusively dominated by white entrepreneurs. In several works, such as those by Tredgold (1980) and by Lee (2017), the important historical roles played by early hoteliers such as the Luyt family with their establishment and continued operations of the Marine Hotel in Hermanus. In addition, Hunt's (2017) account of the historical development of hotels in Hermanus celebrates the town's entrepreneurial citizens who transformed what was in 1915 an insignificant fishing village to become by 1947 "one of the pre-eminent sea-side holiday resorts in the country, and well-known abroad" (Hunt, 2017: 39). The commanding role assumed of white entrepreneurs in the Hermanus tourism economy continued during the apartheid period at a time when severe restrictions existed on business development by black entrepreneurs. Following the democratic transition, the ownership structure of the key components of the tourism economy has been little changed. Our analysis of the contemporary tourism economy of Hermanus indicates its 'exclusive' character in terms of ownership of key tourism assets by small corporates, independent hotel operators and a large number of tourism SMMEs operated by white entrepreneurs.

For example, Table 6 shows the major accommodation establishments in the Overstrand Local Municipality some of which are in corporate ownership as part of hotel groups and others being independent white owned small accommodation services. The local Coloured and black communities of the Overstrand area are represented in the accommodation service sector of tourism almost exclusively as workers and only minimally so as tourism entrepreneurs. Table 7 gives a summary analysis of the key findings about the contemporary Overstrand tourism economy and of its ownership profile. It is evident that the Overstrand tourism economy is *not* a case of national government's desire for inclusive tourism development that would incorporate marginalised groups as participants in the local tourism economy. All the interviews with key stakeholders confirmed that Overstrand tourism is exclusive with its dominance by white capital and by white SMME entrepreneurs. In accommodation services, tour services and restaurants/dining sector the record is of continued overwhelming white ownership. The fine dining country establishments and boutique offerings as well as the majority of local restaurants geared to visitors are white-owned and operated.

Across the majority of the major tour attractions from shark diving, adventure tourism or wine estate visits it is a similar pattern of white ownership of the enterprises which are associated with these attractions. As McKay (2017) shows for the shark-cage operators at Gansbaai the activity is largely dominated by white entrepreneurs.

In recent years the only exceptions are/or have been one black owned bed and breakfast establishment in Zwelihle (now closed), one young local DJ entrepreneur who is seeking to develop the entertainment industry in Zwelihle (Overstrand Local Municipality, 2018b:17), and most significantly of one established black tour operator who initiated his business in 2012. The black tour operator offers a range of tailor-made tours, fishing trips, shuttle services, township tours as well as facilitating adventure tour activities. In the interview he confirmed that overall "*there are few entrepreneurs in*

*Zwelihle*” and himself the only black tour operator. This said, in the supply of local township tours there is another operator, Urban Tours, which markets opportunities to “explore township life through responsible tourism”; the enterprise is run by two local (white) women. In relation to art and craft goods, limited production was disclosed despite the fact that in Zwelihle there is a community of women sewers and at Hawston a workshop exists where disabled members of the community are engaged on crafts. The Zwelihle tours which are operated by the black tour services entrepreneur incorporate visits to some local houses, part of which are converted to display for sale of local arts and crafts. In addition, these tours seek to offer other income opportunities for local residents through walking tours that include visits to a local shebeen for tastings of traditional beer, a take away shop selling traditional foods, and at the conclusion of the tour an opportunity for visitors to enjoy a foot massage from a trained therapist in Zwelihle.

**Table 7.** Key Tourism Products and Inclusivity in the Overstrand Region

<b>Tourism Product/Asset</b>	<b>Ownership</b>
Accommodation Services	In Hermanus are 8 hotels and over 150 bed and breakfasts, guest houses or lodges as well as 292 advertised Airbnb listings (November 2018) of houses, garden cottages and flats. The two hotels at the apex of the local accommodation services are boutique establishments and part of two different small Western Cape portfolios. All graded independent guest houses/bed and breakfast establishments are located in the predominantly white residential areas. There are no Airbnb listings in the residential areas of the poorer Coloured or Black communities.
Tour Services	Several local tour service providers offer travel services including specialist tours on motor-bikes. In total Trip Advisor lists for Hermanus 27 tour companies engaged with dolphin and whale watching (9), nature and wild life tours (6), scuba and snorkelling (6), shark diving (5), sightseeing (5), adrenalin and extreme tours (3) and boat tours (3). With one exception, there is minimal evidence of involvement by black entrepreneurs in tour services as entrepreneurs.
Restaurants /Fine Dining	Trip Advisor lists 96 restaurants and fine dining experience in Hermanus and surrounds. The apex of the food and wine experience is at the upmarket wineries and boutique hotels and country restaurants which cluster in the Hemel-en-Aarde valley and picturesque view sites in Hermanus town. Stanford is another focal point for food tourism with 19 listed restaurants. Throughout Overstrand no evidence exists of any black entrepreneurial involvement in food tourism with the exception of a community-owned restaurant which has been initiated at the visitor centre of the Stony Point penguin colony.
Tourism attractions	All the core tourism attractions of the Overstrand, including ecotourism, wine and food and adventure activities are operated and owned by white entrepreneurs. Conference tourism is focused on the corporate owned Arabella golf course under the ownership of the African Pride Group which are part of Protea/Marriott. Once again, no evidence exists of black entrepreneurial involvement.

## CONCLUSION

The nexus of tourism and planning for local economic development is attracting a growing international scholarship. South Africa provides fertile territory for exploring this relationship because of the national importance of tourism in the economy as a whole and of a commitment to the support of sub-national development planning. In a recent diagnostic paper on the trajectory of national development the World Bank (2018) draws attention to progress made in South Africa since the advent of democracy in 1994. It cautions, however, that it is an ‘incomplete transition’ as the economic transition from a

system of historical exclusion under segregation and apartheid policies remains incomplete. Accordingly, calls for promoting 'inclusive' economic development pathways are firmly on the policy agenda in South Africa, including for the tourism sector.

Across South Africa tourism is identified as a key sectoral driver for LED by the majority of the country's local authorities and particularly emphasized by many small towns. The evidence from Overstrand Local Municipality is that the growth of tourism can contribute to enhanced growth of the local economy as well as job creation for local communities. Nevertheless, it was demonstrated that ownership and entrepreneurship in the tourism sector continues a pattern which was established from the earliest period of tourism development going back to the early 20<sup>th</sup> century in the case of Overstrand. The existing ownership structure of the local tourism economy is overwhelmingly weighted towards white entrepreneurs such that the local tourism economy cannot be described as inclusive. In addressing this historical legacy national government has enacted over the past decade a number of support initiatives which are designed to expand the participation of black entrepreneurs in growing the tourism economy. Arguably, the impact of these support measures and the challenges for making of local inclusive tourism economies merit further investigation by tourism and development scholars in South Africa.

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## **HALAL TOURISM COMMUNICATION FORMATION MODEL IN WEST JAVA, INDONESIA**

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**Abstract.** This study aims to know a Halal tourism communication model. This research methods was conducted based on qualitative methods with data collection techniques through observation and Focus Group Discussions. The results in this study are Halal tourism communication models formed in West Java are still top-down (procedural top-up). The success of a tourism destination development is determined by good planning and phasing which will guide the development steps. A series of steps and activities need to be carried out in developing Halal tourism destinations. In an effort to achieve the objectives of Halal tourism activities, attention is needed from various interest groups that are cross-sectoral.

**Key words:** Destinations, Communication Models, Halal Tourism, Sharia Tourism Stakeholders

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## INTRODUCTION

In 2015, foreign tourists visiting Indonesia only reached 20 percent or 2 million of the total tourist visits to Indonesia. Whereas 2016 reached 2.4 million people who visited. For the year 2018-2019, the Ministry of Tourism predicts Indonesia will be visited by around 5 million Muslim tourists. The countries of Malaysia, Turkey and the United Arab Emirates are the best Halal tourism agents in the world referring to the data from Ministry of Tourism Republic of Indonesia in 2019 that Indonesia is developing the potential of Halal tourism in 10 regions which are used as pilot projects for other areas prepared for Halal tourism destinations. And among the ten regions are West Nusa Tenggara, Aceh Special Region, and West Sumatra provinces which have received the first Halal tourism certification internationally. Halal tourism is a tourism concept that has the potential to be developed. The world Muslim population is predicted to reach 26.5% in 2030 (Babaoğlu, 2019). The expenditure of Muslim tourists is predicted to reach 200 billion dollars by 2020. At present, almost all countries in the world are beginning to attract Middle Eastern tourists, such as Malaysia, Singapore, Japan, Korea, Thailand and others. Furthermore, in 2018 the central government strives for the provinces of West Java and South Sulawesi to be certified as Halal tourism areas at the international level.

The vision of the central government, represented by the Ministry of Tourism regarding the development of Halal tourism for the West Java province, was chosen because natural resources and social resources can meet the criteria as varied and creative Halal tourist destination objects. With the ownership of natural potential and population that is quite abundant in West Java, it can be used as social capital in the development of dignified Halal tourist destination objects. Therefore, the West Java provincial government expects the support of every tourism stakeholders to be able to provide ideas, investments and other tangible forms in terms of developing creative, innovative, dignified and culturally based Halal tourist destinations. This is consistent with the results of a study conducted by Bakar (2013) which states that the development of interactive multimedia is an alternative to improve the quality of information and publications on tourism objects and creative industry products.

Halal tourism is a newly developed type of tourism based on the values of Islamic religious beliefs characterized by friendliness in services, the feasibility of religious facilities, the diversity of guaranteed Halal food, sharia lodging places, and other technical matters related to tourism (Abdullah & Lui, 2018; Chianeh et al., 2018; Thang, 2018; Omar, 2019; Sarkar & George, 2019). On the other hand, for West Java, the tourism object is the fourth largest contributor to the regional budget after oil and gas, coal and palm oil. Increasing regional income through tourism is supported by the role of tourists in knowing and visiting a tourist destination. Which is where tourists' knowledge of tourist destinations is supported by the role of publicity from a very good tourist destination by managers to inform about products and services offered to potential tourists so that they are interested in visiting (Nurrachmi, 2018; Sofield, 2018; Bashir et al., 2019; Han et al., 2019; Kaneko et al., 2019; Manan et al., 2019). As a province with the most population provide fresh air for the development of Halal tourism destination business which is quite significant.

Looking at the future situation and conditions for the development of Halal tourism business in Indonesia, the business opportunity to create Halal tourism in the West Java region is still wide open, especially supported by the majority of the population of West Java who is Muslim, friendly, creative and intellectual. In addition, the process of developing a Halal tourism business can be strengthened through legislation regulated as well as urgent external intervention for changes in tourism services based on religious

concepts. The West Java Provincial Government encourages investors to invest in the tourism industry, especially for accommodation services, restaurants, especially in Regencies/cities that do not yet have international standard tourism facilities.

In order to support the development of integrated vision of Halal tourism in terms of policy, it is necessary to have a synergy between the Ministry of Tourism, Provincial Government, the community, tourism industry and universities to strengthen West Java's bargaining position as the most important tourist destination in Indonesia and Southeast Asia to able increase economic growth and people's welfare around Halal tourism. Therefore, the synergy between tourism stakeholders in West Java is needed with the government, academics, business people, the community and the mass media. Related to the development of Halal tourism, especially those that occur in regencies/cities in West Java, there are some who have started pioneering Halal tourism businesses, including Bandung, Cianjur, Sukabumi, and West Bandung (Nugraha et al., 2017). However, the existence of tourist destinations in the Regencies/cities in West Java in terms of infrastructure and superstructure is still under development. In the future, this tourism destination in West Java has great potential, but currently, there are still some problems that hinder tourism development such as inadequate facilities, access roads to tourist attractions, support from related parties or stakeholders, human resources, levies wild, and so on. Facilities are the main support for a place including tourism. If the contained in tourism facilities are inadequate, this will have an impact on the satisfaction of visitors.

Based on the phenomenon that occurs around tourist destinations in the West Bandung regency, it is true that the readiness of the tourism communication model that has not been formed due to the lack of human resources (HR) is still an obstacle to realizing Halal tourism programs (Nugraha & Prastowo, 2017). Even though the main requirements in developing Halal tourism services in addition to the tourism objects are good, namely the carrying capacity of qualified human resources in serving tourists. In fact, the community around the tourist attraction does not really understand how to manage a creative and quality tourist spot. This is certainly one of the factors that might cause the development of Halal-based tourist destinations in existing cultural tourism places. The potential of nature combined with the concept of religion is now a potential source of inspiration in increasing the high selling power for economic growth and in the practice of communication, the development of Halal tourist destinations is still very limited. Without communication, people's perceptions will become "wild", so that the image that appears in the minds of domestic and foreign tourists becomes immeasurable and unclear. Based on evidenced, the lack of information in the mass media regarding Halal tourist destinations that have been visited by many visitors in the West Java region.

Even though the presence, growth, and dominance of the development of Halal tourist destinations programmed by the provincial government are intensively being carried out. Some of these field findings and secondary data are the basis for conducting research on the design of Halal tourism communication models in the West Java region with case studies in several Regencies/cities in West Java. In general, the purpose of research is expected to help provide solutions for the government and the community to solve problems in the field of tourism management, especially in the field of promotion tourism to the wider community. Based on the phenomena and field data above, the researcher conducted a study on how to design a Halal tourism communication model in the West Java region that could be used as a role model in other regions which are more or less developing creative Halal tourist destinations. Therefore, the problem can be formulated in this research which is to describe and explain how the process of forming a Halal tourism communication model in the West Java region?



## **LITERATURE REVIEW**

### **Halal Tourism**

Halal tourism is actually not much different from tourism in general. Halal tourism is a tourist concept that makes it easy for Muslim tourists to fulfill their travel needs. These needs include: the existence of Halal-certified restaurants, the availability of mosques in public places, the existence of separate swimming pool facilities of men and women, and others (Battour et al., 2018). There are six needs of Muslim tourists (Deputy for Policy Development Tourism, 2015). The Halal tourism industry must provide these six needs (1) there are Halal food and products, (2) prayer facilities; (3) toilet with washing facilities; (4) Ramadan service or fasting; (5) the management of tourist attractions and inns must guarantee the absence of immoral activities and (6) provide facilities for certain activities that are between men and women. Halal Tourism Destinations is a segment that has a large market share. The factor that drives Muslim tourists to travel Tourism is the factor of Halal food. Demographic Muslim tourists are mostly Millennials and Generation Z. Based on the opinion of Vargaz & Perano (2018), the groups (post Millennial) are very connected to the environment around them. The internet and social environment play an important role in the journey of a Muslim who wants to ensure that the products they get are in accordance with their Islamic rules that require product attributes to be Halal, Authentic, Affordable and Accessible. This shows Halal Tourism is an important requirement and must be fulfilled.

Previously, Halal products imagined were only food products, drinks, medicines and cosmetics that do not contain alcohol or chemicals containing pig, blood and carcasses. However now there has been an evolution in the Halal industry to the product finance (such as banking, insurance, etc.) to the product lifestyle (travel, hospitality, recreation and health care). Sector Islamic economy which has experienced significant growth in lifestyle products in the tourism sector are sharia tourism. In several countries in the world, sharia travel terminology using several names that are quite diverse including Islamic Tourism, Halal Friendly Tourism Destination, Halal Travel, Muslim-Friendly Travel Destinations, Halal lifestyle, and others (Wardi et al., 2018). Sharia tourism is seen as a new way to develop Indonesian tourism that upholds Islamic culture and values. So far, sharia tourism is perceived as a tour to the cemetery (pilgrimage) or to the mosque. In fact, sharia tourism is not interpreted as such, but tourism which comes from nature, culture, or artificial which is framed with Islamic values.

The development of sharia tourism is not an exclusive tour because non-Muslim tourists can also enjoy sharia-ethical services. Sharia tourism not only covers the existence of pilgrimage and religious tourist attractions, but also includes the availability of supporting facilities, such as restaurants and hotels that provide Halal food and prayer places (Kamarudin & Ismail, 2018; Mustafa, 2019; Omar, 2019; Wannasupchue et al., 2019). Tourist products and services, as well as tourist destinations in sharia tourism are the same as general tourism as long as they do not conflict with Islamic values and ethics. Sharia tourism is an activity supported by various facilities and services provided by the community, entrepreneurs, government, and local governments that fulfill sharia provisions (Han et al., 2019). Sharia tourism is used by many people because of the characteristics of its products and services that are universal. Travel products and services, tourist objects, and tourist destinations in sharia tourism are the same as products, services, objects and tourism destinations in general as long as they do not conflict with values and sharia ethics. So sharia tourism is not limited to religious tourism.

### **Halal Tourism Concept**

The concept of sharia which is not contrary to Islamic values and ethics related to the concept of *Halal* and *Haram* in Islam. Halal is interpreted as justified, while haram is

interpreted as prohibited. The concept of Halal can be seen from two perspective that is religious perspective and industry perspective (Hasanah & Harun, 2018; Oktadiana & Pearce, 2018; Waehama et al., 2018). What is meant is with a religious perspective, that is, as a law what food is permissible consumed by Muslim consumers according to their beliefs. This brings consequence of consumer protection. Whereas from perspective industry. For food producers, this Halal concept can be interpreted as a business opportunity. For the food industry that targets its consumers most Muslims, there is a need to guarantee the Halal product increase its value in the form of intangible value.

Examples of food products whose Halal label is more attractive to Muslims consumers (Hamzah & Yudiana, 2015). Sharia tourism is wider than religious tourism, namely tourism based on Islamic sharia values. As recommended by the World Tourism Organization (WTO), sharia travel consumers are not only Muslims but also non-Muslims who want to enjoy local wisdom. The general criteria for sharia tourism are; first, have an orientation to the common good. Second, have an orientation of enlightenment, refreshment, and calmness. Third, avoid polytheism and reconciliation. Fourth, free from immorality. Fifth, maintain security and comfort. Sixth, preserve the environment. Seventh, respecting socio-cultural values and local wisdom.

### **Main Indicators of Sustainable Tourism**

The World Tourism Organization (UNWTO) in 2016 has published a Guidebook for Indicators of Sustainable Tourism Development in Tourism Destination Indicators of Sustainable Tourism. This handbook is designed to help identify key issues and indicators that can help managers respond effectively and maintain what makes tourist destinations feasible and attractive. In its implementation, there are 12 (twelve) stages of the procedure to define and apply these indicators. This procedure is a phased approach, which produces operational indicators in tourist destinations, ideally integrated with ongoing planning and management processes to strengthen their effectiveness. The 12 stages are (Haq & Medhekar, 2019): A. Research and Organization; Step 1. Definition / delineation of tourist areas; Step 2. Use of participatory processes; Step 3. Identification of tourism assets and risks; Step 4. Long-term vision in tourist areas; B. Development of indicators; Step 5. Selection of priority issues; Step 6. Identify desired indicators; Step 7. Inventory of data sources; Step 8. Selection Procedure; C. Implementation; Step 9. Feasibility/implementation evaluation; Step 10. Data collection and analysis; Step 11. Accountability, communication and reporting; Step 12. Monitoring and evaluating application indicators. The issues that are the baseline issues for sustainable tourism development are (Sutono, 2019): 1. local community satisfaction with tourism activities; The basic indicators measured on this issue are: the level of satisfaction of the local community towards tourism activities. 2. Impact of tourism on local communities; The basic indicators measured on this issue are: 1) the ratio of tourist arrivals to local tourist sites; 2) the percentage who believe that tourism has helped bring new services or infrastructure and 3) the amount and capacity of social services available to the community 3. Tourist satisfaction; The basic indicators measured on this issue are 1) Level of satisfaction by visitors; 2) Perception of the value of money; and 3) Percentage of returning visitors 4. Tourist season; The basic indicators measured on this issue are 1) Tourist visits in the month or quarter; 2) Occupancy rates for licensed (official) accommodation per month (peak period relative to low season) and % of all occupations in the peak quarter or month; 3) % of business premises open throughout the year; and 4) The number and % of tourism industry jobs that are permanent or full year 5. Economic benefits of tourism; The basic indicators measured on this issue are 1) The number of local residents (and the ratio of men to women) employed in the tourism sector (also the

ratio of tourism employment to the number of jobs); 2) Income generated by tourism as % of the total income generated in the community. 6. The energy management; The basic indicators measured on this issue are 1) Energy consumption per capita from all sources; 2) Percentage of businesses participating in energy conservation programs or implementing energy saving policies and techniques; 3) % of energy consumption from renewable resources (at destination, place of business) 7. Availability and utilization of water; The basic indicators measured on this issue are; 1) Use of water (total volume consumed and liters per tourist per day); and 2) Water savings and 8. Quality of drinking water.

## **RESEARCH METHODS**

The method used in this study is a qualitative method. In qualitative research, according to (Kuntoro, 2009) researchers try to understand behavior and institutions by knowing well the number of people involved, values, rituals, symbols, and their beliefs. Qualitative research is essentially observing people in their environment, interacting with them, trying to understand their language and interpretations of the world around them by going down to the field and being in a place of research in a certain period of time (Nasution, 1996). The type of research design used descriptive method. According to Subana and Sudrajat (2011), descriptive research tells and interprets data relating to facts, circumstances, variables, and phenomena that occur when research takes place and presents it as is. In descriptive research, researchers did not control the situation during the study. To obtain the required data, the author carries out the steps for collecting data as follows:

1. In-depth interviews to get data in accordance with reality.

Interviews were conducted to get information about Halal tourist destinations, patterns of interaction between communities, communication systems and culture in tourism areas.

2. Systematic and participatory observation

Observations in the form of observations of Halal tourism activities, patterns of community interaction, communication and cultural in the tourism area, recorded a symptom with the help of instruments and recorded it in order to obtain the required data from the informants.

3. Literature/library study

The researcher uses various references relating to the reality under study. The required documents consist of words and images that have been recorded without the intervention of the researcher, which are available in the form of writing, notes, sound, images, and digital. The informants in this study were stakeholders involved in the development of Halal tourist areas. Determination of this resource person is done purposively and fulfills the conditions set by Taylor and Bogdan (1993), namely: 1) research subjects are willing to accept the presence of researchers; 2) capable and willing to express past and present experiences; and 3) having something interesting, for example having special experiences.

## **RESULT AND DISCUSSION**

### **Result**

#### **The Background of Halal Tourism Concept Emergence in West Java**

One that can affect macroeconomics is the political and ideological system implemented by a country or region, including the development of Islamic economics as part of the representation of the world economy influenced by sharia ideology which is the foundation of its development (Boğan & Saruışık, 2019; Yamaguchi, 2019). This

condition is strengthened as the results of Awalia's research (2017) which states that the government perspective Michael Foucault's social post-modern theory of discourse and power presents a power elite capable of creating a new discourse on Halal tourism to strengthen its political dominance. The focus of sharia economic development in these years can be categorized as increasing. This is evidenced by the significant increase in the Islamic economic sector including culinary, financial, insurance, clothing, cosmetics, entertainment and tourism (Suharko et al., 2018; Yousaf & Xiucheng, 2018).

Regarding one of the sharia business developments in the tourism sector, the Indonesian government is targeted to be able to organize a model of Halal tourism area that is easily visited by foreign tourists. The definition of Halal tourism is "various kinds of tourism activities and supported by permissible facilities and services in Islam that meet the needs of Muslim tourists, provided by the local community, fellow tourists, the government, local governments, and entrepreneurs" (Ministry of Tourism, 2019). The tourism development can be relied upon in increasing local revenue (PAD) to support existing development (Olya & Al-ansi, 2018). The emergence of the concept of sharia tourism, which is better known as Halal tourism, is a form of demand where product demands on each product must be Halal both in process and outcome. The Halal tourism there are 4 basic things needed as Muslims in carrying out tourism activities, including: the need to purify with water; the need for facilities and infrastructure for worship; the need for food that is guaranteed Halal; and the need for tourism activities that do not conflict with Islamic values such as there is no element of pornography/porno-action (immoral) and disobedience (Mariska & Shelton, 2018).

The concept of Halal tourism continues to grow along with the development of business in Muslim-majority countries who are members of an Organization of Islamic Conference (OIC) that runs the wheel of business and commerce rapidly, the participation of multinational companies from the Arabian Peninsula, information technology that supports inter-state connectivity, and strengthening Islamic ideology after the collapse of communism in the Soviet Union. Some of these reasons make the products that will be a favorite for Muslim residents are products that are labeled Halal.

Thus, the development of the Halal tourism industry in several Muslim-populated countries began to be pioneered by professionals, especially in Indonesia. West Java as one of the regions with the most Muslim population is now developing Halal tourism areas in several Regencies/cities including Pelabuhan Ratu Beach in Sukabumi Regency, Green Canyon in Pangandaran Regency, Kawah Putih in Bandung Regency; Taman Safari Indonesia in Bogor Regency, Depok City Golden Dome Mosque, Ciater in Subang Regency; and Lembang Tourism, West Bandung Regency. The seven tourism regions have become pilot projects of the West Java provincial government to revive tourism potential, especially those based on Sharia. On the other hand, the emergence of the concept of Halal tourism is one fulfillment of the lifestyle of today's Muslims who have become new economic forces because they are involved as producers and consumers of the tourism industry who have become part of the lifestyle of most people in this millennial era (Heydari et al., 2018; Isa et al., 2018; Akhtar et al., 2019).

Basically, the development of Halal tourism is not an exclusive tour because even non-Muslim tourists can enjoy tourism services that are ethical in Sharia. The existence of the seven Halal tourism development destinations is a challenge for the people and government of West Java to be able to implement it well or vice versa. Therefore, to ensure that several Regencies/cities in West Java have been established for Halal tourism promotion events can be used as a source of information regarding the implementation of Halal tourism communication models in the West Java region,

including Garut Regency and Pangandaran Regency. The choice of the two regions is inseparable from several well-known tourist destinations. Pangandaran is famous for marine tourism while Garut with mountainous nature tourism, culinary, and Sundanese culture. Therefore, based on the results of observations, interviews, and FGDs, it was found that Halal tourism in the Garut and Pangandaran areas was still limited to discourse at the level of government institutions and had not yet become the political will of the Regency government. This indicates that the implementation of Halal tourism in West Java is still limited to socialization that has not touched the level of legal aspects in the form of Regional Regulations and Governor Regulations.

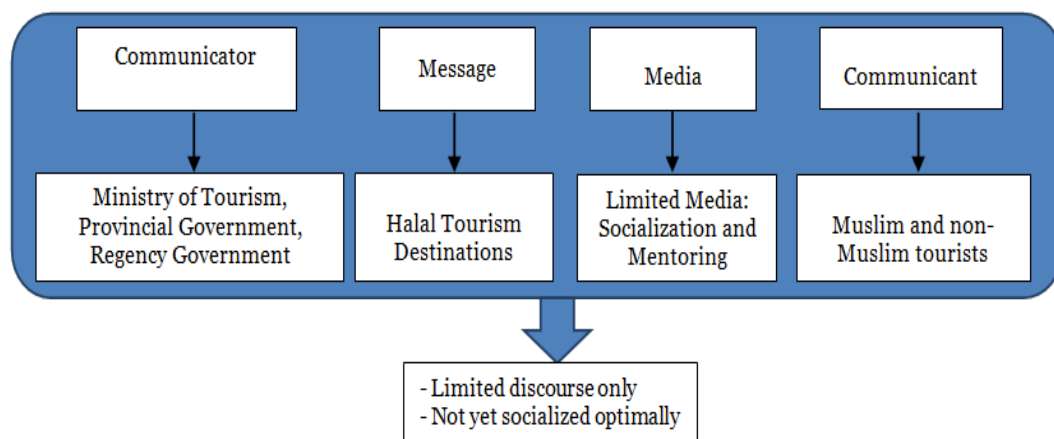
Based on the results of the focus group discussion (FGD) in Garut Regency, it was stated that Halal tourism is a concept that is likely to be different from Sharia tourism. This is because Halal tourism focuses more on the process of serving food for Muslims when traveling somewhere". This shows that the knowledge and understanding of the community, especially among tourism activists, do not yet have the same perception regarding the concept of Halal tourism which is heralded by the central government and the provincial government. From a number of informants studied in the Pangandaran region in the Focus Group Discussion (FGD) in Garut Regency stated that here only carry out activities to provide beach tourism services plus other tours around Pangandaran such as the Grand Canyon, Batu Hiu, Citumang. However, for the concept of Halal tourism, we have only heard from the Tourism Office without any intention to find out more about the concept of Halal tourism in Pangandaran. The informants in Pangandaran Regency gave a statement that Halal tourism had indeed been delivered by the government, but until now the concept could be said to be suspended animation. This is stated because the process of developing tourism in Pangandaran Regency is still focused on the development and improvement of tourism infrastructure around Pangandaran coast which is a very promising source of local revenue.

### **The Process of Establishing a Halal Tourism Communication Model in West Java**

The success of a tourism destination development is determined by good planning and phasing which will guide the development steps. A series of steps and activities need to be carried out in developing Halal tourism destinations. In an effort to achieve the objectives of Halal tourism activities, attention is needed from various interest groups that are cross-sectoral. This is in accordance with the results of research from Anugrah et al., (2017) which states that a region has Halal tourism potential, if it is supported in the form of regional regulations, at least contained in the Regional Tourism Development Master Plan. With the Master Plan, it can become the basis for formal policymaking related to the preparation to support Halal tourism in an area. To get effective results of communication, efforts must be made so that the parties have an awareness that the place has the potential to become Halal tourism. Furthermore, information and communication channels need to be developed both directly and through media (online and offline). The information and communication channels are built to strengthen coordination between business people, Indonesian Ulama Council/Halal Guarantee Agency and related agencies. Based on the results of a study in the field, it can be seen that the Halal tourism communication model can be explained like the chart in Figure 1.

From the Figure 1 above, it can be explained as follows: the communication model formed in Halal tourism is more linear, which means that the government as the regulator in setting a place to be developed into a tourism destination on limited communication media in the form of information, guidebooks and discussions among the public who is interested in developing Halal tourism is visiting Muslim and non-

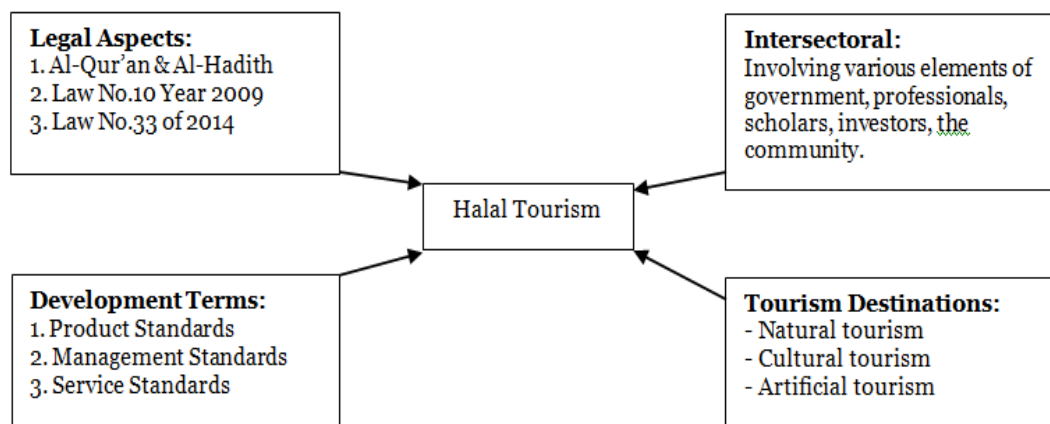
Muslim tourists. The media is through the process of socialization and mentoring among groups of tourism activists as well as the Department of Tourism in the area. The meetings conducted with informants who said that most of the community was half-half in accepting the concept of Halal tourism. This is because there is no guarantee that a destination conceptualized as Halal tourism will provide business benefits. In addition, the political will of the government in each region is different regarding the implementation of the concept of Halal tourism. Through the tourism communication model that has been formed, there has been interaction and influence in the social process. However, the expected level of achievement is still limited.



**Figure 1.** Communication Model for Establishing Halal Tourism

The communication model is a representation of the phenomenon of communication by highlighting the most important elements in order to understand the communication process (Vardiansyah, 2004).

The development of Halal tourism will contribute to improving the economy of the community on the condition that it is managed professionally and supported by all elements of interest groups related to tourism.



**Figure 2.** Halal Tourism Development

In the end, the development of a Halal tourism formation process can be made in the model below in Figure 2. Based on Figure 2, Halal tourism is an object that is still of limited policy, so the communication pattern conveyed to the community is top-down. Which is the practice of top-down communication is more linear. This means that communicators are more powerful than communicants. So that based on a communication analysis the phenomenon of tourism communication models that are formed is more inclined to linear communication patterns.

According to Vardiansyah (2004) one-way linear communication is based on the stimulus-response paradigm, in which local governments in Regencies/cities inevitably have to be able to follow what is a discourse on Halal tourism development at the national and provincial levels. This one-way linear communication model, the emphasis is still on the influence of the mass media on the audience. With the element of involvement, elements of communication can be used as part of a social change strategy.

The important and fun concept of Halal tourism is prioritized as part of excellent service in the tourism sector. The positive impact of tourism development in the form of preservation of the cultures of local communities such as religious activities, customs and traditions, and acceptance of the development of tourism and the arrival of tourists by local communities. Another impact of tourism development is seen from the response of local communities to the existence of tourism such as disputes or conflicts of interest among stakeholders, hatred and rejection of tourism development, and the emergence of social problems such as gambling practices, prostitution and sexual abuse.

The negative impact of tourism, it will arise objection to tourism development. In the view of several community groups, activities tourism is mostly in conflict with Islamic law. The attitude of some people who consider tourism development as contrary to Islamic law basically becomes a challenge especially for tourism policy makers. For anticipate the need for a change in strategy in tourism development. One of them is placing the community not as a tourist attraction that has been happening all this time, but placing the community as the subject of tourism.

## CONCLUSION

The concept of Halal tourism is still limited to the political discourse conveyed by the West Java provincial government. In the perspective of communication studies, the Halal tourism communication model that is formed is still limited to non-binding instructions, but a recommendation if indeed the potential of the planned area has “capital” for development towards Halal tourism destinations in the form of one-step and top-down linear communication. Although the concept of Halal has become a lifestyle for most Muslim populations, Halal tourism is less developed because of facilitation, it is not easy to ensure Halal food, certification Halal, and lack of promotion.

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## **STAKEHOLDER VIEWS ON SUSTAINABLE COMMUNITY-BASED ECOTOURISM: A CASE OF THE PAGA CROCODILE PONDS IN GHANA**

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**Abstract:** This study analysed tourism at the Paga Crocodile Ponds in the Upper East Region of Ghana as a basis to evaluate its potential for sustainable community-based ecotourism development. The study employed qualitative case study approach, using data from secondary and primary sources that involved in-depth interviews with key actors in the tourism sector of the community in Ghana. Results of the study suggest that tourism in the community is in its developing stage. The Paga Crocodile Ponds attract international and domestic tourists, and tourism influences the socio-cultural, economic, and environmental livelihood of the community. The research found that the ponds were silted and experiencing threats of drought and competition from other uses of the water. Tourism at Paga is mainly managed by the traditional community leaders with insufficient tourism infrastructure and therefore needs support from government and other stakeholders. The results suggest that a sustainable community-based ecotourism development in the community require improvement in stakeholder involvement, environmental sanitation and water level of the ponds.

**Key words:** Ecotourism, sustainable community-based ecotourism, Paga Crocodile Ponds

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### **INTRODUCTION**

This paper investigated sustainable community-based ecotourism development in Paga towards making the community a sustainable tourism destination in the pan-African context. Tourism contributes greatly to socio-economic development (Rogerson, 2007, 2014; Telfer & Sharpley, 2008; WTTC, 2018). The World Travel and Tourism Council (WTTC, 2015) argues that the global travel and tourism generated 122,000 jobs in 2014 alone, which translated into 2.2% of the total employment and this was expected to increase to 2.3% by 2015. Tourism is a practical means for development in developing countries, with sustainable community-based ecotourism as a tool for social, economic, and environmental wellbeing of localities (Scheyvens, 1999; Asiedu, 2002; TIES, 2018).

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Ecotourism is one alternative forms of tourism described as the fastest growing in the tourism industry and useful for the development of less developed nations. It is a source of rural livelihood and a promoter of sustainable development agenda. But, depending on how it is managed, ecotourism can induce positive and negative social, economic and environmental impacts (Wearing & Neil, 1999; Weaver, 2009; Das & Chatterjee, 2015; Woldu, 2018). Consequently, sustainable community-based ecotourism is advocated as an approach to managing tourism for the benefit of the local communities without degrading the local culture, economy and environment. Tourism stakeholders in communities are the individuals directly engaged in tourism management with authority.

Studies about ecotourism in Ghana have not focused on in-depth understanding and analysis of tourism at the Paga Crocodile Ponds using a sustainable community-based ecotourism model. Asiedu (2002) considered the potentials of ecotourism for rural development in Ghana whereas Cobbinah (2015) studied local community understanding of ecotourism of the Kakum National Park in Ghana and concluded that there is need for further studies in the field. Acquah et al. (2017) studied the socio-cultural impacts of ecotourism on park-adjacent communities of the Kakum National Park, Shai Hills, and Mole Game Reserve in Ghana. Eshun & Tonto (2014) focused on the benefits and conflicts of ecotourism in communities around Kakum National Park. Amuquandoh (2010) researched on lay concepts of tourism in the Lake Bosomtwe Basin while Eshun & Tagoe-Darko (2015) considered ecotourism from postcolonial perspectives. These studies focused on popular tourism destinations in Ghana. Additionally, there is campaign for more research on sustainable community-based ecotourism in developing nations (Dangi & Jamal, 2016) and this study fits well into filling this gap. This research analyses the views of stakeholders about tourism at the Paga Crocodile Ponds in Ghana from a sustainable community-based ecotourism perspective. The paper argued that tourism activities at Paga have social, economic, cultural and environmental impacts with a potential for a sustainable community-based ecotourism development. Characteristics of tourism and its organisation at the ponds are described. This paper consists of introduction to specify the context, problem and objectives of the research. The other sections focused on sustainable community-based ecotourism concept, research methods, discussion of results, conclusions and recommendations.

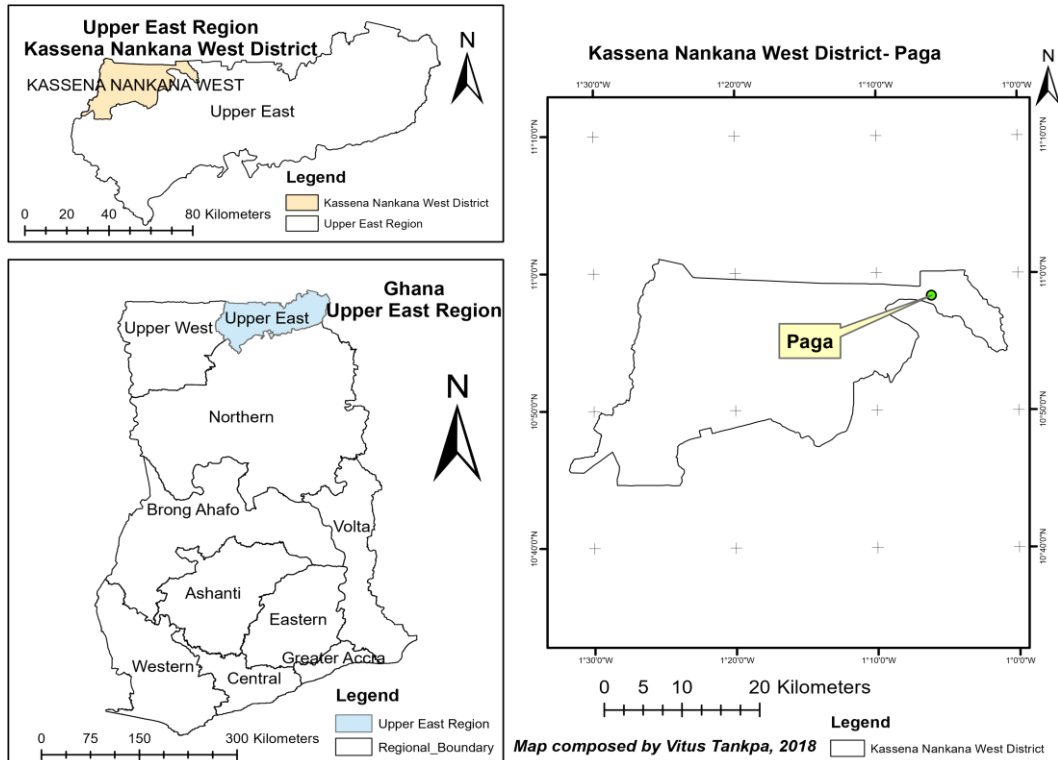
### **Aim and research objectives**

The aim of this study is to contribute to research on sustainable community-based ecotourism development. The specific objectives of the study are to:

1. Analyse the characteristics of tourism of the Paga Crocodile Ponds in the context of sustainable community-based ecotourism concept.
2. Evaluate the potential for a sustainable community-based ecotourism development of the Paga Crocodile Ponds.

### **THE STUDY AREA**

Paga is the capital of the Kasena-Nankana West District (KNWD) in the Upper East Region of Ghana (Figure 1). Paga is a multi-religious town with Christianity, Islam and African Traditional Belief systems co-existing (KNWD, 2009). The traditional political head and custodian of the community is the local chief. Agriculture and small-scale businesses characterised the community with poor farm yields due to infertile soils and unreliably short rainfall periods from May to November annually. With savannah climatic conditions, dugout dams and wells are useful for irrigation farming in the dry season in the community. Paga and its surrounding villages have a population of about 17,250 (KNWD, 2009). With poor economic activities, levels of employment and poverty are high in the community.



**Figure 1.** Map of the Study Site (Source: Vitus Tankpa, 2018)

### CONCEPT OF SUSTAINABLE COMMUNITY-BASED ECOTOURISM

Sustainable community-based ecotourism seeks to address the ills of mass tourism (Weaver, 2009). The concept of tourism has shifted from mass tourism to alternative tourism due to the negative impacts of the former on society (Wearing & Neil, 1999; Weaver, 2009). Alternative tourism involves all responsible tourism including ecotourism, rural tourism and community-based tourism. Alternative tourism is to sustain economic, social, cultural and environmental values without neglecting tourists interests. Moreover, it is part of the sustainable development agenda of Brundtland Report, 1987. Ecotourism has no precise definition. Fennell (2001) found 85 definitions of ecotourism with many more left unidentified. However, the author indicated that the common features of the concept as nature-based, conservation, culture, benefit to locals and education. Ceballos-Lascurain defines ecotourism as “travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals as well as any existing cultural manifestations (both past and present) found in these areas” (Boo, 1990: 2).

This definition suggests a common conceptual basis and practice of ecotourism. Ecotourism supports conservation, livelihoods, environmental education and sustainable development of destination communities, but evidence shows that this is not always the case (Coria & Calfucura, 2012). Sometimes it causes environmental and cultural degradation, neglect of local communities, conflicts among stakeholders and economic leakages (Ojeda, 2012; Eshun & Tagoe-Darko, 2015; Tichaawa & Mhlanga, 2015). Community-based ecotourism is in response to problems of ecotourism (Scheyvens, 1999). The focus of the concept is to involve local communities in tourism management

and benefits while conserving local environment and culture for the interests of tourists. Conversely, other scholars argue that ecotourism is sometimes used as a marketing tool with contempt of its core values and as well controlled by cooperate bodies and local elites to the neglect of local communities (Coria & Calfulcura, 2012; Cobbinah, 2015). The term community is used here to signify a group of people with common interest and attachment to a common resource in a geographical location. Local communities need to participate in tourism development process and its benefits (Richards & Hall, 2000). This study considers tourism stakeholders individuals involved in tourism management.

## **MATERIALS AND METHODS**

A case study is an investigation of a phenomenon within its context for indepth understanding (Yin, 2009). A qualitative approach allows for detail comprehension tourism at the crocodile ponds from secondary and primary data sources. A gatekeeper mediated the data collection at Paga. This strategy effectively established rapport between the researcher and the research participants. The data were obtained from expert interviews, observations, comments of tourists and minutes of the local tourism board meetings. Secondary data from historical documents and comments of tourists, expressing their touristic experiences at the ponds. Tourists expressed their satisfaction, dissatisfaction and suggestions for tourism improvements at the site. The following research participants were interviewed after a successful traditional community entry process. The representatives of the Paga Chief (TS1), Kasena-Nankana West District Assembly Planning Officer (TS2), Achala Village (TS3), District Tourism Board (TS4), two tour guides (TS5, TS6), Kubbs Lodge (TS7), Paga Motel (ST8), Paga Community Tourism Development Committee (TS9) and Zenga Community (ST10) as experts in the tourism sector. In all, ten in-depth interviews were conducted with an average duration of 30-45 minutes each. A semi-structured interview guide with open-ended questions was used for the data collection. This allowed the researcher to obtain detailed data from the research participants (Cook & Crang, 2007). The interviews covered themes on the socio-cultural characteristics of tourism, tourism activities and organisation, economic, social, and environmental impacts in the community (Lee, 2013). Potentials for sustainable community-based ecotourism development were explored. A purposive and snowball sampling techniques were used to identify the research participants. Thematic content analysis was applied to analyse the data and the results were interpreted narratively. The data were manually organised into themes according to the research objectives. The interviews were transcribed verbatim and coded according to the research themes. The quotations from secondary and primary data are interpreted narratively to support the research objectives.

## **RESULTS AND DISCUSSION**

### **Tourism activities and organisation**

The spatial distribution of tourism is crucial to understand for socio-economic development (Hall, 2013; Rogerson, 2014). This research revealed that the Paga Crocodile Ponds as well as Pikworo Slave Camp, the Chief Palace, the Market Square and the Achala Village Architecture attract tourists in Paga. The Chief Crocodile Pond and the Zenga Crocodile Pond are 1 kilometer apart. The results indicate that the two crocodile ponds were small water bodies which have been constructed in the second half of the 20th century. The respondents confirmed in the interviews that: “the construction was needed to expand the ponds to contain the increasing number of crocodiles” (TS5). This further supports the argument that ecotourism contributes to environmental conservation (Brundtland Report, 1987; Weaver, 2009). The Nania Gardens are botanical gardens with variety of ornamental plants.

The research findings confirmed that the crocodiles are a totem for the natives of Paga as the following quotation illustrates: “The crocodiles are the souls of our ancestors and are our souls too. We believe that in Paga when you kill a crocodile you have killed a human being and it has been happening. It is a taboo in Paga to kill, eat crocodile or keep its body parts” (ST1). History shows that, the crocodiles are associated with the first settler of Paga, Nave, who immigrated with the crocodiles from Tampela to Kampala in Burkina Faso and finally settled at Paga in Ghana. The crocodiles are a symbol of the people and a shrine for unity and protection. Similar to findings of other studies, African traditional belief systems are linked to nature and animals (John-Parson, 1958; Rim-Rukeh et al., 2013). The monkeys at the Monkey Sanctuary in Boabeng and Fiema have similar reverence as the crocodiles at Paga (Appiah-Opoku, 2007).

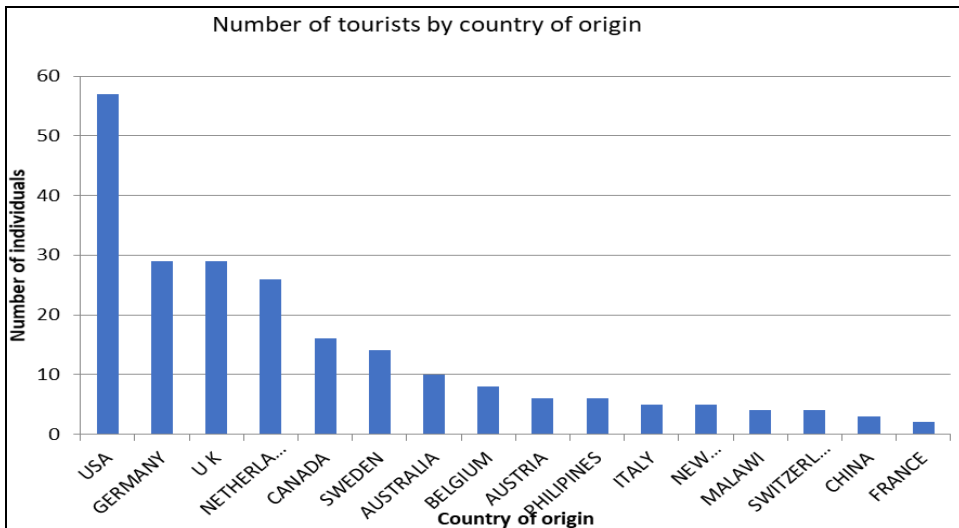
Ecotourism involves interaction with nature and appreciation of culture and history communities (Boo, 1990; Weaver, 2009; TIES, 2018). This research shows that the tourists offer live chicken to crocodiles and interact with them. The research findings illustrate that: “When the tourists come, they sit on the crocodile, hold its tail, they play with the crocodiles and take pictures of the environment. Tourists listen to the history of the ponds and the community. Tourists are always fascinated by the way they sit on the crocodiles and the friendly nature of the animal” (TS6). Tour guides play important role in tourism development (Cetinkaya & Oter, 2016). Six tour guides working at the Paga Zenga Crocodile Pond, were employed by the chief and traditional leaders in the community. The roles of the tourguides are to call out the crocodiles, narrate history of the tourism, give chicken to crocodiles, and guide tourists around to understand the sites. The research findings indicate in the following quotation that: “The tour guides are trained to call out the crocodiles for tourists and interpret the history of the community and the crocodiles” (TS10). Tour guides need to be conversant with the history of the community and the crocodiles. The results show that chicken for the crocodiles is controlled as the following quotation demonstrates: “all tourists are required to buy live fowls at the ponds in order to ensure the safety of the crocodiles” (ST1). This safety measure helps to conserve the crocodiles and creates market for local fowl vendors. The ponds attract domestic and international tourists. In the year 2010 the fee for domestic tourist was GHC 2.00 while an international tourist paid GHC4.00 (GHC = Ghana Cedis). In the year 2018, a domestic tourist pays about GHC7.00 while an international tourist pays GHC15.00. This difference in the fees is to provide an incentive for domestic tourists.

The research findings show tourism ownership and management. The royal family owns and manages the Chief Pond whereas the Paga Zenga community owns and manages the Zenga Pond. Income from the Chief Pond is for maintenance of the ponds, sacred responsibilities, and payment of tour guides and that from the Zenga is used for community development. The results confirmed that: “The money we collect from the tourists at the Zenga Crocodile Pond is divided into two equal parts; half of it is used for the development of the community and the other half of the money is used for paying the tour guides and maintaining the pond” (TS5). The research shows that, government, non-governmental organisations and private sector involvement in tourism is poor and it is managed by the traditional community leaders. Contrarily, other studies show that government officials and corporate tourism organisations (Coria & Calfucura, 2012; Eshun & Tonto, 2014). The research findings show that tourism stakeholders met with the Paga Chief, the district Security Sub-Committee, hotel operators and tour guides to visit the tourism sites in community (Tourism Development Sub-Committee Minutes, February 20, 2010). The policy guide is to improve tourism management and development in Paga through stakeholder involvement, tour guide education, sanitation and environmental management of the ponds. The stakeholders in tourism development

were specified. The research findings illustrate that: “Besides the chief and the district assembly, the other stakeholders are the Ghana Tourist Board and local Tourism Development Sub-Committee. As of now, we do not really have strong NGOs and the private sector involvement concerning the development of the tourism sector” (ST3).

A few organisations have interest in tourism development in the community and these included Nature Conservation Research Centre (NCRC), Paga Ecotourism Committee, the American Peace Corps group and some individuals (KNWD, 2009). The results showed that tourism infrastructure is poor. This is in line with the general poor tourism infrastructure in Ghana (Yankholmes & Akyeampong, 2010). The respondents explained in the interviews that: “We have accommodation and catering services, and poorly constructed road. Almost every year, we have to rehabilitate the road to the pond” (ST2). The information above emphasises the growing yet undeveloped, state of the tourism infrastructure in the community.

The findings confirmed that tourism occurs throughout the year. The interviewees illustrated that: “Tourism activities here are all year round and I do my tour guiding activities every day. ...tourist numbers have been increasing over the past few years. The tourists come from different socio-cultural backgrounds; Ghanaians and non-Ghanaians, rich and poor as well as students” (ST5). Evidence of tourist experiences at Paga showed a mixed feeling of satisfaction, dissatisfaction and comments for improvements. Satisfactory comments describe the destination as good, very good, interesting, impressive, awesome, wonderful, excellent, lovely, nice, fantastic, fabulous, historic, and attractive experiences. A few tourists had good experiences but want further improvements. These includes lovely crocodiles but get a recreational centre; good experience with the crocodiles but road to the pond untarred.



**Figure 2.** Shows International Tourist Origins to the Community  
(Source: Adapted from Paga Zenga Crocodile Pond Tourism Visitor Book, 2009/2010)

Unsatisfactory comments of tourist bad experiences include high fees, no development, site undeveloped and tour guides unfriendly. This finding matches with the comment from the tour guide that the tourists have good impression about the tourism at the sites. All the fifteen letters that were read had expressions of nice experiences at the sites (Paga Zenga Crocodile Pond Tourism Visitor Book, 2009/2010).

Whereas the comments consisted of both positive and negative experiences, the letters contained only positive experiences. Countries of origin of international tourists to the community were visible in the tourist book as shown in Figure 2.

The results show similar trends of tourist arrivals to the Zenga Crocodile Pond for the years of 2011, 2012, 2013, 2015, 2016 and 2017. In the year 2011, a total of 4,653 (4,265 domestic and 388 international) tourists visited the site. For the year 2012, a total of 5690 (5226 domestic and 464 international) tourists visited the Zenga pond. In the year 2013, the total number decreased to 3,141 (2947 domestic and 194 international) tourists. Figures for the year 2014 were not available. The year 2015 had 3,026 (2808 domestic and 218 international) tourists. The total tourists arrived at the Zenga pond in the year 2016 was 6,370, consisting of 5958 domestic and 412 international tourists. The number of tourists for the year 2017 was 8292 (7945 domestic and 347 international) tourists. The figures indicate a decline in the number of tourist arrivals to the ponds. Several reasons might have been responsible for this decline, but no apparent explanation was identified. As in other African tourism destinations, the international tourists typically come from the developed nations, with the USA recording the highest number (Williams, 2009). One African country is on the list, which supports the notion that tourism is a popular activity for western middle-class people. The ability to speak multiple international languages can play a role in the activities of a tour guide and this was discussed in the interviews.

The respondents confirmed that English is the only international language used by the tour guides. Rylance (2008: 34) states that “language remains a constraint to local economies in accessing the marketplace” and argues that tourism in Mozambique is limited to Portuguese and a recipe for underdevelopment of the sector.

This representation follows Cohen’s theory of institutionalised and non-institutionalised types of tourism, which explains that most tourists of non-institutionalised tourism destinations are domestic. Tourism at Paga is still at its developing state, and non-institutionalised. The relationship between international tourists and total revenue is positive as a short rise in the number of international tourists leads to a sharp increase in the total revenue and a short fall in international tourist numbers results in a drastic reduction in the total revenue.

### **Economic, socio-cultural and environmental impacts of tourism**

This research found that tourism in the Paga community has economic, environmental and socio-cultural impacts (Das & Chatterjee, 2015). These findings are presented in the following sections.

#### **Economic impacts**

The results show that tourism is a source of employment for the people of Paga and revenue for the local government. Tourism promotes small scale businesses in the community. The results match with findings of other studies that a community-based ecotourism is a source of livelihood for the people of tourism destinations (Asiedu, 2002; Williams, 2009; Das & Chatterjee, 2015; Kuqi, 2018). Tourism is a source of revenue for Paga community. The total revenue for the major tourism sites has increased from GHC 4,022.00 in 2006 to GHC 9154.00 in 2010 as in Ghana currency. The statistics of tourism revenue of the Zenga Crocodile Pond for the years of 2011, 2012, and 2013 were GHC4,717.70, GHC4,954.70 and GHC3,807.00 accordingly. Revenue for the year 2014 was unavailable. The tourism revenue of the same site for the years of 2015, 2016 and 2017 was GHC4,398.00, GHC12,665.00 and GHC9,537.00 respectively. There is a fluctuating trend of increase in revenue and tourist arrivals.

Tourism creates jobs in the community as the results show that the hospitality, tour operation, sanitation and hotel sectors provide jobs for individuals, especially women, in



the community. This was illustrated in the interviews as follows: “Tourism creates jobs for the tour guides at the crocodile ponds and the hotel attendants. Seventeen workers work full-time in the Kubbs Lodge Hotel, and these include all the employees. As manager of the hotel, I am included because I am equally a worker” (ST7). A moreover, a private waste and sanitation company in Ghana was contracted deal with waste around the ponds. Overall, the findings suggest that, the industry has the potential to employ more people if tourism becomes sustainable in Paga. The research found that tourism supports local means of livelihood. Tourism can be described as sustainable when it integrates into the local economy (Odede et al., 2015; Dangi & Jamal, 2016). The interviewees recounted the integration of tourism into agriculture in the community as follows: “We buy seedlings of plants from the gardeners to plant around to conserve our dam and provide shade for tourists to rest” (ST8). The tourism integrated into the local economy as it supports irrigation, livestock, fishing and other socio-economic activities.

### **Socio-cultural impacts**

Studies reveal that tourism induces positive and negative socio-cultural impacts in communities (Urry, 2002; Mugizi et al., 2018). The results of this research show that tourism makes Paga popular internationally and fosters social cohesion among individuals. There was also evidence of training and workshops for empowerment and capacity development of employees in the sector, similar to the findings of Odede et al., (2015). The respondents pointed out in the interviews that “Ghana Tourism Board organises education and tour guide training workshops for us as tour guides. ...we are educated on receiving and interacting with the tourists. We attend these training workshops twice a year” (ST8). The education and training provided can improve the skills of employees in the sector. In agreement to the findings of Cappucci (2016), the results revealed that crocodile tourism at Paga is unique and a cultural identity of the native people. This was illustrated in the interviews is the following quotation: “Paga is known all over the world and I think this is all through tourism. The people in the community are proud to be called Pagatina; amo ye Paga tu mo; which in Kasem, the local dialect; literally implies the natives of Paga” (ST1). Regarding social cohesion and community development, the results proved that: “Tourism has brought a lot of cohesion to our community. ... certain times, prominent dignitaries visit the pond, and whenever they visit the pond, they come with other government delegations, and a lot of people in the community gather” (ST3). The findings indicate that the income from tourism was used to build a Kindergarten in the community. The chairperson for the Tourism Development Sub-Committee is a female. This shows the participation of women in tourism decision making. The committee sensitises and educates community members about tourism development. Negative social impacts of tourism in the community were not yet obvious. This is not to ascertain that negative social cultural impacts may not exist in the future.

### **Environmental impacts**

Environmental impacts of tourism in the Paga community were discussed in this research and the findings showed these impacts in the community. Like the findings of Appiah-Opoku (2007) and Rim-Rukeh et al., (2013), environmental impacts of tourism in Paga and practices of conservation management of the ponds were identified in this research. The findings showed specific environmental regulations to conserve the ponds tree planting program, waste management program, and prohibitions of washing clothes and vehicles in the ponds were put in place to ensure that the ponds are maintained. Accordingly, the respondents illustrated in the interviews that: “the chief and his elders make sure that all the people who farm close to the pond and all those who build close to the ponds discontinue their projects” (ST10). Restriction of these activities could reduce siltation of the ponds from soil erosion. Negative environmental impacts from tourism

activities were not obvious in the community. It was noted that some domestic tourists dropped litter indiscriminately instead of in the waste bins. This assertion suggests poor sensitivity to waste management of these tourists. The impacts outlined in this section contribute to evaluate tourism activities for a sustainable community-based tourism development.

### **Tourism development challenges**

Richards & Hall (2000) envisage that development challenges affect the growth of tourism in developing nations. Tourism at Paga faces infrastructural, management, and environmental challenges that affect development of tourism activities. Research emphasised the importance of infrastructure for tourism development (Jovanović & Ilić, 2016). Tourism infrastructure in the Paga community is poorly developed and some tourists go to the nearby bigger towns, Navrongo and Bolgatanga, to stay overnight. This is considered a disincentive for the hospitality part of tourism in Paga. Similarly, Fuschi & Evangelista (2017) found that attractive service alternatives in bigger towns is a threat to rural tourism destinations in Pescara, Italy. Consequently, the accommodation industry is relatively unprofitable. The research found that a major threat to crocodile ponds and tourism in the community is drought as this keep lowering the water level of ponds annually as the following quotation from the interviews illustrates: “I am getting to 12 years as a tour guide here and comparing the state of the water level at the previous years of my job and the current state, the drying up of the pond is getting worse. If it is not dredged, it will get to a time the water will dry completely and the crocodiles will go away, and tourism will end” (ST6). The research discovered that record keeping of the crocodile ponds is poor and this makes planning and management unrealistic. The research participants indicate that: “Record keeping at the pond is a big challenge. There is no good record keeping at the pond, I mean statistics” (ST1). Statistics provide data for tourism management and lack of them problems in development planning.

Marketing of the crocodile ponds is important for attracting tourists to the area. This was seen by interviewees as poorly done when the researcher raised it for discussion in the interviews. Brochures, books, calendars, special programmes on radio and television means for marketing tourism in the community. Internet advertisement identified as ineffective. The next section focuses on preliminary evaluation for developing the Paga into a sustainable community-based ecotourism destination.

### **EVALUATING SUSTAINABLE COMMUNITY-BASED ECOTOURISM AT PAGA**

Table 1 is a summary of the characteristics of tourism in Paga relative to sustainable community-based ecotourism development principles. Environmental conservation is a key principle of sustainable community-based ecotourism. The evidence of tree planting and conservation regulation confirm this principle. Tourism practices are changing towards environmental conservation and stewardship (Baral, 2013; Cobbinah et al., 2015). The tourism stakeholders at Paga made conscious efforts to conserve the ponds as assets for tourism and in honour of the ancestral pledge to safeguard the crocodiles in the community. Similarly, Spenceley (2008) revealed that the government of South Africa implemented environmental conservation policies to prevent indiscriminate deforestation and poaching in tourism destination communities. The participation of local communities in tourism development planning is crucial for sustainable tourism development (Das & Chatterjee, 2015). Involving the stakeholders in the planning makes them feel part of the community and stewards of the ponds. The Tourism Development Committee of Paga coordinate with community members for tourism development in the community. The results show that the community members participation in tourism decision-making and development planning is important for sustainability. The results also suggest that tourism is managed by the local traditional authority and community elders, indicating little intervention from other

stakeholders. This finding is contrary to that of Eshun & Tagoe-Darko (2015) which revealed that locals around the Kakum National Park do not manage tourism of the park.

Spenceley (2007) contended that, mutuality among stakeholders of tourism destination community can attract external support from government and tourism development agencies. Social groups in tourism destination community need to participate in development planning. Spenceley (2007) contended that, mutuality among stakeholders of tourism destination community can attract external support from government and tourism development agencies. Social groups in tourism destination community need to participate in development planning. The contribution of tourism activities to the economic development of the people in tourism destinations is also important for sustainability. Tourism activities have been noted to offer direct and indirect job opportunities for the local people of Paga. All the tour guides come from the local community and most the employees in the restaurants, hotel and other hospitality sectors originate from the local community. This result agrees to the finding of Tichaawa & Mhlanga (2015) that the CAMPFIRE contributed to livelihood. Kubbs Lodge hotel, the only vibrant hotel in the community, has nineteen rooms. Community involvement and ownership of tourism businesses reduces economic leakages away from the community.

**Table 1.** Sustainable community-based ecotourism practices and characteristics of tourism at Paga

Sustainable Ecotourism Principles & Factors		Tourism Characteristics in Paga	
Principle	Factors	Sustainable Characteristics	Unsustainable Characteristics
Economic Sustainability	Economic benefits: Job and livelihood opportunities, economic integration, growth of local industries, income, and revenue generation. Others includes reinvestment, records keeping and tourism marketing	Employment of local people Local economic integration & revenue Development of small and medium scale enterprises	Poor records keeping, marketing, revenue management and reinvestment Inadequate monitoring
Environmental Sustainability	Strategies of environmental management including policies, waste and sanitation management, tree planting, environmental education and green labelling that aiming at conserving the crocodile ponds as tourism resources	Tree planting Conservation policies Waste and sanitation management Simple infrastructure Environment and sanitation education	Drying up of the ponds Silted ponds not dredged Animal excreta in water cause stingy smell No environmental labels Unobserved carrying capacity of ponds
Socio-cultural Sustainability	Activities that promote local social and cultural values and tourist interests. Such activities also include human development and training workshops, community integration, social cohesion, and equity.	Respect for social and cultural values and tourist interests Social cohesion Capacity development of employees. Infrastructural development	Tendency for the local youth to adopt foreign lifestyles due to interaction with the tourists Tendency for some children to engage in income earning activities

Tourism activities are regarded as sustainable community-based when they integrate into local economic activities. This was clear in the results as tourism activities supports agriculture and domestic activities of the of local people. However, the use of the ponds by animals suggests a potential conflict as excreta of the animals causes bad scent and pollutes the water. The tourism regulation policies that prohibit cattle and donkeys from entering the water suggest a sign of potential conflict. Environmental sustainability is an essential

element of community-based ecotourism development. Environmentally sensitive tourism practices respect ecological maintenance, waste and sanitation management, conservation practices, environmental education and monitoring of tourist numbers to ensure that carrying capacity of the environment is not exceeded. Tourism activities in Paga have some of these characteristics. The tourism infrastructure in the community is undeveloped and has no huge buildings. Community-based tourism infrastructure is usually in small scale. Efficient infrastructure is important for sustainable tourism practices. From the tourist comments, it is obvious that the infrastructure at the pond was not efficient. The inefficient infrastructure in Paga confirms the findings of Yankholmes & Akyeampong (2010) for tourism infrastructure in Ghana is generally poor. Inefficient infrastructure does not retain tourists in tourism destination communities.

Sustainability of the tourism resources is important community-based tourism principle. The two experience droughts and siltation that keep lowering the water levels. The savannah dry climatic conditions are a threat to sustainability of tourism in the community. Social cohesion is crucial for sustainable community-based ecotourism. The Tourism Development Committee coordinates tourism stakeholders in Paga. This finding confirms Briedenhann & Wickens (2004) assertion that tourism stakeholders in South Africa have to work collaboratively towards sustainable community-based tourism development. Social cohesion is good platform to sensitise community members for tourism development. Empowerment of the local people to participate in the tourism industry also fits into sustainable community-based ecotourism development guidelines. Sustainable tourism integrates the local people into tourism sector by giving them relevant training and education in Paga to be able to work efficiently (Dangi & Jamal, 2016). Social justice and equity issues consider gender inclusion and fair share of proceed from tourism in the community. Revenue from tourism was used to build a kindergarten in the community. Sustainable tourism practices should consider the needs of the community people (Coria & Calfucura, 2012; Das & Chatterjee, 2015). Cusack & Dixon (2006) also acknowledge that education and training workshops for local youth in tourism destinations give skills to be able to assess employment opportunities in the tourism sector. Tourism is labour intensive and an avenue for employing unskilled and semi-skilled labour. These authors also explain that retail trade in the tourism sector in southern Africa is dominated by women. The research findings suggest that record keeping is poor and statistics are inconsistent. The research indicated tourism in the community is informal and it is at a developing stage. Taking precautionary measures on the challenges facing tourism development can contribute to developing tourism in the locality into a sustainable community-based tourism.

### **POLICY RECOMMENDATIONS FOR SUSTAINABLE COMMUNITY-BASED ECOTOURISM**

1. There is need for conservation and protection of the crocodile ponds. This can take several approaches including dredging and creation of buffer zones to reduce pollution and unwanted use of the ponds.
2. Environmental education and green labels at the ponds should be intensified to reduce indiscriminate waste disposal and environmental degradation.
3. Tourism infrastructure should be improved to provide satisfactory services.
4. Sustainable tourism development requires support from the stakeholders of government and other organisations.

### **LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH**

This research was a single case and focused on the in-depth understanding and analysis of tourism of Paga crocodile ponds. The findings should be used without generalisation. The sample size was limited to key players in tourism management and

did not include the views of all individuals from the community. Future research on sustainability of ponds should be detailed involving quantitative and qualitative methods to seek large sample size from the community.

## CONCLUSION

This research was set to analyse stakeholder views on tourism characteristics and organisation at the Paga crocodile ponds from a sustainable community-based ecotourism framework, referring to the economic, environmental, cultural and social impacts of tourism in the community. These characteristics of tourism have been analysed and indicated that tourism in the community is managed by local traditional authorities and community elders with little involvement of government and corporate entities. Tourism is in its development stage and have benefits for the Paga community. To advance tourism development to a sustainable community-based ecotourism, there is need for other stakeholders from government, private sector, non-governmental and individuals to contribute to the efforts of traditional authorities to improve the management and infrastructure of tourism in the community. The crocodile ponds are getting silted and their sustainability as well as record keeping are a potential challenge to sustainable community-based ecotourism development in the community.

## Aknowlegments

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## **EVALUATION AND PRIORITIZATION OF TOURISM SITES IN KOOHBANAN CITY IN ORDER TO DEVELOP TOURISM IN IRAN**

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**Abstract:** Geographic perspectives make natural and unique attractions and have a high potential for tourism development with regard to spatial and geographical equilibrium. Recreational use of environmental capabilities, in addition to the appropriate facilities and conditions, requires the conservation of natural resources. This feature can be evaluated through the environmental capability measurement of tourism sites and the estimation of tourist demand. So the present research evaluates and prioritizes the tourism sites in Koohban applying VIKOR and TOPSIS Models to develop its tourism. To this aim, after identifying the tourism sites such as watery mills in Daregezk, Gerdukaj, Darehood and Bandar villages, their potentials were evaluated by such indicators as wideness, water resources, distance to tourist attractions, variety of attractions, distance to religious sites, business centers, facilities and services for catering and tourism, other welfare services, environmental diversity and pristineness, scarcity, historical and ancient aspects, apparent beauty and appropriate climates. The results of VIKOR Model imply that the site of Bandar village with point of 0.00189 from VIKOR indicator, point of 0.00376 from satisfaction indicator and point of 0.00153 from dissatisfaction indicator has the first ranking of tourism development in Koohbanan city. Other tourism sites, however, have achieved an acceptable rating in all three VIKOR indicators of satisfaction and dissatisfaction, and according to these indicators, the sites of the mill, Daregezk, Gerdukaj and Darehood ranked second to fifth in tourism development. The obtained results from TOPSIS Model show that Bandar and Daregezk villages with the highest potential and sustainability criteria, with a weight of 0.428 and 0.426, respectively, are in the first and second priorities,

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respectively. The villages of watery mills and Darehood with points of 0.368 and 0.338 have the third and the fourth priorities, respectively. Gerdukaj village with a relatively high point difference and a weight of 0.109 ranks the fifth.

**Key words:** tourism development, recreational site, Vikor model, Topsis algorithm, Koohbanan

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## INTRODUCTION

Nature-oriented tourism is a natural and sustainable tourism which is possible with the participation of indigenous operators and the exploitation of indigenous and natural tourism potentials. In other words, nature tourism is referred to any kind of trip to natural places. In fact, the foundation of this kind of tourism is nature, which is also referred to as naturalist tourism or nature-based tourism. Therefore, paying attention to the importance of its role in protecting the environment in order to achieve sustainable development is essential (Rezvani, 2004:109). In addition to the natural and pristine attractions of each area, geographical space creates such landscapes that, given the spatial conditions and spatial relationships, can have a great potential in the field of tourism. Obviously, the recreation use of the environment both requires the facilities and the appropriate conditions as well as the conservation of these resources. This can be achieved by assessing the environmental capabilities and determining the capacity for receiving resources and estimating tourism demand. It should be noted that different places have potential in various fields, including tourism.

But to use these abilities, we have to turn capability into usability with such an appropriate space; which is a special art that in many cases knowledge of geomorphologists can prepare and discover it. In other words, the understanding and presentation of the relationship between the form and the process has a profound effect on its emotional and aesthetic response, which is geomorphology in the tourism industry (Ramesht et al., 2011: 354). Although many researchers consider the importance of tourism solely in creating incomes and job opportunities, it should be noted that the importance and majesty of the tourism industry is not limited to those cases; in fact, if planned and developed, tourism, and in particular natural tourism, can improve such indicators as social justice, promotion of living standards, public welfare, and regional balance. It should be noted that planning for identifying the characteristics of the destination of tourism causes the region's diversification, tourism growth and vital economic stimuli in each region (Liu et al., 2012: 413).

In general, the main objective of nature tourism is the education and entertainment of tourists from natural phenomena, as well as the protection of the natural environment and its prospects in relation to the lack of change and the avoidance of human intervention in disrupting the face of the earth. In this regard, Pourahmad (2005), while using multi-criteria decision-making models in evaluating tourism capabilities of Semnan province, state that the application of various multi-criteria methods leads to a different ranking of competing alternatives. Therefore, in order to achieve consensus and also more comprehensive ranking of options, the method of integration of the results is proposed as the best method. Mousavi et al., 2005 in an article entitled investigating and prioritizing the power and infrastructure of tourism development in the cities of Kurdistan using a multi-criteria decision making technique reported that in terms of infrastructure indicators of tourism, Sanandaj is highly advanced and Dehgolan and Divandareh districts are at a low level (deprived). Ghanbari et al., 2014 rank the cities of East



Azarbaijan province based on urban tourism infrastructure with a multi-criteria decision making method. Their results show that Tabriz, Maragheh and Shabestar are the first three cities and Varzaghan, Charavimaq and Khodaafarin are the last three cities of the province based on the availability of urban tourism infrastructures. Mavadat & Maleki (2014) review the tourism infrastructures in Yazd province using TOPSIS and HDI models and report that tourism infrastructure in Yazd province does not have a good balance. Tyrväinen et al., 2014, while exploring the intentions of tourists in the north of Lapland, Finland, with the aim of environmental preferences and tourist accommodation, emphasize that tourists mainly focus on the relationship of their location with nature, green infrastructure, access and quality of the environment. Doniz-Paez et al., 2011, in another investigative attempt, while studying the geomorphous landscape of volcanoes in Canary islands, Spain conclude that this perspective has scientific, cultural, added value, and use and management values for tourism development. Uysal (2013) in a study titled "Urban Tourism Development" had a comparative comparison of urban tourism in Istanbul and Helenisky and concluded that tourists in both cities were attracted from three points.

Considering the fact that identifying, evaluating and introducing tourist attractions in each region is the first step in the development and planning of regional tourism, as well as the existence of appropriate infrastructure and appropriate distribution of services in attracting tourists to the most prone areas of tourism is very determinative (Taghvaei & Ranjbar Dastanani, 2010: 23), this research tries to analyze the natural tourism sites of Koohbanan city in accordance with their infrastructure and their tourism characteristics.

## **THEORETICAL BACKGROUND**

With regard to tourism development, recreational planning and the determination of environmental-human resources is a process that relates people's leisure time to space and environment. This planning is an art and science that uses concepts and methods related to a great deal of scientific orientations to provide public and private recreational-tourism opportunities in and around cities. The main issue in planning and managing tourism development is to create a balance between the power of the natural and social environment with the amount of tourism and recreational activities in a particular region, area or special promenade. This is especially more sensitive in urban sprawl and surrounding areas; as on the one hand, it faces the increase in the demand and limited resources, and on the other hand, there is a risk of increasing environmental problems and issues (Saeidnia & Mehdizadeh, 2012: 5). In general, successful planning involves essentially five features that are mandatory in the early stages of planning. It is worth noting that the ranking of the following priorities varies among researchers:

A) Estimating and listing all available facilities and facilities that are likely to be used in the future;

B) The assessment of a possible tourist market (origin and nationality of tourists);

C) Examining the areas in which the demand outweighs the supply (channeling demand);

D) Searching to find internal and external financial resources to provide financial aspects of tourism;

E) trying to preserve the natural characteristics, cultural heritage and characteristics of social life (Zaherie, 2012: 97).

Tourism attraction as the main focus of tourism and initial capital of this industry has a very important role in the planning and development of tourism, and therefore, the study of tourist attractions is considered as the basic of tourism industry planning (Heidari Chianeh, 2010: 44-45). Attractions are developed sites designed and managed to

satisfy the interests and activities of visitors and recreate recreational facilities (Heidari Chianeh, 2017: 59). Since most of Iran's cities and habitats are adjacent to valuable natural resources such as valleys, water areas, bays, springs, etc., recognizing the tourism potential of these natural resources and their relationship with human culture and civilization will have a huge impact on the development of tourism in different regions.

## METHODOLOGY

The present research is based on descriptive and analytical methods based on field visits. At first, while using library studies, through topographical maps, Google Earth images, digital elevation models and field visits, the studied area and the spatial distribution of tourism sites were identified. These sites include water mills, Daregezk, Gerdukaj, Darehood and Bandar villages (Table 1, Figures 1 and 2).

**Table 1.** Characteristics of the studied tourism sites (Source: Bastani, 2006)

Tourism site	Geographical location		Relative location	Tourism features
	longitude	latitude		
Asiab abad village	56° 28'	31° 18'	3 km north of Koohbanan	Villages dating back to the thousand years. the existence of eight water mills, each of which were known as a village and has been in operation for up to 30 years, but now only the eighth mill is effective.
Daregezk village	56° 29'	31° 16'	10 km north of Koohbanan	The existence of a natural aquarium, known as the largest natural aquarium in the south-east of the country. Many aquatic plants grow in this aquarium, and there are some fish with the age of about twenty years.
Gerdukaj village	56° 15'	31° 31'	45 km north of Koohbanan	This village is one of the city's summer residences, where Mount Davadan, with a height of 3660 meters, is the highest point in the Kohhbanan mountains. There are also Gerdukaj trees in the village, from which the name of the village is taken, old and thick trees that date back more than a thousand years.
Darehood village	56° 25'	31° 1'	10 km north of Koohbanan	There are mineral water springs coming from Mount Davadan. There is also a protected area in the village called Asia.
Village of Bandar	56° 24'	31° 23'	10 km southeast of Koohbanan	The presence of natural springs, old trees and ancient aqueducts, as well as medicinal plants such as black cumin, Thymus and Artemisia in the mountain range (2732 m high), are the attractions of the village of Bandar.

In the next stage, the evaluation indicators were selected according to the purpose of the research as well as previous studies, then the weight of the indicators was determined by the experts. The most important evaluation indicators are shown in Table 2, which are different according to the type of evaluation model. Finally, VIKOR and Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) models were used to prioritize tourism sites. VIKOR is one of the multi-criteria decision-making methods derived from Visekriterijumska Optimizacija IKompromisno which means multi-criteria optimization and compromise solution. The main purpose of this method is to approach the most ideal solution based on compromise and consensus solutions. So that the final answer (Q) is based on compromise and agreement with one or two conditions. This method can help decision makers to make a final decision (Opricovic & Tzeng, 2004: 447).



Water mills of Asiab Abad village



Natural aquarium in the village of Daregezk



Asia Protected Area in Darehood Village

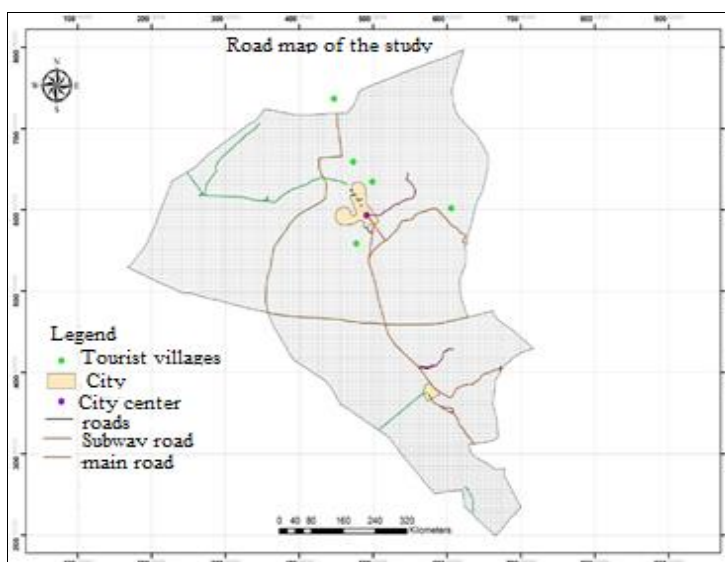


Scenes of the Bandar village

**Figure 1.** Photographs of studied tourist sites that have portrayed part of tourism attractions

VIKOR is one of the multi-criteria decision-making methods for solving a discrete decision-making problem with inappropriate criteria and various contradictory measurement units that are presented by Opricovic and Tzeng, 2004.

This method defines a ranked set of available options for conflicting indices so that the ranking of options is based on this goal. This compromise response introduces a multi-criteria ranking index based on the proximity to the ideal answer (Opricovic, 1998: 16). The main purpose of the VIKOR method is to be closer to the ideal answer of each indicator (Pourahmad & Khaliji, 2014: 12).



**Figure 2.** Communication status of the studied sites ( Koohbanan City in Kerman,Iran)

**Table 2.** Indicators used in each model to evaluate tourism sites (Source: Opricovic & Tzeng, 2004)

Evaluation model	VIKOR	TOPSIS
Evaluation Criteria	Area Tourist attractions and distance to them access water sources The distance between the mosques and the tourist attractions Commercial use Catering and tourism facilities Other services	Environmental diversity and pristineness Scarcity Historical and ancient aspects Apparent beauty Good climate

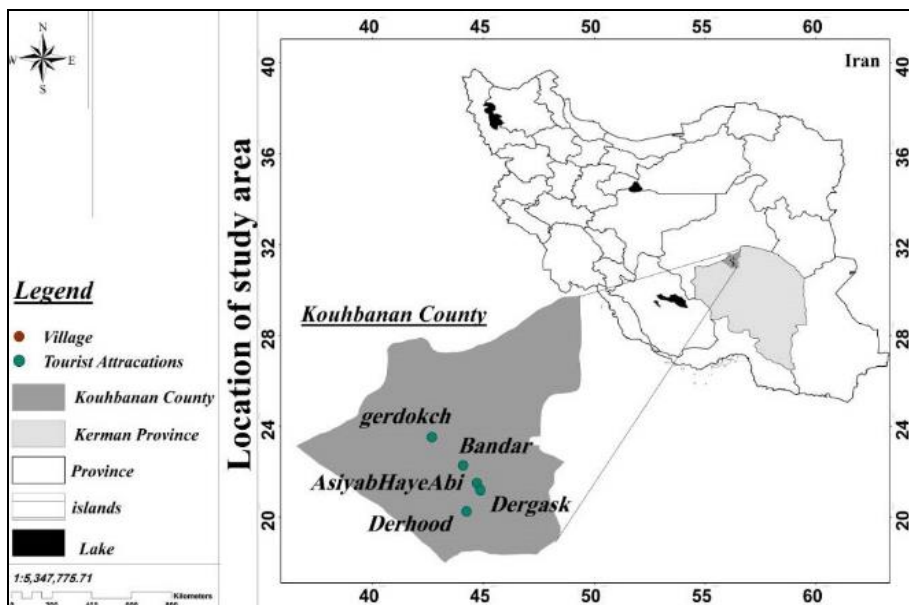
TOPSIS is one of the ranking techniques based on the similarity to the ideal solution, which was originally developed by Huang and Yoon in 1981. This method has a lower sensitivity than the weighting method of criteria (Malchovsky, 1999: 107), which, due to the compensation, allows the exchange between the indicators; i.e. the weakness of an index may be offset by another index score. In multi-index methods, including TOPSIS, the goal is ranking and selecting the best option (Kohansal, 2009: 93). In this method, option M is evaluated by the N index. The principle logic of this model defines the ideal solution (positive) and the ideal negative solution. In this method, in addition to considering the distance of an option from an ideal point, its distance from the ideal point is also considered negatively (Asgharpur, 2009: 263). It means that it has suitable

options and has a higher priority, which has a minimum distance from the ideal solution and the farthest distance from the ideal negative solution.

In other words, the distance between options is calculated from the positive and negative ideal solution, and then the options are ranked based on the fact that they have the least ideal distance from the positive ideal and the maximum distance from the negative ideal (Deng, 2000: 967). The basis of this method is selecting the option that has the least distance from the positive ideal and the maximum distance from the ideal negative. In this method, the indicator called "The relative closeness of the i-th option to the ideal solution is introduced, and the option with the highest one is chosen". In this method, an indicator titled "The relative closeness of the i-th option to the ideal solution ( $C_i^+$  or  $C_i^-$ ) is introduced, and the option with the highest  $C_i^+$  is chosen" (Desheng, 2006). This model is used in order to select a decision-making strategy among several possible solutions according to the desired indicators.

### The studied area

Koohbanan city with an average height of 1945 meters above sea level is located in the northwest of Kerman province and in the position of 56 degrees and 17 minutes in longitude and 31 degrees and 25 minutes in latitude (Figure 3). Interconnected Mountains with a northwest to southeast trend have surrounded this city. Mount Davadan with the height of 3660 meters is the highest point of Koohbanan. The city is bounded from the north to the city of Bafgh, from the south to the city of Zarand, and from the east to the city of Ravar and Behabad, and from the west to Nogh Rafsanjan and Zarand. The protected area of Asyab Mountain, Babaebodan Tower, Takht Amir, old towers and castles, natural aquarium in Dargask village, Sheikh Abu Zayed monastery and eight mills are one of the most important tourist attractions in the city of Kohbanan.



**Figure 3.** The Geographical location of the studied Discussions and Findings (Tourism Sites in Koohbanan City in Kerman, Iran)

The increasing urbanization and leisure-time geography approach in recent decades have attracted the attention of many countries in considering the tourism industry as the



largest and most diverse industry and as an achievable goal in the process of sustainable development. Many countries recognize this dynamic industry as the main source of income, job creation, private sector growth, and cultural and human exchange and the development of infrastructure (Tayebi, 2007: 21). Iran, like many parts of the world, is rich in natural attractions and natural potentials along with historical and cultural phenomena. Therefore, the present study has been developed according to the necessity of tourism villages in the city of Koohbanan to study, investigate, identify and introduce as a tourist attraction area. A comparative evaluation of these villages for the development of sustainable tourism has been done applying two frameworks of VIKOR and TOPSIS. Therefore, the results of this study are presented in two separate sections as follows.

### **Prioritizing tourism sites based on the VIKOR model**

The first step in prioritization in VIKOR model is the formation of a primary matrix which consists of evaluation options and indicators. This matrix has five options of the villages of Asyab Abad, Daregezk, Gerdukaj, Darehood and Bandar, and nine indicators of area, distance to tourist attractions, access, volume of water resources, tourist attractions, mosque distance to tourist attractions, commercial use, facilities for catering and tourism, and other services and has an order of 45 that shows the numerical values of indices in each village (Table 3), which represents the initial matrix of the VIKOR model.

**Table 3.** Primary VIKOR matrix based on the options and digital values of indicators in eachvillage

Indicator Site	Area	Distance to tourist attractions	Access	Volume of water resources	Tourist attractions	Mosque distance to tourist attractions	Commer- cial use	Facilities for catering and tourism	Others services
Asyab	120	220	9	165000	1004.1	25	42	21	33
Dargask	150	200	96	145000	302.23	20	39	11	28
Gordukch	110	300	81	140000	102.71	50	93	32	50
Darehud	140	130	41	137000	114.155	20	54	37	35
Bandar	130	150	61	166000	102.825	30	59	32	35

In the second stage of the VIKOR model, as the unit of the selected indices is different, their units should be deleted before entering into the model, and the quantitative values of each index should be converted into dimensionless one, which can be done through normalization methods. The results of the normalization of the data matrix will be in the format of normalized or dimensionless matrix, which are reported in Table 4.

**Table 4.** Normalized Matrix of VIKOR Model

Indicator Site	Area	Distance to tourist attractions	Access	Volume of water resources	Tourist attractions	Mosque distance to tourist attractions	Commer- cial use	Facilities for catering and tourism	Others services
Asyab	0.18	0.22	0.03	0.22	0.62	0.17	0.15	0.16	0.18
Dargask	0.23	0.20	0.33	0.19	0.19	0.14	0.14	0.08	0.15
Gordukch	0.17	0.30	0.28	0.19	0.06	0.34	0.32	0.24	0.28
Darehud	0.22	0.13	0.14	0.18	0.07	0.14	0.19	0.28	0.19
Bandar	0.20	0.15	0.21	0.22	0.07	0.21	0.21	0.24	0.19

The third step in the VIKOR model is to weigh the indicators and prioritize them. Since the indices have different priorities in option selection stage, this step is done through various weighting methods such as network analysis, hierarchical

analysis, entropy, and so on. In this study, entropy weighting method was used to prioritize the indices. In this method, the more variables of a single index are distributed, the more important it is. The results are presented in Table 5, in which water resources with the volume of 0.995 has gained the largest volume. In the fourth step, with a similar multiplication of the weight of indices in the normalized matrix, the normal matrix is obtained, which is provided in Table 6.

**Table 5.** Weighting indexes and prioritizing them based on entropy model

Indicator	Area	Distance to tourist attractions	Access	Volume of water resources	Tourist attractions	Mosque distance to tourist attractions	Commer-cial use	Facilities for catering and tourism	Others services
E	647.60	973.00	257.24	751415.39	1157.79	138.99	277.67	127.18	178.80
Standard Deviation	-646.60	-972.00	-24.256	-751414.39	-1156.79	-137.99	-276.67	-126.18	-177.80
Weight	0.0009	0.0013	0.0003	0.9950	0.0015	0.0002	0.0004	0.0002	0.0002

**Table 6.** The weighted normal matrix in VIKOR model

Indicator Site	Area	Distance to tourist attractions	Access	Volume of water resources	Tourist attractions	Mosque distance to tourist attractions	Commer-cial use	Facilities for catering and tourism	Others services
Asyab	0.00016	0.00028	0.00001	0.21804	0.00095	0.00003	0.00005	0.00003	0.00004
Dargask	0.00020	0.00026	0.00011	0.19161	0.00028	0.00003	0.00005	0.00001	0.00004
Gordukch	0.00014	0.00039	0.00010	0.18500	0.00010	0.00006	0.00012	0.00004	0.00007
Darehud	0.00018	0.00017	0.00005	0.18104	0.00011	0.00003	0.00007	0.00005	0.00005
Bandar	0.00017	0.00019	0.00007	0.21936	0.00010	0.00004	0.00008	0.00004	0.00005

**Table 7.** The values of the lowest and the highest normal matrices and their anomalies

Indicator Site	Area	Distance to tourist attractions	Access	Volume of water resources	Tourist attractions	Mosque distance to tourist attractions	Commer-cial use	Facilities for catering and tourism	Others services
Maximum	0.00020	0.00039	0.00011	0.21936	0.00095	0.00006	0.00012	0.00005	0.00007
Minimum	0.00014	0.00017	0.00001	0.18104	0.00010	0.00003	0.00005	0.00001	0.00004
Deducing min from max	0.00005	0.00022	0.00010	0.03832	0.00085	0.00004	0.00007	0.00003	0.00003

**Table 8.** Values of Satisfaction Indicators (S) and Dissatisfaction (R) in VIKOR model

Indicator Site	Area	Distance to tourist attractions	Access	Volume of water resources	Tourist attractions	Mosque distance to tourist attractions	Commer-cial use	Facilities for catering and tourism	Others services	Satisfaction	Dissatisfaction
Asyab	0.00064	0.0006	0.00034	0.034	0	0.00015	0.0003	0.00010	0.00018	0.036	0.034
Dargask	0	0.0007	0	0.720	0.0011	0.00018	0.0003	0.00017	0.00024	0.723	0.720
Gordukch	0.0008	0	0.00006	0.892	0.0015	0	0	0.00003	0	0.894	0.892
Darehud	0.0002	0.0012	0.00021	0.995	0.0015	0.00018	0.0002	0	0.00016	0.998	0.995
Bandar	0.0004	0.0011	0.00014	0	0.00153	0.00012	0.00023	0.00003	0.00016	0.003	0.001

The fifth step of the VIKOR model is the determination of the minimum and maximum numerical values of each index in the normal matrix and their anomalies, i.e., the fraction of the minimum item from the maximum, the results of which are reported in Table 7. In the sixth step of the VIKOR model, the satisfaction index (S) and dissatisfaction index (R) are calculated. In this method, the maximum number of normal weight matrices in each index is deducted from the normal weight matrix elements in the same index and is divided into the maximum and minimum anomalies, the results of which are given in Table 8.

In the seventh step of the VIKOR model, the final ranking of the options is performed; at this stage, the VIKOR value (Q) is calculated using equation (1) and is accepted with two conditions, so that the lower the Q value, the higher this option has priority if it has at least one of the following two conditions:

A: The difference between the second and the first option is greater than or equals to DQ. The DQ is calculated from (2), where n is the number of options. Accordingly, given the lower Q2-Q1 difference from the DQ value, the first condition is not acceptable.

B: The first option must always maintain its rank in S or R in addition to the Q. As you can see, not only the first option (the village of the port), but all the options in all three indices (R, S, Q) have maintained their ranks. Therefore, the second condition is accepted (Atashin & Sasani, 2013:107).

$$\text{Equation 1: } Q = V \times \left[ \frac{S_i - S^*}{S^- - S^*} \right] + (1-V) \times \left[ \frac{R_i - R^*}{R^- - R^*} \right]$$

Equation 2:

$$DQ = 1/(n-1) \rightarrow \frac{1}{5-1} = 0.25$$

$$Q2-Q1 = (0.0330 - 0.00189) = 0.0311$$

In these relationships, Q = the VIKOR index, V = the fixed number which equals to 0.5,  $S^- = \text{Max} S_i$ ,  $R^+ = \text{Min} S_i$ ,  $S^+ = \text{Min} S_i$ ,  $R^- = \text{Max} S_i$ .

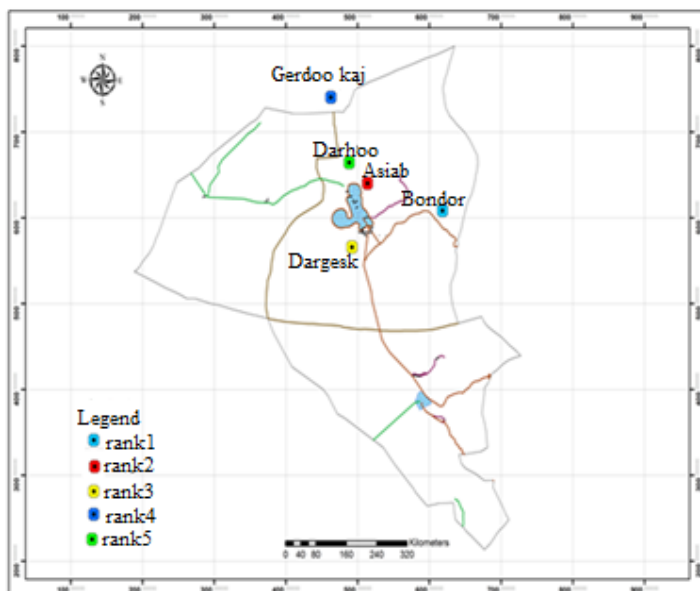
The results of the final ranking of options based on the VIKOR model are shown in Table 9 and Figure 4. As we can see, the villages of Bandar and Asiabad are the first priorities of tourism development with VIKOR values of 0.00189 and 0.03303, respectively.

**Table 9.** Final ranking of Tourism Sites in Koohbanan City based on the VIKOR model

Site	VIKOR value	Final VIKOR rank	Satisfaction index	Final satisfaction rank	Dissatisfaction index	Final dissatisfaction index
Bandar	0.00189	1	0.00376	1	0.00153	1
Asyab	0.03303	2	0.03667	2	0.03431	2
Daregezk	0.22536	3	0.72344	3	0.72056	3
Gerdukaj	0.89769	4	0.89459	4	0.89212	4
Darehood	1.00189	5	0.99888	5	0.99506	5

The problem solving process according to the TOPSIS model consists of several steps, the first step of which is to determine the indices for the formation of the data matrix. In this research, data matrices include options of water mills, Daregezk, Gerdukaj, Darehood and Bandar villages and indicators including environmental diversity and pristineness, scarcity, historical and ancient aspects, apparent beauty and proper climate. In this section, only the quantitative and numerical values of the indicators are reported for the formation of data matrices, the results of which are presented in Table 10. This matrix consists of five options and five indicators, whose rows and columns form a 25-fold matrix.





**Figure 4.** The final ranking of Tourism Sites in Koohbanan City based on the VIKOR model Prioritizing Tourism Sites Based on TOPSIS Algorithm

**Table 10.** Decision-making matrix and quantitative values of indices in TOPSIS algorithm

Indicators Options	Environmental diversity and pristineness	Scarcity	Historical and ancient aspects	Apparent beauty	Appropriate climate
Water mills	0.575	0.61	0.6	0.525	0.26
Daregezk	0.73	0.6	0.63	0.5	0.59
Gerdukaj	0.26	0.44	0.475	0.45	0.53
Darehood	0.575	0.49	0.30	0.58	0.51
Bandar	0.375	0.31	0.40	0.45	0.6

Since the selected indices have multiple units, so matching, inserting and measuring them is not allowed in the model in the same way. As a result, their unit should be deleted and the quantitative values of each index should be converted to the model dimensionlessly. The results of the non-dimensionalization of the data matrix will be normalized or non-dimensional matrices, which are reported in Table 11.

**Table 11.** Dimensionless or normalized matrix in TOPSIS algorithm

Indicators Options	Environmental diversity and pristineness	Scarcity	Historical and ancient aspects	Apparent beauty	Appropriate climate
Water mills	0.486	0.543	0.541	0.476	0.226
Daregezk	0.617	0.534	0.568	0.444	0.514
Gerdukaj	0.219	0.392	0.428	0.400	0.462
Darehood	0.486	0.436	0.270	0.516	0.445
Bandar	0.317	0.276	0.360	0.400	0.523

Since the effects of indicators on the prioritization of alternatives are not the same and different from each other, the indices must first be compared to each other in a pairwise comparison, and their importance are entered introduced into the computational process of

the algorithm in the form of quantitative values in the vector of weight. Therefore, in order to prioritize the indices and compare them with each other in a pairwise fashion, the Shannon entropy model was used, the results of which were reported in Table 12. As can be seen, the environmental diversity and apparent beauty indices have the highest and lowest priorities, respectively, with the values of 0.352 and 0.0006 respectively.

**Table 12.** Weight vector resulting from paired comparison of indices in Shannon entropy model

Indicators	Environmental diversity and pristineness	Scarcity	Historical and ancient aspects	Apparent beauty	Appropriate climate	Confidence value	dj	Weight vector
Environmental diversity and pristineness	0.228	0.248	0.249	0.209	0.104	.9610	0.039	0.352
Scarcity	0.290	0.244	0.261	0.199	.2360	0.979	0.021	0.189
Historical and ancient aspects	0.103	0.179	0.197	0.179	.2120	0.976	0.024	0.216
Apparent beauty	0.228	0.2	0.124	0.231	0.204	0.993	0.0007	0.0006
Appropriate climate	0.149	0.126	0.166	0.179	0.240	0.974	0.026	0.234

In order to prioritize the indices in the computational process of the algorithm, their weight vector is multiplied equally well in the dimensionless matrix. The results are equal to the formation of a dimensionless matrix that is reported in Table 13. The ideal situation indicates the desirability. Therefore, considering the positive and negative effects of the indicators in prioritizing options, the minimum and maximum values indicate the desirable situation and represents the ideals. That is, if the parameter has a negative effect, the minimum value of it represents the ideal is positive and vice versa. According to the above principle, the ideals of the study indicators are reported in Table 14.

**Table 13.** Non-scale weighted matrix in the TOPSIS algorithm

Indicators Options	Environmental diversity and pristineness	Scarcity	Historical and ancient aspects	Apparent beauty	Appropriate climate
Water mills	0.080	0.046	0.053	0.0012	0.024
Daregazk	0.102	0.046	0.056	0.0011	0.055
Gerdukaj	0.036	0.033	0.042	0.0010	0.049
Darehood	0.080	0.037	0.026	0.0013	0.047
Bandar	0.052	0.023	0.035	0.0010	0.056

**Table 14.** Positive and Negative Ideal Matrices in the TOPSIS Algorithm

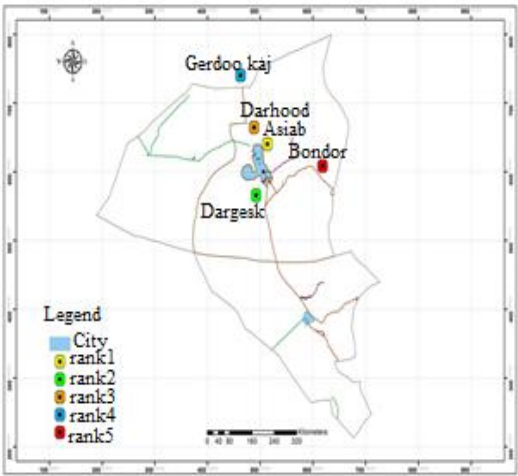
Indicators Ideals	Environmental diversity and pristineness	Scarcity	Historical and ancient aspects	Apparent beauty	Appropriate climate
Ideal solution	0.125	0.070	0.243	0.080	0.044
Non-ideal solution	0.073	0.052	0.03	0.041	0.033

In terms of the effect of prioritizing the regions, the most desirable option will be the option which has the least relative distance to the positive ideal and the maximum relative distance to the negative ideal. From the relative relationship between the distances to the positive and negative ideals, the relative weight of the options is calculated, which is reported in Table 15. Relative weight values usually vary between

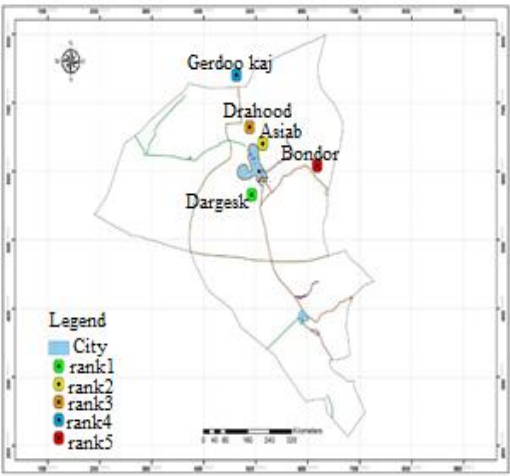
zero and one, the highest weight referring to the highest priority, and the lowest weight indicates the lowest priority. According to its values, the ranking of the options was performed according to Table 15 and Figures 5 to 8.

**Table 15.** Ideal solution matrix and prioritization of options in TOPSIS algorithm

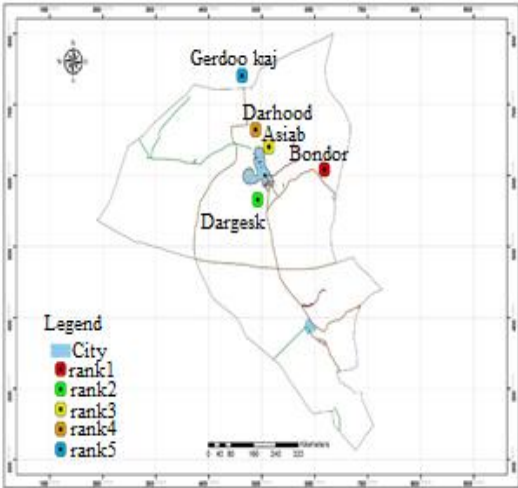
Options	Weight	Rank
Water mills	0.368	Third
Daregezk	0.426	Second
Gerdukaj	0.109	Fifth
Darehood	0.338	Fourth
Bandar	0.428	First



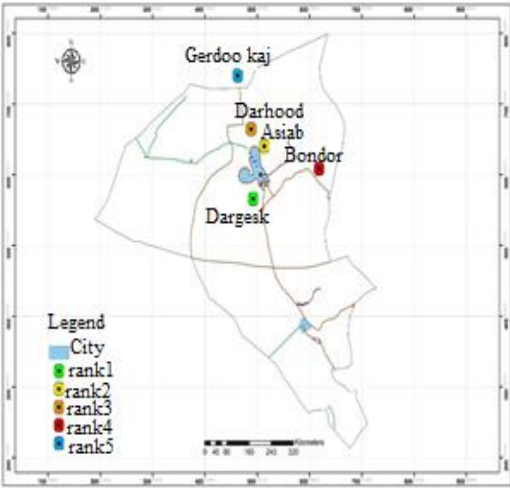
**Figure 6.** Prioritization of options based on the dimensionless matrix



**Figure 5.** Prioritization of options based on the data matrix



**Figure 8.** Final prioritization of the options based on the TOPSIS model



**Figure 7.** Prioritization of options based on the weighted dimensionless matrix

## CONCLUSION

Today, the tourism industry has functions with a comprehensive dimension in all economic, social and cultural spheres, and it is a very suitable platform for any country, taking into account its capacity and ability. But the expansion of the tourism industry in every part of the world requires special conditions such as climate, historical and cultural influences, natural attractions, customs and traditions, infrastructures, facilities and equipment (Hosseini et al., 2013: 2) and most importantly, identifying and introducing tourism potentials in different regions. In the meantime, natural tourism will have a unique ability to attract tourists and boost the tourism industry due to the diversity of shapes and attractions. In this regard, this research has investigated the potential of natural tourism sites in Koohbanan city for tourism development using the VIKOR's technique. To prioritize attractions, based on the VIKOR's model, the indicators of area, distance, accessibility, water resources, tourism features, distance to religious, commercial, service sites, and other required infrastructures are used.

As stated above, according to the VIKOR model, the site that ranked first in the development of tourism should, in addition to Q in S or R, always maintain its rank.

According to the results of Table 4, the Tourism Site of Bandar with a score of 0.00189 from the VIKOR Index (Q), the score of 0.00376 from the Satisfaction Index (S) and the score of 0.00153 from the Dissatisfaction Index (R) ranked the first for development Tourism in Koohbanan city. It should be noted that according to the results of the research, not only the first option (Bandar site), but all the options have maintained their ranks in all three indices (R, S, Q). So that according to these indicators, the sites of Asyab, Daregezk, Gardokuch and Darehood ranked second to fifth for tourism development in this city.

The results of the TOPSIS model show that the villages of Bandar and Daregazk have the highest potential and sustainable tourism criteria with a weight of 0.428 and 0.426 respectively in the first and second priorities of tourism development. The villages of water mills and Darehood with a score of 0.368 and 0.338, have the third and fourth priorities, respectively. The village of Ghodrokhay has been ranked fifth with a weight of 0.109.

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## **INTERNATIONAL MIGRANT WORKERS IN TOURISM AND HOSPITALITY INDUSTRY, LANGKAWI, MALAYSIA: DOES THEIR DEMOGRAPHIC PROFILE MATTER?**

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**Abstract:** The main purpose of the study was to investigate the demographic profile of the employment of international migrant workers in the Langkawi tourism and hospitality industry. A total of 258 international migrant workers had participated in the study and the findings indicated that majority of them were male, with age ranged between 18 – 30 years old and were still single. Additionally, the findings also highlighted that the majority of the international migrant workers in Langkawi were semi-skilled and had the ability to speak good English. Most of them had migrated from Indonesia and had been working in the accommodation sector which was more towards customer service sectors. They also earned an income between RM1,000 – RM4,999 a month. The findings of the study would significantly assist the Workforce Department in designing and preparing a comprehensive policy regarding the employment of international migrant workers in Langkawi.

**Key words:** International migrant workers, Langkawi, tourism and hospitality industry, demographic profile

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### **INTRODUCTION**

Tourism and hospitality employment has a significant economic and social impact on a destination thus human resource analysis is considered an important component of

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tourism and hospitality research. At the same time, immigration for tourism has caused a demand for employment (Merrill, 1982). It is further believed that the creation of employment opportunities can bring migration into the tourism and hospitality industry (Connell, 1987:108). Some researchers have found that migration is common in tourism employment, especially where the seasonality of the tourist traffic is significant (Monk & Alexander 1986; Lever, 1987). According to Halseth (1999), tourism development also brings employment opportunities to a destination area thus it can be extremely attractive for destination areas seeking economic development alternatives, especially during a period of economic transition. However, the tourism and hospitality industry is expected to have a difficult time attracting and keeping labor.

Further, the tourism industry is also considered unpopular as an employment choice because of its low status and large surplus of unskilled labor market (Saunders, 1981). While estimates of the number of jobs in tourism and hospitality continue to grow, there is also a concern that the industry will experience a labor shortage in the near future (CTHRC, 2003). In fact, the industry largely has an image of providing low skilled and low payed jobs, and attributes that are not likely to motivate mobility into the industry (Krakover, 2000; Hjalager & Andersen, 2001).

These issues were solved by recruiting international migrant workers to work within the tourism and hospitality industry. The study is conducted to investigate the international migrant workers demographic profile who worked in the tourism and hospitality industry in Langkawi, Malaysia (Figure 1).

The development of Langkawi as tourist destination has begun with the conferring on the Duty Free Zone status in 1987, followed by the establishment of the Langkawi Development Authority (LADA) in 1990 and has been one of the agendas in the Sixth Malaysia Plan (1991 – 1995). The growth in tourist arrivals to Langkawi has spurred a corresponding increase in the demand within the tourism service industry itself. The number has significantly increased in 2004 when it reached 2.2 million tourist arrivals out of the 15.7 million received for Malaysia.



**Figure 1.** Location of Langkawi, Malaysia  
(Source: Google maps)

In 2012, Langkawi has received about RM 2.6 billion revenue from the approximately 3 million recorded tourist arrivals (Langkawi Development Authority, 2016). The government has taken prompt action from these statistics by proposing a Blueprint Langkawi by the year 2015 to make Langkawi Island listed as 10 highest island visited by tourists as well as to make Langkawi as a luxury tourist destination. Added to this, the target in economics is to double tourism in Langkawi Gross National Income (GNI) of RM 0.8 billion in 2010 to RM 1.9 billion in 2015. Further, recipients are also expected to double from RM 1.9 billion tourists in 2010 to RM 3.8 billion in 2015 through the launching of marketing campaign based on customer needs. The tremendous growth of tourism in Langkawi has led to greater employment of international migrant workers. It is important therefore to understand their demographic profile as to design and plan a proper and effective recruitment strategy.

### **LITERATURE REVIEW**

According to Bell et al., (2002), migration is usually described spatially as action across the border of an area unit. Additionally, migration of international worker is believed can help to fill labor shortages in high-skills and also low-skill parts of the market (IOM, 2010). Based on a report from the World Tourism Organization (WTO, 1995), the tourism industry employs in excess 11,194,418 people worldwide and represents approximately 5 per cent of the world's total travel and tourism workforce.

Lee-Ross and Pryce (2010) have noted that the presence in large numbers of migrant workers in such hospitality organizations is of consequence for tourism academics as it carries implications for both destination image and the tourist experience of the destination. Although many studies have suggested positive outcomes from employing foreign workers, some negative consequences for the industry have also been identified. Choi et al., (2000) and William and Hall (2000) have argued that this ongoing relationship between migration, migrant labor and tourism employment continues partly because a mobile international workforce offers a solution to labor shortages where the local workforce is not willing to be engaged in low pay, low status and seasonal employment. Harrison (1992) on the other hands has supported the view with an example from Kenya, where despite the high numbers of new jobs created by tourism, regional unemployment remained high because of the large numbers of migrants who sought work within the tourism sector.

Another question regarding migration which should be addressed is whether migrants compete for tourism jobs with the local labor force or whether they fill a niche left open for social, cultural, economic or political reasons. Furthermore, the employment of international workers in tourism and related service sectors presents a series of opportunities alongside challenges for migrants, employers and host communities. Several studies have been conducted on investigating demographic profile. The characteristics of tourism employment have been found varied among destinations for instance occupation, skills and gender (Monterrubio & Espinosa, 2013). The employment were dominated by men compared to women and the reason was probably caused by the cultural structure of local communities. A recent study by Erden and Yolal (2016) have found that demographic variables also contributed as factors determining residents' perceptions of international fair in Izmir. They also noted that residents' perceptions vary across their age groups, occupation and educational level.

Chi et al., (2009) for instance have studied the relation between perceived image of destination and tourists' demographic factors such as gender, age, education, occupation, income and marital status. The study have indicated that gender and



education determined tourists' perceptions on destination image. Previously, Beerli and Martin (2003) have investigated the relation between image components and tourists' socio-demographic characteristics as a meaningful factor in terms of social class, education, age and gender. However, study on international migrant workers demographic profile has not aggressively been conducted.

### **METHODOLOGY**

The study applied a purposive sampling technique where the selected respondents consisted of the international migrant workers who legally entered Langkawi to work in the tourism and hospitality industry. The selected technique eventually enabled researches to obtain questionnaires quickly and economically (Sekaran & Bougie, 2010; Zikmund et al., 2010). Since there is no exact number of the international migrant workers working in the service sector specifically in Langkawi, the number of population was determined according to the general number of international migrant workers working in the service sector in Malaysia as stated by the Department of Statistic Malaysia (2012). There was a number of 291,997.44 international migrant workers working in the service sector and using a table of sample size provided by Krejcie and Morgan (1970), 384 respondents were selected to represent the sample.

Since the purpose of the study was to develop a profile of international migrant workers working in the tourism and hospitality sector, a self-administered survey questionnaire was used as research instrument. According to Sekaran and Bougie (2010), survey questionnaire is an efficient data collection mechanism to ensure relevancy and consistency of information gathered as the responses are objective, standardised and comparable. To achieve this objective, only 4 and 5 star hotels, fast food service restaurants and international cuisine restaurants in Pantai Cenang area, Langkawi were involved. This was due to the fact that these sectors recruited legal international workers. Pantai Cenang was selected as there are many tourism and hospitality sectors at the location. Additionally, Pantai Cenang also represents major tourism spots and activities in Langkawi. Hence, the study had distributed a total number of 400 questionnaires to the hotels. The human resource managers or related officers at the sectors were contacted through phone calls before asking their participation in the study.

Appointment date for meeting was set and the questionnaires were handed in to the human resource managers or related officers during the meeting. They were asked to distribute the questionnaires to their international migrant workers. Within 2 weeks, the researcher approached the human resource managers or related officers to collect the completed questionnaires. On the other hand, the secondary data in the study was assessed and analysed using all other sources such as literature search and reports from various sources. Literature review also covered relevant online journal articles through online databases and also reports from newspapers and published statistics.

### **FINDINGS**

A total of 258 useable questionnaires out of 400 were obtained, representing 64.5% response rate. Table 1 depicts the findings of the survey. It is indicated that the majority of international migrant workers are male (70.5%) whilst the remaining are female (29.5%). As for the age distribution, the findings show that the majority of them are between 18 to 30 years old (69.4%), followed by the category of age between 31 to 50 years old (27.1%), then by those who are below 18 years old (2.7%) and the remaining are above 50 years old (0.8%). The findings also highlight that most respondents are still single (51.9%). Meanwhile some of them are married (40.3%), followed by a small

number of them who are divorced (4.3%) and others are under other category (3.5%). The respondents were further asked to state their country of origin. The findings of the survey indicate that the highest percentage of international migrant workers are from Indonesia (21.3%). The findings then reveal most of them are from other countries such as Nepal, United Kingdom and few are from Maldives (20.9%).

Further, the findings show that some of the international migrant workers are from India (17.8%), then followed by Bangladesh (15.9%), Philippines (12.4%), Thailand (8.5%), Pakistan (2.7%) and only few are from Vietnam (0.4%).

More, the findings emphasize that the majority of international migrant workers have secondary school education (41.4%), followed by high school (38.4%), college (13.6%) and university (7.0%). Additionally, the majority of them have possessed a certificate (50.8%). In fact, most of them have also possessed diploma/higher diploma (43.0%) and followed by undergraduate degree (5.0%) and postgraduate degree (1.2%). This question however indicated a missing data of 11.6%.

**Table 1.** The demographic profile of international migrant workers

Items	Number	Percentage
Gender:		
Male	182	70.5
Female	76	29.5
Age:		
Below 18 years old	7	2.7
18 – 30 years old	179	69.4
31 – 50 years old	70	27.1
Above 50 years old	2	0.8
Marital status:		
Single	134	51.9
Married	104	40.3
Divorced	11	4.3
Others	9	3.5
Country of origin:		
Bangladesh	41	15.9
Philippines	32	12.4
Indonesia	55	21.3
India	46	17.8
Pakistan	7	2.7
Thailand	22	8.5
Vietnam	1	.4
Others	54	20.9
Educational level:		
Secondary school	106	41.1
High school	99	38.4
College	35	13.6
University	18	7.0
Qualification:		
Certificate	131	50.8
Diploma/higher diploma	111	43.0
Undergraduate degree	13	5.0
Postgraduate degree	3	1.2

Skills level:		
Unskilled	87	33.7
Semi-skilled	171	66.3
Proficiency in English:		
Very little	44	17.1
Little	63	24.4
Good	93	36.0
Very good	58	22.5
Job in sector:		
Accommodation	106	41.1
Transportation	3	1.2
Food and beverages	84	32.6
Visitor attractions	27	10.5
Others	38	14.7
Job position:		
Administration	16	6.2
Customer service	195	75.6
Security service	15	5.8
Others	32	12.4
Number of years working in the sector:		
Less than 1 year	63	24.4
1 – 5 years	159	61.6
6 – 10 years	31	12.0
More than 10 years	5	1.9
Income per month:		
Less than RM1,000	40	15.5
RM1,000 – RM4,999	215	83.3
RM5,000 – RM9,999	2	0.8
More than RM10,000	1	0.4

As for the skills level, the findings show that the majority of them are semi-skilled workers (66.3%) whilst the rest is unskilled (33.7%). The majority of them also have the ability to speak good English (36.0%) and very good English (22.5%). The remaining on the other hand has low ability to speak English (24.4%) and very low ability to speak English (17.1%). Further, it is noted that most of them are working in the accommodation sector (41.1%), the food and beverages sector (32.6%), other tourism and hospitality related sectors (14.7%), the visitor attractions sector (10.5%) and the transportation sector (1.2%). As for their position in the sector, majority of them are involved in the customer service sector (75.6%). It is then followed by other positions (12.4%), administration (6.2%) and only few in the security service (5.8%).

The findings also highlight that the majority of the respondents have been working in the industry between 1 – 5 years (61.6%). This is followed by less than 1 year (24.4%), between 6 – 10 years (12.0%) and the remaining has been working for more than 10 years (1.9%). Additionally, most of the international migrant workers have an income between RM1,000 – RM4,999 per month (83.3%). Few of them have an income less than RM1,000 (15.5%), some have an income between RM5,000 – RM9,999 per month (0.8%) and the remaining have more than RM10,000 income per month.

The respondents were also asked to indicate reasons for working in the tourism and hospitality sector and also reasons for choosing Langkawi as a destination to migrate. The findings (Table 2) highlight that the main reason for them to work in the tourism and

hospitality industry is 'to gain new experience' (52.3%). This is then followed by 'follow their friends' (41.1%), 'high wages' (37.2%), 'love meeting with people' (28.3%), 'easy to get job' (22.1%), 'job promotion' (7.8%) and 'family concerns' (7.4%) and finally few stated as 'other reasons' for choosing the industry (5.4%). As for the questions regarding reasons for choosing Langkawi, the findings emphasize that the main reason is because of the 'beautiful island' (50.8%). The respondents also stated the reason as 'easy place to get around' (32.9%), followed by 'a peaceful place' (32.2%), 'friendly people' (31.4%) 'due to company concerns' (24.0%), 'family concerns' (12.0%) and 'other related reasons' (7.4%).

**Table 2.** The reasons for choosing the industry and Langkawi

Items	Number	Percentage
<i>Reasons for choosing the industry:</i>		
To gain new experience	135	52.3
Following friends	106	41.1
High wages	96	37.2
Love meeting with people	73	28.3
Easy to get job	57	22.1
Job promotion	20	7.8
Family concerns	19	7.4
Other reasons	14	5.4
<i>Reasons for choosing Langkawi:</i>		
Beautiful island	131	50.8
Easy to get around	85	32.9
Peaceful place	83	32.2
Friendly people	81	31.4
Company concerns	62	24.0
Family concerns	31	12.0
Other reasons	19	7.4

## DISCUSSION

It can be concluded that the majority of the international migrant workers in Langkawi is male. Most of them are also in the category of 18 – 30 years old. Additionally most of them are still single. The international migrant workers in Langkawi are also from Indonesia and majority is secondary school leavers with certificate. They are also acknowledged as semi-skilled workers and can speak good English. The findings also indicate that the majority of the international migrant workers in Langkawi are working in the accommodation sector, hence it is a fact that the majority of them are working in the customer service area. Most of them have been working in Langkawi for almost 1 – 5 years with RM1,000 – RM4,999 income per month. Looking at this scenario, it can be highlighted that the international migrant workers in Langkawi are semi-skilled labors with good qualification which are in line with their positions to serve customers from all over the world.

The profile of international migrant workers working in the tourism and hospitality industry within Langkawi provides significant data and information to various stakeholders who really want to understand the scenario of employing foreign workers. The profile is vital and significant as it may assist the human resource manager particularly in the hotel sectors to deal with the issue of labor shortages among

the local people. This phenomenon is important particularly in the tourism and hospitality industry within Langkawi. It can be assumed that the issue of labor shortages in the industry can be solved by having recruited international migrant workers as they may perceive the wages offered by the industry as high compared to the local people. Another reason could also be due to the fact that the currency exchange in their countries is high such as for Indonesia and Thailand.

Additionally, the trend of having recruited Indonesian workers may provide more benefits to Langkawi since they share similar culture and values. Hence, they do not have to be trained in these aspects when dealing with customers. In fact, it cannot be argued that the Indonesian can speak better English compared to international workers from Thailand and Bangladesh. However, several negative impacts eventually might need to be considered for instance the discrimination of local workers labors, crime, misuse of languages and others. Further, the findings from the survey also indicated that majority of the international migrant workers are working in the industry to gain new experience, besides following their friends and also due to the high wages offer by the tourism and hospitality industry today. Since Langkawi is a world tourist destination with various hospitality sectors catering to fulfill the needs of international tourists, most of the sectors offer high salary to compete with their competitors. Additionally, majority of the international workers have chosen to migrate to Langkawi due to the fact of the island itself which they consider as a beautiful island and easy to get around. More, they also feel that Langkawi is a peaceful tourist destination and surrounding by friendly people which make them comfortable and safe to be around for a long period of time.

### **CONCLUSION**

This study has involved only the international migrant workers who were legally working in the tourism and hospitality sectors in Langkawi. More, the study has focused on Langkawi since it is a world known tourist destination composed of various hospitality sectors and eventually consisted of many international migrant workers. It did not represent Malaysia as a whole. Subsequently, the findings may only present the majority of international migrant workers who have been working at the lower managerial level including skilled and semi-skilled workers and excluding the expatriates. It is suggested that for future research, the international migrant workers would include all categories of workers in the tourism and hospitality sectors in Langkawi. Furthermore, another study should also be conducted to investigate the factors influencing the international migrant workers to work within the tourism industry in Langkawi.

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## **TOURISM INTENTION: THE EMPIRICAL INVESTIGATIONS OF PULL, PUSH AND PERCEIVED SECURITY FACTORS IN NIGERIA**

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**Abstract:** Tourism industry in recent time has suffered from pervasive insecurity issues which significantly affect the performance of the industry. The aim of this study is to investigate the joint effect of push, pull and perceived security factors on tourism intention in Nigeria. In order to conduct this research, questionnaires were distributed to 650 respondents. Out of the distributed questionnaires, only 310 were eventually used for the analysis. The researchers employed Partial Least Square Structural Equation Modelling (PLS-SEM). The findings of this study reveal that push and pull factors have a positive and significant effect on tourist intention. The result equally shows a negative effect of perceived security factor on tourist intention. The results presented may serve as a direction for academia, policy makers and other practitioners.

**Key words:** Push, pull, perceived security, Nigeria, tourist intention.

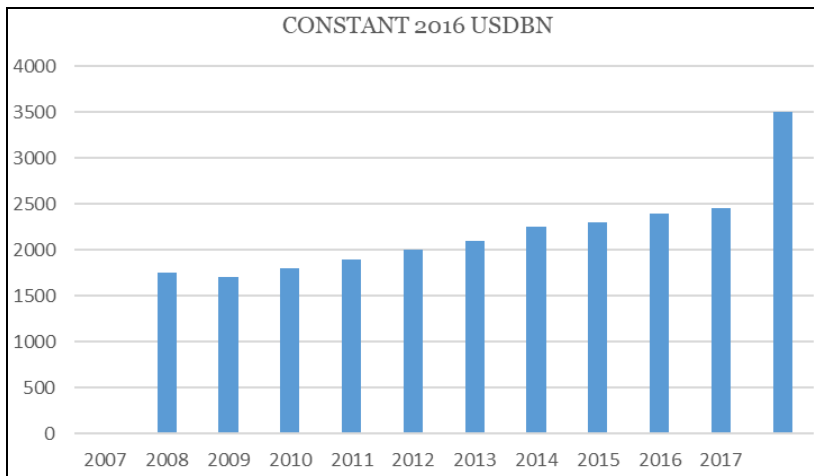
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## INTRODUCTION

The benefits of the tourism industry to the economic development of many countries of the world have been globally acknowledged. Recently, the World Travel and Tourism Council (WTTC) (2017), reports that this sector generates US\$7.6 trillion and creates 292 million jobs in 2016 globally. The sector equally accounts for 6.6% of the total global exports while boosting the total global service exports by 30%. This awesome performance shows that the sector is a driving force of the economic prosperities by contributing to the growth of GDP of some nations such as Singapore, Spain, South Africa, Gambia, India, Malaysia, and so forth (Esu, 2015; Ohlan, 2017; Yousefi & Marzuki, 2015). On a global scale, for instance, it is projected that this sector would contribute 4.0% per annum to USD3,537.1bn (3.5% of GDP) by 2027 (WTTC, 2017) as shown in Figure 1.



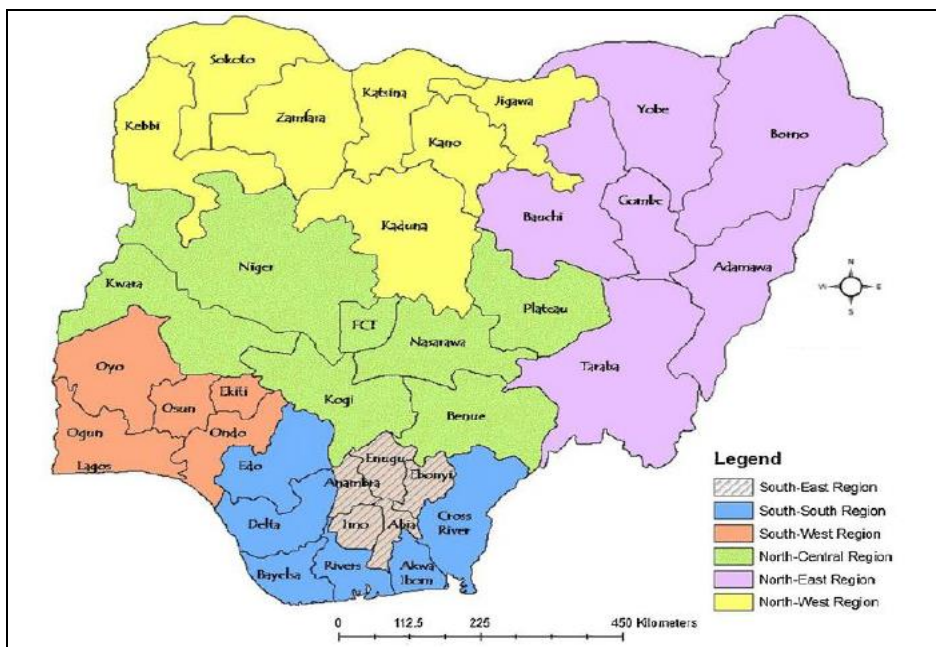
**Figure 1.** Projected Contribution to Global GDP by Tourism by 2027  
(Source: Adapted from WTTC, 2017)

It can, therefore, be argued that the accelerated growth of the tourism industry in many of these countries is due to certain push and pull factors while the governments in the respective nations seem to have deliberately formulated policies that would ensure that the tourists are equally protected and secured when visiting their chosen destinations. Importantly, the push and pull factors concept to tourism motivations which was first theorized by Dann (1977), is now ubiquitous among tourism scholars (e.g. Giddy & Webb, 2018; Naidoo et al., 2015; Pomfret & Bramwell, 2014; Su et al., 2018). This approach is regarded useful since it permits the researchers to investigate both the extrinsic and intrinsic factors which propel and draw tourists to pursue particular tourism experiences and destinations (Giddy & Webb, 2018; Pomfret, 2014). Researches on tourism with respect to the push and the pull factors have included works that identified which factors propel the tourists towards a destination (Aref et al., 2010; Naidoo et al., 2015) while many of these studies have equally established a relationship among these factors (Prayag & Ryan, 2011; Uysal & Jurowski, 1994). Additionally, tourism researchers seem to a limited extent, have explored the issue of security that borders on the risk which an individual tourist may face in their voyage to a new destination (e.g., Atuger, 2015; Centizos & Edge, 2013; Li et al., 2018; Mohseni et al., 2018). These perceived security factors have almost been unanimously agreed to be a debarring issue which seems to inhibit many tourists from performing a voyage to their chosen destinations.



However, while many of these studies have been conducted and equally provided some useful insights into the impact of push, pull and perceived security factors, the outputs of most of these extant studies are anchored on secondary data analysis of large-scale survey research projects which poses major limitation on the range of motivational factors that can be identified empirically (e.g. But & Ap, 2017). Where some empirical studies on tourism intention based on primary data are however available, most of them have exclusively concentrated on developed countries of Europe and North America (Kim & Prideaux, 2005; Rittichainuwat, 2008), as empirical researches pertinent to developing nations generally remain inadequate (Yousefi & Marzuki, 2015). Recently, Yousefi and Marzuki (2015), argued that even though push-pull factors represent substantial factors that account for why people embark on tourism, there is no globally accepted conceptual or theoretical framework to understanding such motives (Huang, 2010). Dean and Shuartanto (2019) also posited that the conceptual explanation and logical linkages between the push and pull motivational factors have not been explored fully. This is in line with the arguments of Han and Hyun (2018) that literature is superficial in explaining the relationship between motivation factors to travel and behavioural intention. This, therefore, calls for a further study that can improve the understanding of the research and practitioners' community of this phenomenon. This, most importantly, would equally have practical relevance for management of destinations, marketers and product developer (Vujko et al., 2018).

Importantly, Nigeria is a country that is richly blessed with cultural and natural resources. Figure 2 depicts the structure of Nigeria as the government of the Nation keeps making concerted efforts to build a viable tourism industry in the last five decades (Esu, 2015). Despite the continuous attempts of the government to market and attract tourists across the globe, it is pathetic that the country has been unable to achieve any meaningful result, thereby, making the industry to be underdeveloped (Dillimono & Dickinson, 2014).



**Figure 2.** Nigeria Map (Source: Adapted from Federal Government of Nigeria website)

Evidence has shown that Nigeria has only succeeded in attracting tourists from third world countries such as Benin, Niger, Liberia, Cameroon, Chad and Sudan (Euromonitor International, 2017). This, perhaps explain the reason why the contribution of this sector to GDP of the country is still less than 1% (Central Bank of Nigeria (CBN) Statistical Bulletin, 2013). The poor performance of this sector is a major concern for the government, the academicians, practitioners and the global community. Given the bad state of the tourism market in Nigeria therefore, the stakeholders have kept asking a recurrent question about how the problem bedevilling the growth of the industry can be solved (Esu, 2015). This study, therefore, proposes that some push and pull factors and security concern are the major factors that could either stimulate or inhibit tourism development in Nigeria. The following structure is used for the other section of this paper. The paragraph that follows the introduction section presented the literature review and theory development. After this, the researchers presented the methodologies, results and discussions of findings while the implications are highlighted.

### **LITERATURE REVIEW AND THEORY DEVELOPMENT**

The theory of push and pull has been used widely to comprehend the motives of individuals to travel to certain destinations (Zhang et al., 2017). This theory ultimately encompasses both internal and external factors that either serve as propellers or inhibitors to take certain decisions about a choice of a destination. The push factors relate to internal psychological forces which are connected to a particular destination, for instance, taking a leave from routine activities, social interaction, gaining new knowledge about a country and sense of adventure (Kim et al., 2018; Zhang et al., 2017). “Pull” factors such as historic monuments, sunshine, accessibility of location and convenience of facilities are the characteristics of an external environment which entice individuals to particular destinations (Kim et al., 2003). While the majority of previous studies have used this push-pull framework extensively (e.g., Battour et al., 2017; Antón et al., 2017; Yousefi, & Marzuki, 2015), researchers have largely ignored the issue of security concern that seems to prevent such behaviors (Hsu et al., 2017) especially in developing countries. The security concern has however been cited as the major issue that is preventing tourists from visiting their desired destinations generally (e.g., Ghaderi et al., 2016; Floyd, Gibson, Pennington-Gray & Thapa, 2004; Silva et al., 2010) and Nigeria in particular (Obieluem et al., 2016).). In view of this, this study considers push and pull factors along the perceived security of the desired destination to predict tourism intention in Nigeria.

### **PUSH FACTORS AND TOURISM INTENTION**

The ‘push’ factors emanate from the Abraham Maslow hierarchy of needs theory (Mayo & Jarvis, 1981). These factors are regarded as those motivational requirements that arise from the state of disequilibrium or tension within the motivational set up of an individual (Kim, et al., 2003; Pryag & Ryan, 2011). These factors create an intrinsic or intangible urge within an individual traveller to embark on a vacation (Crompton, 1979; Uysal & Hagan. 1993). In line with the classification of Crompton (1979) cited in Khoung and Ha (2014, p. 490-491), the push factor comprises seven socio-psychological motives which include: “escape, self-exploratory, relaxation, prestige, regression, kinship enhancement, and social interaction” and two cultural motives of “novelty and education”. With respect to the push factor, Gray (1970) in his early classification, regards pleasure travellers as wanderlust. This indicates that the travellers in this category emphasise the cultures of destinations, people and landscape (Prayang & Ryan, 2011). Dann (1977) equally argues that pushing factors can be categorized as ‘anomie’ and ‘ego-

enhancement'. The former is regarded as the aspiration to escape from the feelings of isolation which accumulate from day-in-day-out or regular daily activities while the latter is a product of the need to achieve recognition and it is attained through the status which travel confers on the travellers (Fodness, 1994). In essence, the push factors are the stimulants within an individual which serve as a driving force to take a decision to travel out of one's present location (Battour et al., 2012). A number of recent researchers have acknowledged that these are the first set of motivations that stimulate an individual to leave their primary abode for another destination (Battour et al., 2012; Khoung & Ha, 2014; Yousefi & Marzuki, 2015; Xu & Chan, 2016). For instance, Yousefi and Marzuki (2015) empirically reported a positive and significant relationship between push factors and travellers intention in Penang, Malaysia. Khoung and Ha (2014) equally found a positive and significant relationship between push factors, the satisfaction of tourists with destination and intention to return among tourists of Vietnam. Battour et al., (2017) explored travel motivation among Muslim Tourists and found that push factors are essential in achieving tourist satisfaction. Xu and Chan (2016) also found that push motivation significantly contributes to the future behaviour of the tourists. Even though these empirical pieces of evidence seem to show that the push factors are highly essential in motivating tourist to choose their destinations, scholars have advocated for more research in this regard in order to have a comprehensive model that could elicit further understanding of the travel motivation (e.g, Chiang & Jogaratnam, 2006; Yousefi & Marzuki, 2015). Hence, we hypothesize as follows:

H1: The push factors have a positive effect on tourism intention in Nigeria.

### **PULL FACTORS AND TOURISM INTENTION**

Pull factors are described as those factors that determine the choice of where, when, and how the tourist travels (Mill & Morrison, 1985). These factors relate to the characteristics, attractions, or attributes of the desired destination (Klenosky, 2002) which attract an individual to a specific destination with the objective that those characteristics would satisfy the desires and needs of the tourists (Whyte, 2017). The pull motivation factors represent the possibility of specific attracting factors of a given destination and which align with the travellers' push motivation (Dean & Shuartanto, 2019; Suni & Pesonen, 2017). These factors may be intangible or intangible in nature. The intangible represents the travellers' perception, expectation and interpretation of the value and uniqueness of the services received as compared to the home country's services. On the other hand, the tangibles may include the attraction and inexpensiveness of specific facilities, the availability of desired services, staff friendliness and performance during the visit (Dean & Shuartanto, 2019; Yoon & Uysal, 2005).

Theory of migration, therefore, posits that the decision to migrate is not only influenced by the characteristics of the original location, but also by the features that are related to the destination (Wong et al., 2016). For instance, if the destination avails a better quality of life with respect to better education and good climate, there is a possibility to migrate to the new destination (Lee, 1966). This, in essence, indicates that there is an interrelationship between pull and push factors and which serves as an underpinning factor for embarking on a journey (Suni & Pesonen, 2017). Dean and Shuartanto (2019), in this instance, argued that tourists may not use one pull motivation factor, but may employ several factors as far as these factors correspond with the push motivation factors. A number of extant studies have reported a positive and significant relationship between pull factors and tourist intention (Alén et al., 2014; Chang et al., 2014; Dean & Shuartanto, 2019). David and Shuartanto (2019) reported

that pull factors influence the tourist intention to repeat the visit. Chang, et al., (2014) found a positive effect of pull factors on the tourism motivations of virtual migrant for social networking sites. Hence, we hypothesize as follows:

H2: The pull factors have a positive effect on tourism intention in Nigeria.

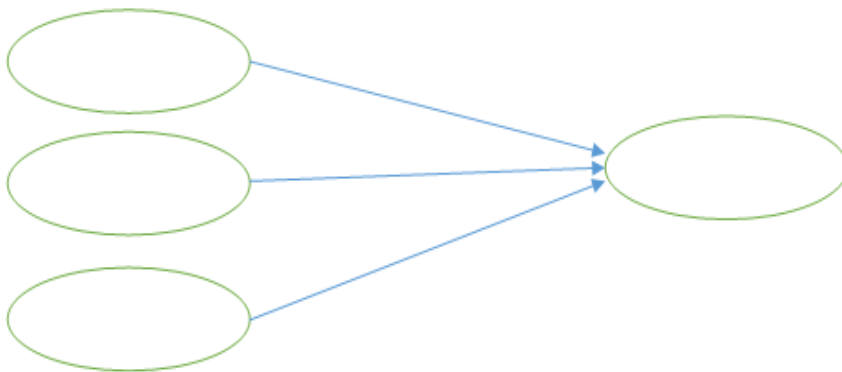
### **PERCEIVED SECURITY AND TOURISM INTENTION**

The tourism industry in recent time is more susceptible to man-made and natural crises and disasters (Li et al., 2018). Events of these nature have important influences on the tourist sojourn and expenditure (Huan et al., 2004). For instance, WTTC (2017) confirms that when a disaster such as terrorist attack happens, visitor spending automatically declines as the influences of such attacks would be compounded by incorrect or extended travel advisories, making the intending tourists seek for alternative destinations they perceived safer. The safety and security of the intended destination are therefore very paramount in the minds of the travellers (Shin, 2005). Tourists have become sceptical about security situations in Nigeria especially with the incessant terrorist attacks and other man-made crises that are common in Northern part of and some other States of the country (Imhonopi & Urim, 2016). From the tourists' perspective, the general feeling of being secured while travelling to, and within the choice of their destinations is regarded as an essential factor than any other ones (George, 2003; Hsu et al., 2017). If a tourist perceived that the intended destination is secured, his/her motivation towards the desired destination will be positive while otherwise will make the tourists to perceive the destination to be unsecured. Researchers have paid detail attention to how the tourism industry responds and reacts to different crises and disasters such as financial meltdown (Li et al., 2010; Obradovic et al., 2013), political uncertainty (Elshaer & Saad, 2017; Ioannides & Apostolopoulos, 1999), and natural crises (Cró & Martins, 2017; Wright & Sharpley, 2016). However, within the context of developing countries such as Nigeria, little attention has been paid to the issue of security concern among tourists despite that the previous studies from other climes of developed nations have reported the significance of secured destinations on tourism intention (e.g. Ghaderi et al., 2016; Hsu et al., 2017; Silva et al., 2010). Hence, we hypothesize as follows:

H3: Perceived security factors have a negative effect on tourism intention in Nigeria

Considering the background of the study and subsequent literature review, the following conceptual framework is presented:

### **FRAMEWORK OF THE STUDY**



**Figure 3.** Conceptual Framework

## METHODOLOGY

### STUDY SITE

Nigeria has a population of about 200 million people and it is one of the largest countries in West Africa (Worldmeter, 2019). The country has two major climatic seasons: a wet season and a dry season. The wet season runs from April to September while the dry season is witnessed between October and March. The dry season is the most favoured season for tourism as this period ushers in many tourists due to favourable climatic condition of the period (Awaritefe, 2003). This study was conducted during the dry season by selecting Benin City, Badagry Beach, and Kainji lake national park. In order to collect the data of this study, a self-administered survey was used.

**Table 1.** Demographic information

Variables	Descriptions	%
<b>Gender</b>	Male	56.3
	Female	43.7
<b>Age</b>	18-25	26.9
	26-35	44.1
	36-45	12
	46-55	7
	56 and above	10
<b>Marital Status</b>	Single	65.3
	Married	21.2
	Divorce	4.1
	Widowed	9.4
<b>Nationality</b>	African	79
	Asian	4
	European	9
	American	6
	Oceanian	2
<b>Frequency of Visit</b>	First-Time	65.4
	Second-Time	18
	Third-Time	4
	Three times and above	12.6
<b>Income</b>	Less than US\$1500	54
	US\$1501-US\$3500	22
	US\$3501-US\$5500	13
	US\$5501-US\$7500	4
	US\$7501-US\$10000	3
	Above US\$100000	4
<b>Accommodation</b>	Hotel	35
	Resort	21
	Motel	15
	Home of relatives and Friends	12
	Apartment	8
	Others	9

The researchers divided the questionnaire into four sections. In the first section, demographic information with respect to gender, age, income, level of education, employment, and nationality of the respondents was collected. In the second section,

the researchers collected information on travel features (number of visitation, the period of stay, the objective of visit, travel frequency, and type of accommodation). In the third section, pull, push and perceived security factors were identified. 18 Items related to push, 18 items related to pull and 6 items related to perceived security factors were adapted having comprehensively reviewed literature from previous studies (George 2003; Hsu et al., 2017; Hanqin & Lam, 1999; Huang & Hsu, 2008; Sangpikul, 2008; Yousefi & Marzuki, 2015). All the items were assessed using a 5-point Likert scale with the response which ranges from 5 (*Agree Strongly*) to 1 (*Disagree Strongly*).

About 650 questionnaires were distributed by the researchers among foreign tourists at the study sites between October 2017 and March 2018. The researchers were able to retrieve 310 usable responses indicating 47% of response rates. Table 1 provides demographic information about the respondents while Table 2 classifies the constructs with their items and the sources where the items are adapted as depicted below. Table 1 above shows that the majority of the respondents (56.3%) are Male tourists while 44.1% of the tourists are within the age rank of 26-35. The table further shows that the majority of the tourists (54%) have less than \$1500.00 (One thousand, five hundred US dollars) income while the largest percentage of 35 of the tourists prefer to stay in the hotel for their period of stay. The information provided by the table equally depicts that 65.3% of the respondents are having single marital status, 79% of the respondents are Africans, while 18% of the respondents, and being the highest, visit the country the second time.

**Table 2.** Constructs classification, items and their sources

Constructs	Items	Sources
Pull Factor	I travelled to Nigeria because of the positive attitude of the residents	Hanqin & Lam, 1999; Hsu & Huang, 2008; Sangpikul, 2008; Yousefi & Marzuki, 2015;
---	I travelled to Nigeria because of the positive attitude of service staff	---
---	I travelled to Nigeria of the convenience of the transportation system	---
---	I travelled to Nigeria because of the quality of local transportation	---
---	I travelled to Nigeria because of the quality of transportation services	---
---	I travelled to Nigeria because of the convenience associated with shopping.	---
---	I travelled to Nigeria because of the ease associated with shopping.	---
---	I travelled to Nigeria because of the ease with the transportation system	---
---	I travelled to Nigeria because the climate is acceptable	---
---	I travelled to Nigeria because of the ease of entry and exit	---
---	I travelled to Nigeria because the recreation facilities are attractive	---
---	I travelled to Nigeria because the beaches are attractive	---
---	I believed the cultural centres in Nigeria are attractive	---
---	I travelled to Nigeria because the cultural centres have different monuments	---
---	I travelled to Nigeria because of different cuisines	---
---	I travelled to Nigeria because it is affordable	---

---	I travelled to Nigeria due to the hygiene and cleanliness of the centres	---
---	I travelled to Nigeria to see natural landscape and scenery	---
Push Factors	I travelled to see something new	Hanqin & Lam, 1999; Hsu & Huang, 2008; Sangpikul, 2008; Yousefi & Marzuki, 2015;
---	I travelled to Nigeria to visit friends and colleagues	---
---	I travelled to Nigeria to acquire knowledge of a new destination	---
---	I regard travelling as an opportunity to relax in a new destination	---
---	I believe that be travelling will enable see something new	---
---	I believe travelling will enable me to have physical relaxation/rest	---
---	I travelled so that I can share a new experience with colleagues at home	---
---	Visiting places my friends have visited	---
---	I travel to escape from physical stress at home	---
---	I enjoy every moment with my family during the vacation	---
---	I believe travelling to Nigeria enables me to fulfil my dream of visiting a foreign country	---
---	I want to visit Nigeria because my friends have visited the country before	---
---	I travel to escape from my usual daily routines	---
---	Travelling enables to be happy	---
---	I travelled to see how other people live their life	---
---	I travelled to have knowledge of a new destination	---
---	I travel to enable me to see other groups of people	---
---	I travelled to see something I don't usually see	---
Perceived Security factor	I feel secured while touring the city	George (2003), Hsu et al., (2017)
---	Adequate security is provided during the visit	---
---	I will repeat my visit because I feel secured during this visit	---
---	I feel secure while walking during the day	---
---	I feel secure while walking during the night	---
---	I feel secure while using the bus or transportation	---

### MODEL ESTIMATION

In order to test the hypotheses of the study, the researchers used structural equation modelling (SEM). The PLS-SEM approach is used generally by the contemporary researchers because it can accommodate limited sample size, and small latent variables which are not sufficient enough to be accommodated by covariance-based SEM (CB-SEM) (Adeleke et al., 2018; Bamgbade et al., 2018; Salimon et al., 2017). Recent arguments also position that the PLS-SEM is very robust in model estimation while establishing construct validities effectively than CB-SEM (Salimon et al., 2017). The conceptual model includes four reflective unidimensional constructs. In line with Hair et al., (2011), the researchers evaluated the measurement models by conducting three

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of Pull, Push and Perceived Security Factors in Nigeria

different tests in order to validate the reflective constructs. The four tests include internal-consistency, indicator-reliability, convergent-validity and discriminant-validity.

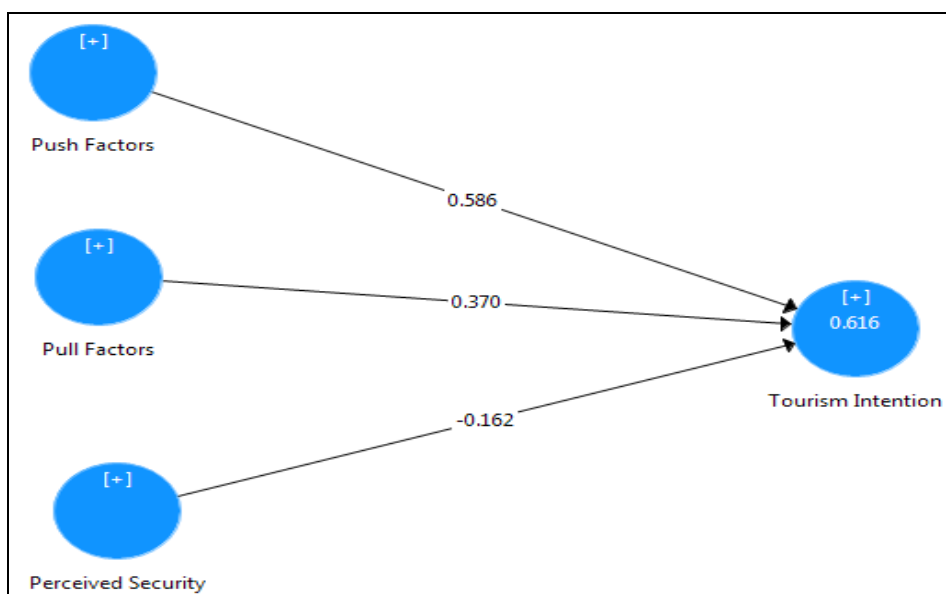
**Table 3.** Measurement Model

Constructs	Factor Loadings	AVE	CR	rho_A
PF1	0.788	0.67	0.94	0.93
PF2	0.873	---	---	---
PF3	0.788	---	---	---
PF4	0.821	---	---	---
PF5	0.816	---	---	---
PF6	0.849	---	---	---
PF7	0.865	---	---	---
PF8	0.755	---	---	---
PLF1	0.736	0.64	0.95	0.95
PLF2	0.775	---	---	---
PLF3	0.757	---	---	---
PLF4	0.768	---	---	---
PLF5	0.773	---	---	---
PLF6	0.775	---	---	---
PLF7	0.815	---	---	---
PLF8	0.827	---	---	---
PLF9	0.767	---	---	---
PLF10	0.769	---	---	---
PLF11	0.658	---	---	---
PLF12	0.732	---	---	---
PLF13	0.705	---	---	---
PLF14	0.714	---	---	---
PLF15	0.712	---	---	---
PLF16	0.69	---	---	---
PLF17	0.676	---	---	---
PSF1	0.691	0.71	0.95	0.94
PSF2	0.836	---	---	---
PSF3	0.714	---	---	---
PSF4	0.769	---	---	---
PSF5	0.847	---	---	---
PSF6	0.781	---	---	---
PSF7	0.785	---	---	---
PSF8	0.79	---	---	---
PSF9	0.671	---	---	---
PSF10	0.801	---	---	---
PSF11	0.807	---	---	---
PSF12	0.764	---	---	---
PSF13	0.743	---	---	---
TI1	0.738	0.69	0.94	0.93
TI2	0.829	---	---	---
TI3	0.861	---	---	---
TI4	0.852	---	---	---
TI5	0.825	---	---	---
TI6	0.852	---	---	---
TI7	0.863	---	---	---

Note: PF=Push Factors, PLF=Pull Factors, PSF=Perceived Security Factors, TI=Tourist Intention



Regarding the latent constructs, the loadings of their individual indicators with their composite reliability (CR) are depicted in Table 3. The values of loadings for the items of each construct range between 0.658 and 0.871. These values surpass the recommended standard of 0.40, and which shows that the reliability of individual item is confirmed. Additionally, the values of the CR were equally above the floor standard of 0.70, signifying the internal-consistency and reliability of each the latent constructs of the study (Bagozzi et al., 1991). In order to establish convergent validity, the researchers ascertain that the value of average-variance-extracted (AVE) is above the standard of 0.50 indicating that all the values of the AVEs for the respective constructs are within 0.64 to 0.71, implying that the validity for convergence requirement has been met. Equally, the discriminant validity is established as shown in Table 4. Generally, the results that are generated thereby show that the research's constructs have sufficient degrees of construct validity, internal consistency, convergent validity and discriminant validity.

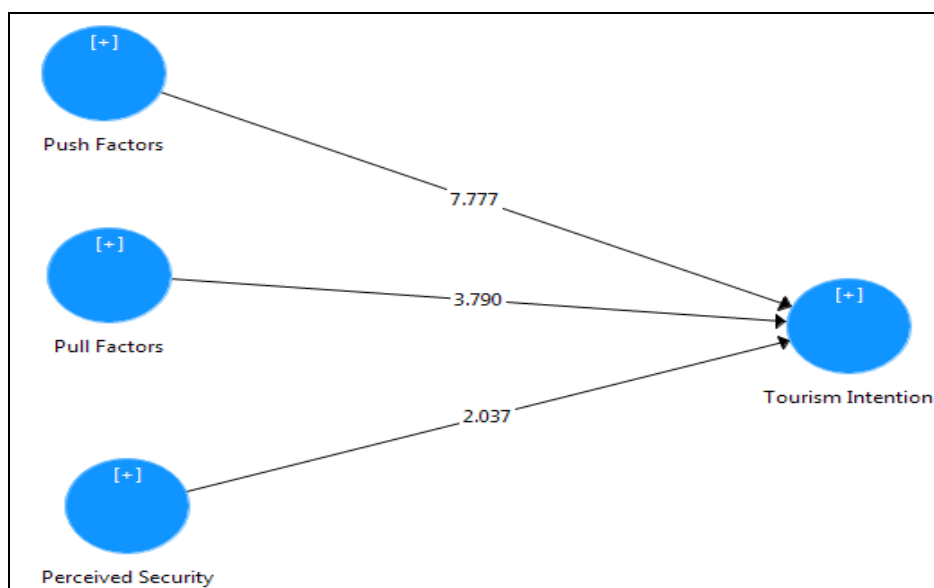


**Figure 4.** Measurement Model

**Table 4.** Discriminant Validity (Heterotrait-Monotrait Ratio (HTMT))

	Perceived Security	Pull Factors	Push Factors	Tourism Intention
Perceived Security	---	---	---	---
Pull Factors	<b>0.746</b>	---	---	---
Push Factors	0.624	<b>0.744</b>	---	---
Tourism Intention	0.466	0.701	<b>0.805</b>	---

The next step in the SEM with respect to structural model requires testing of hypothesis. As indicated in Table 5 and based on information extracted from figure 2 and 3, push factors significantly influenced tourism intention ( $b = 0.586$ ,  $p < 0.001$ ). Pull factors also influenced tourism intention ( $b = 0.370$ ,  $p < 0.001$ ). Moreover, perceived security equally influenced tourism intention negatively and significantly ( $b = -0.162$ ,  $p < 0.001$ ). These results indicate that H1, H2, and H3 hypotheses are supported.



**Figure 5.** Structural Model

**Table 5.** Structural Model Result - Notes: \*\*\* $p < 0.001$ .  $R^2 = 0.616$

Paths	b	Standard Error	t-value	P Values	Decision
<b>PF -&gt; Tourism Intention</b>	0.586***	0.075	7.777	0.000	Supported
<b>PLF -&gt; Tourism Intention</b>	0.370***	0.098	3.79	0.000	Supported
<b>PSF -&gt; Tourism Intention</b>	-0.162***	0.08	2.037	0.000	Supported

### PREDICTIVE RELEVANCE AND EFFECT SIZE

In Table 6, the variance caused ( $R^2$ ) by the exogenous variables on the endogenous latent variable as well as predictive relevance ( $Q^2$ ) of the model are reported. The  $Q^2$  was assessed based on the Stone-Geisser test ( $Q^2$ ) (Geisser, 1974). Accordingly, the  $Q^2$  of 0.02, 0.15 and 0.35 indicate small, medium, and large predictive relevance accordingly. By virtue of this, push, pull and perceived security factors are regarded to have adequate predicting power since their values are 0.35, 0.17, and 0.38 respectively. The  $R^2$  value of 6.16 per cent as obtained is equally above the minimum standard.

**Table 6.** Predictive Relevance ( $Q^2$ ) and Effect Size ( $F^2$ ), NA= Not Applicable

	$R^2$	$Q^2$	$f^2$
<b>Tourist Intention</b>	6.16	N/A	N/A
<b>Push Factors</b>	N/A	0.16	0.092
<b>Pull Factors</b>	N/A	0.36	0.506
<b>Perceived Security</b>	N/A	0.38	0.572

Thus, the research frame work of this study possesses the desired predictive power in explaining the tourism intention. Additionally, the effect-size ( $F^2$ ), which shows the empirical-power of the study framework is equally ascertained. Based on the

suggestion of Cohen (1988),  $f^2$  values of 0.02, 0.15, 0.35 indicate small, medium, and large effect size respectively for a particular endogenous construct. In this regard, the  $f^2$  of this research is acceptable based on medium and large effect sizes.

## **DISCUSSION OF FINDINGS**

The primary purpose of this research is to test the influence of push, pull and perceived security factors on tourist intention in Nigeria. In this regard, the empirical results of this research support the proposed hypotheses. The statistical results revealed that Push and pull factors positively influence tourist intention. Previous studies have reported similar findings (Prayag & Ryan, 2011; Yousefi & Marzuki, 2015) indicating that when travellers have stronger intrinsic desires to go on a vacation and positive perception towards the features, attractions, or attributes of a specific destination, they may get intention to visit their choice of destinations.

This in line with the arguments of previous studies that seem to agree that travel motivation such as psychological motives and destination attributes positively influence the intention of tourist to visit. Importantly, the results indicate that the push factors are connected with the tourist's internal motivation, however, the pull factors in the form of destination features and characteristics are very exigent to further cause a tourist to begin a journey. This, therefore, shows that there is an interrelationship between the two factors for the tourist intention to be sustained. In this regard, the question whether push factors such as the motivation to escape from the usual routines, the need to have new experiences, the desire to meet new people and see a new culture or to enjoy new cuisines can only come to reality if the pull facilities are actually available. An average tourist wants to relate his experience back home or feel different after a visit to a new destination, achieving this requires a destination that makes these desires to come to fore and this is what the findings of this research are revealing with respect to the push and pull factors.

The relationship between perceived security and tourist intention was negative and equally supported in line with the stated hypothesis. This confirms the findings of previous studies (e.g., Artuğer, 2015; Çetinsöz & Ege, 2013; Gut & Jarrell, 2007) thereby indicating that perception of security and safety of chosen destination is a major concern when tourists decide to visit a place. A place perceived to be secure seems to attract tourists while destination perceived to be unsafe and insecure seems to repel travellers and this is what our negative finding is pointing at.

If tourists feel unsecured or threatened about a particular destination, they can form a negative perception of that destination. The negative perceptions come from the risks that are involved when a journey is performed and which may render invalid the good attributes (pull) of the destination. Aside, even though the tourists may have the urge to visit a place, negative related experience concerning lack of security from the previous tourists may debar other intending tourists from executing their intention. Fekete (2012) has initially argued that tourist consultants often refuse to recommend destinations they feel that are not secured to their clients even though the clients are so much interested in those destinations.

## **IMPLICATIONS OF FINDINGS**

The results of this research contribute significantly to debates on tourism in developing countries generally, and Nigeria in particular. Recent studies on tourism in developing countries seem to point to the fact that much still needs to be done as our findings are of different manifolds. First, this research identified the most significant

push/pull factors which stimulate and attract tourists to choose their desired destinations. The factors used in this study and their associated measuring items can be adopted by future researchers of destination marketing especially in Nigeria and developing countries generally thereby increasing further understanding of the factors that may underpin the improved performance of tourism industry.

Similarly, the findings of this study with respect to perceived security clearly show that when tourists perceived their intending destinations not to be secured, they tend to develop negative perception. This negative perception seems to have a serious drawback for the industry thereby calling for proper understanding of such factors. Although perceived security risks may be viewed from different perspectives, their consequences are often shocking while negatively impacting the tourism industry (Law, 2006). It may, therefore, be beneficial for the tourist professionals to have a better understanding of these influences in order to plan and implement marketing activities (Cetinsoz & Ege, 2013). When these factors are well defined and understood, marketers and suppliers can readily give assurances to the likely tourists that their concerns have been considered and well addressed. When this is done, the industry will substantially minimize the risks that are related to the visitation barriers by reducing the level of perceived risk factors. Our findings are also exigent for the policymakers in Nigeria. The issue of insecurity seems to be endemic in Nigeria as the country has witnessed a lot of terrorist attacks in the recent past.

These incidents seem to have a major negative influence on the tourism industry. And, as researches have indicated, every tourist has a good reason (s) to fear crime, since they are more exposed to the crime or other forms of violence than the residents. In order to reduce the tourists' fear therefore, the tourism industry and as well the security enforcement agencies should cooperate to execute crime prevention mechanisms. For example, while the visitors arrive, they should be given tourist information guide which advises them of the differences in the mode of transportation, the different times and routes of the cabs, and so on.

It is equally important that the security measures be improved in order to make the places to be visited protected and to give assurances to the tourists that they can go out in the night while the public transportation is equally made safer. Consequentially, these safety measures would help the visitors to spread their spending across a wider range of amenities, such as theatres, restaurants, and leisure facilities instead of hotels and tourist resorts as indicated in the demographic information.

Based on the findings of this research, it is very important that the government comes up with policies and pronouncements that would give assurances to would be visitors that Nigeria as an intending destination for tourism is secured. The implication is equally important for the marketers of the tourism industry in Nigeria.

Since this industry is growing faster across the globe, the marketing practitioners need to keep providing and updating information about the safety, the nature of facilities and other important available amenities that could propel the intending travellers to consider Nigeria as a destination to be visited. A form of collaboration with the government and other stakeholders in this regard could go a long way to achieve the objective of improving the rate of patronage of this sector.

From the academic perspective, this study has been able to contribute to the discussion on tourism and the findings of this study could be a starting point for academic researchers who may be interested in the issue of tourism in a developing country like Nigeria. Due to the parsimony nature of the model of the study, researchers can draw solution or draw a guide when conducting their research.

### **LIMITATION AND FUTURE RESEARCH RECOMMENDATION**

This study has a number of limitations that may be considered while its results are being interpreted. First, the sample used in this study may not represent the entire population of tourists to Nigeria since we collect our data conveniently.

This method of data collection was used as there is no specific and sample frame for tourists. The second limitation centres on the scope of investigation as the study only focused on three popular tourist centres in Nigeria: Benin City, Badagary beach, and Kainji lake national Park which might equally limit the generalizability of the research findings. In addition to this, the study only considered pull, push and perceived security factors within a one-time frame to predict tourist intention while the model of the study only predicted 6.61 per cent of the total variance of the dependent variable. In this realm, future studies may consider longitudinal perspectives and equally perform a comparison study among various destinations in Nigeria and among other West African countries.

Conducting such studies may improve the predictive power of our model. Third, this research only considered international tourists at the expense of local or domestic tourists. It is, therefore, exigent for future study to examine these factors from both perspectives in order to collect more useful information that may guide decision makers.

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## **ASSESSING THE ACCEPTANCE BY TOURISM AND HOSPITALITY STUDENTS OF JORDANIAN UNIVERSITIES' CONTRIBUTION TO THEIR TRAINING AND EMPLOYMENT**

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**Abstract:** This paper aims at evaluating students' acceptance of universities' contribution to their training and employment. Such contribution is achieved through communication and collaborating with the tourism and hospitality enterprises. A sample of 120 students in Tourism and Hospitality Management Programs in Jordanian universities filled a questionnaire that focused on aspects related to study plans, training and following up with graduates on their employment progress. A general low level of acceptance is indicated by results regarding courses content, training provided while pursuing the degree and coordinating with employment market. It is recommended that universities should give more priority to enhancing their programs' quality through more involvement of the industry in the design of curricula and students' training, as well as facilitating the access of students to jobs.

**Key words:** tourism and hospitality education, students acceptance, students satisfaction, tourism training and employment, Jordanian Universities

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### **INTRODUCTION**

The hospitality and tourism industries are significant contributors to the economies and employment worldwide; they require educated, skilled and committed workforce for their success. A significant source of such workforce is colleges and universities offering educational programs to qualify human resources to work in these industries. These provide education and training programs of various lengths in the form of both theoretical and vocational training courses (Koyuncu et al., 2008).

For Jordan, tourism and hospitality as educational disciplines are included as academic programs in 13 public and private universities, 9 community colleges; 17 tourism and hospitality training centers and 27 public and private schools (USAID, 2007).

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Since 2012, the Higher Education Accreditation Commission in Jordan formally declared that universities solely have the choice to open one or more of 3 majors (Tourism Management; Hotel Management and Events Management). To be nationally accredited, any of these programs should commit to particular standards for course disciplines, practical training/internship and training facilities in their establishments. Such accreditation standards enhanced the quality of curricula, training and other inputs, but it did not necessarily improve aspects related to the involvement of tourism/hospitality industry in facilitating training and employment of students.

Jordan, as many other countries is facing the problem of non-consonance between the needs of employers and the educational outcomes of universities offering the professions of tourism and hospitality (Mustafa, 2012). As stated by Mustafa et al., 2017 it is a reality that universities and colleges are being perceived as being too academic, where their teaching skills and topics are in isolated context, not necessarily including the basic and potential skills on how to run a business; moreover, there is a lack of coordination with private sector in different stages of curricula development, training and recruitment. Most of these programs focus on preparing students for managerial positions without sufficiently considering problem identification, communication, analytical, creativity and leadership skills. In many cases these universities lack technical facilities as laboratories and technology to support the curriculum. This is due to different factors; one is that such majors are housed in diverse fields as geography, sociology, natural resources management, and business studies. Many institutes and universities perceive the introduction of new tourism programs as important only to increase students' enrolment. Also, the lack of proper academic understanding and focused theoretical framework of most tourism studies leads to unclear directions in the teaching tourism courses (Mayaka & Akama, 2007). Tourism and hospitality fields are applied subject areas that require academics, students and curricula developers to have close links with tourism industry. This is not the actual case of many educational programs where strategies for industry engagement are haphazard and lack commitment (Solnet et al., 2007).

This means that tourism institutions will not be able to develop programs that help students move ahead in an orderly way; many tourism students find themselves in tedious dead-end jobs, making the education and training they have received not of any relevance (Berger, 2008). In some cases, tourism industry is often seeking cheap labor, while the educational institution focuses on a structured training experience for the student. Therefore, partnerships founded on these outcomes lack strategic direction and do not fully meet the expectations of the educator, the industry and the student (Solnet et al., 2007). Tourism education in Jordan is facing these problems (Mustafa, 2012); consequently, employing tourism programs' graduates by the industry is far below its potential.

### **Tourism Education and Students' Satisfaction**

The four main stakeholders to be involved in the design, development and implementation of educational programs are: enterprises (industry), students, educational institutions and government (Zagonari, 2009). Industry particularly should have a key role in the design and delivery of the tourism curricula, educators then act as the conduit between industry and students beside their role of providing quality education as a first priority. Students will achieve a better representation in the industry if they develop contacts with it, and if they have a good educational experience (Dale & Robinson, 2001). According to Goodenough and Page (1993) there is an urgent need for a closer contact between the industry and the educational provider to develop the training requirements of course participants, though, such role is time consuming and demanding for academics, causing then a weak relation with the industry.

The satisfaction of students on quality of educational process became significant to numerous research works, which dealt with different aspects such as: institutional image (Bringula & Basa 2010; Brown & Mazzarol, 2009), teaching methods (Abdullah, 2006; Baum, 1991; Burbidge, 1994; Dimmock et al., 2003; Knutson, 1992; Lee et al., 2009; Munar & Montano, 2009; Moscardo, 1997; Wang et al., 2010), training (Arif et al, 2013; Gruber et al., 2010), evaluation process (Sultan & Wong, 2012), competencies achieved by programs (Mustafa et al., 2017), admission procedures (Sultan ^ Wong, 2012), and coordination with employers (O'Driscoll, 2012). Moreover, different instruments were developed to measure the satisfaction of higher education and vocational students; these include: The Student Outcomes Survey in Australia (Fieger, 2012), British National Student Survey (NSS) (Ipsos MORI, 2019), the American National Survey of Student Engagement (NSSE) (Indiana University School of Education, 2019), HEDPERF and SERVPERF (Abdullah, 2006), and European Customer Satisfaction index (ECSI) (ECSI Technical Committee, 1998). According to Băcilă et al., (2014), education managers need to measure the students' level of satisfaction in order to assess their performance, though, this is not easy to achieve since satisfaction is an abstract concept and was not clearly defined or measured. Many definitions were given to the concept of satisfaction; generally, it is a feeling generated from an evaluation of the use experience (Cadotte et al., 1987); Oliver (1997) defined it as the judgement that a provided product is of a pleasurable level of consumption.

It was also recognized as the "consumer's response to the evaluation of the perceived discrepancy between prior expectations and the actual performance of the product as perceived after its consumption (Tse & Wilton, 1988: p. 204), while Fornell (1992) stated that satisfaction is "an overall post-purchase evaluation" (p.11). Overall, satisfaction represents the response of the end user (Giese & Cote, 2002).

It is an evaluation process, regardless of the context or targeted group. Considering that the targeted sample of students in this research were still pursuing their Bachelor degree, it was more appropriate then to use the concept of acceptance; according to Nielsen (1993) (as cited by Adell, 2007, 2), an acceptance is the "the question of whether the system is good enough to satisfy all the needs and requirements of the users and other potential stakeholder"; thus, the end use of the tourism program as an educational product was not yet achieved. The aim of this research is to evaluate the acceptance levels of students regarding the performance of their universities in the following aspects: their collaboration with tourism/hospitality industry for training and employment of students, also the study plans' coverage of some knowledge areas and skills needed for future jobs (the measured variables were derived from previous literature and rephrased for the purposes of this study).

## **MATERIALS AND METHODS**

A random sample of 120 students in 3 Jordanian universities (2 private and 1 public) were targeted to fill the questionnaire of this study. In the time when the survey was distributed in 2010, a random sample of 120 was decided (by calculating the sample size needed with a confidence level of 95% and a confidence interval of 10, it should be at least 96). This sample was divided into two subgroups: 60 students from a public university, and 60 from 2 private universities. A research assistant was trained to introduce the questionnaire to the targeted respondents and help in filling them. 110 students responded: 56 out of 60 in private universities' group, and 54 out of 60 in the public university group (%91.6 as a total response rate), data collection took place at the campuses of these universities. 56 respondents were students enrolled in hotel

management, while 54 were in tourism management. Most of the students in the sample were in their 3rd or 4th year. 69 were males and 38 were females, 106 of the sample were in the age range of 20-25, only 3 were 26-30 years old.

The research instrument was designed to include the following sections: The first section was for information about respondent like age, level of study and gender. The second section included questions with dichotomous responses (yes/no), these questions aimed to know: if students worked in tourism, if they had to make more self efforts to gain skills for future jobs in tourism, if the faculty helped them in searching for jobs opportunities, if they recommend such major to others, if they have taken yet the practical training of their study, and if they think that their study plans should be modified to better fit employment market needs. The third section was an index of educational inputs to be evaluated by students on a five-point scale (1: Completely Acceptable, 2: Very Acceptable, 3: Moderately Acceptable, 4: Slightly Acceptable and 5: Not At All Acceptable), and these were concerning: tourism courses credits versus other specialization credits in study plan, specialization credits versus university requirements, theoretical versus practical credits, number of practical training credits, the coverage of some topics by the study plan, the communication between faculty and students to follow up on the their employment, the communication between faculty and employers in tourism for the purpose of practical training, and the communication by faculty with tourism employers in order to facilitate the employment of students. The Cronbach's alpha for this 13-items scale was (0.887), (with a summary mean of 3.066 and a variance of 0.324). The respondents were asked to add comments if they had any after filling the questionnaire.

## RESULTS & DISCUSSIONS

The results show that most of the respondents in the sample did not have the chance at that time to get employed in tourism while studying (only 43 out of 110), also, only 50 of them took the practical training/internship course.

Though, the responses of students to questions on university role in training and employment reflected a weakness by the programs in such aspects (Table 1). 60 students agreed that courses provided by the university equipped them with skills to work in tourism, though, 71 students think that they needed more self efforts to enhance such skills. 79 students stated that their university did not have any role in helping them to find jobs in tourism and hospitality industry. Only 56 respondents would recommend the major they studied to others. Moreover, 86 respondents think that their study plan should be modified to better fit employment market needs.

**Table 1.** The responses of students to dichotomous questions on university contribution to training and skills gained through study program

Question	Yes	No	N of Valid Responses
Have you got the chance to work in your field of study?	43	67	110
Have the courses you have taken in the university equipped you with needed skills for working in tourism?	60	47	107
Have you needed to make more self efforts to equip yourself with necessary skills for future tourism jobs?	71	35	106
Has your school taken any role in searching for jobs opportunities in tourism?	25	79	104
Do you recommend your major for others?	56	51	107
Have you taken yet the practical training of your study?	50	59	109
Do you think your study plan should be modified to better fit employment market needs?	86	21	107

For the evaluation regarding program credits, training and communication of university with different stakeholders. It can be noticed that 7 of the variables in this index had mean scores between 3 (Moderately Acceptable) and 4 (Slightly Acceptable), while 6 variables had means between 2 (Very Acceptable) and 3 (Moderately Acceptable), which generally does not reflect a high level of acceptance (Table 2). The items that had the highest means were for the number of offered practical training credits ( $M=3.7547$ ,  $SD=1.31520$ ), the evaluation of university's communication with the industry to train students ( $M=3.7525$ ,  $SD=1.28379$ ), and the coverage of foreign languages (other than English) ( $M=3.6436$ ,  $SD=1.21313$ ), (i.e. between Moderately Acceptable and Slightly Acceptable). The items that had the lowest means were for the coverage of topics related to tourism services and sites in Jordan ( $M=2.4019$ ,  $SD=1.08419$ ), and the number of tourism credits versus other credits in the study plan ( $M=2.4312$ ,  $SD=1.03965$ ) (i.e. between Very Acceptable and Moderately Acceptable).

**Table 2.** Descriptive statistics of variables related to acceptance of credit hours and study plan topics

Question	N	Mean	SD
How do you evaluate the number of tourism credits if compared to other courses credits in your study plan?	109	2.4312	1.03965
How do you evaluate the number of specialization credits if compared to university and faculty requirements?	107	2.6542	1.01964
How do you evaluate the number of theoretical courses credits if compared to practical ones?	107	3.6075	1.33711
How do you evaluate the number of practical training credits?	106	3.7547	1.31520
How do you evaluate the coverage of theoretical aspects of tourism?	105	2.4952	1.08419
How do you evaluate the coverage of communication skills?	108	2.7222	1.09231
How do you evaluate the coverage of English language skills and topics?	106	3.3868	1.26920
How do you evaluate the coverage of Other languages skills and topics?	101	3.6436	1.21313
How do you evaluate the coverage of topics related to sites and tourism services in Jordan?	107	2.4019	1.08905
How do you evaluate the coverage of other related topics as archaeology, management ...etc?	107	2.5047	1.12748
How do you evaluate the communication of college to check your work progress?	101	3.7525	1.28379
How do you evaluate the communication of college with tourism industry for practical training?	105	3.3619	1.35961
How do you evaluate the communication of your college with tourism sectors for employing students?	105	3.4571	1.33033

Note: the variables in this table were measured on the following scale: (1: Completely Acceptable, 2: Very Acceptable, 3: Moderately Acceptable, 4: Slightly Acceptable and 5: Not At All Acceptable)

The analysis was further extended in order to understand if there are differences in acceptance levels between private and public universities' students. Both Crosstabulation (for dichotomous variables) and T-test (for the acceptance 5-point scale variables) were conducted for this purpose. For Crosstabulation (Table 3), some of the variables had significant p values (less than or equal to 0.05) indicating an association between students' responses and being in a public or a private university; these were: if they had the chance to work in the industry, 37 of 56 students in private universities answered with yes versus 19 in public university group ( $\chi^2=34.876$ ,  $p=.000$ ), if the university courses equipped them with needed skills to work in tourism, 36 students in private universities group agreed versus 24 in public university group ( $\chi^2=4.966$ ,  $p=.026$ ), and if they

recommend the major to others, 35 students in the private university group stated that they would versus 21 students in the public university group ( $\chi^2=5.793$ ,  $p=.016$ ).

**Table 3.** Crosstabulation between university type and responses on contribution to training and skills gained through study program

Question	Answer	University		$\chi^2$	p	Eta
		Private	Public			
Have you got the chance to work in your field of study?	Yes	37	6	34.876	.000	.563
	No	19	48			
Have the courses you have taken in the university equipped you with needed skills for working in tourism?	Yes	36	24	4.966	.026	.215
	No	18	29			
Have you needed to make more self efforts to equip yourself with necessary skills for future tourism jobs?	Yes	37	34	.118	.732	.033
	No	17	18			
Has your school taken any role in searching for jobs opportunities in tourism?	Yes	14	11	0.219	.640	.046
	No	40	39			
Do you recommend your major for others?	Yes	35	21	5.793	.016	.233
	No	20	31			
Have you taken yet the practical training of your study?	Yes	38	12	22.41	.000	.454
	No	18	41			
Do you think your study plan should be modified to better fit employment market needs?	Yes	44	42	.466	.495	.066
	No	9	12			

**Table 4.** T-test comparisons between private and public universities' students on acceptance of credit hours and study plan topics

Question	Uni.	N	M	SD	t	p
How do you evaluate the number of tourism credits if compared to other courses credits in your study plan?	Private	55	2.4909	1.05185	.603	.548
	Public	54	2.3704	1.03334		
How do you evaluate the number of specialization credits if compared to university and faculty requirements?	Private	53	2.9057	1.11397	2.595	.011
	Public	54	2.4074	.85822		
How do you evaluate the number of theoretical courses credits if compared to practical ones?	Private	53	3.4151	1.40650	-1.483	.141
	Public	54	3.7963	1.24960		
How do you evaluate the number of practical training credits?	Private	55	3.6364	1.33837	-.962	.338
	Public	51	3.8824	1.29069		
How do you evaluate the coverage of theoretical aspects of tourism?	Private	53	2.4717	1.08493	-.224	.824
	Public	52	2.5192	1.09348		
How do you evaluate the coverage of communication skills?	Private	54	2.7222	1.08882	.000	1.000
	Public	54	2.7222	1.10602		
How do you evaluate the coverage of English language skills and topics?	Private	55	3.6000	1.21106	1.816	.072
	Public	51	3.1569	1.30188		
How do you evaluate the coverage of Other languages skills and topics?	Private	53	3.9811	1.10053	3.059	.003
	Public	48	3.2708	1.23322		
How do you evaluate the coverage of topics related to sites and tourism services in Jordan?	Private	54	2.4074	1.05542	.053	.958
	Public	53	2.3962	1.13238		
How do you evaluate the coverage of other related topics as archaeology, management ...etc?	Private	54	2.4074	1.07315	-.900	.370
	Public	53	2.6038	1.18223		
How do you evaluate the communication of college to check your work progress?	Private	52	3.7308	1.20644	-.174	.862
	Public	49	3.7755	1.37334		
How do you evaluate the communication of college with tourism industry for practical training?	Private	54	3.3704	1.40479	.065	.948
	Public	51	3.3529	1.32399		
How do you evaluate the communication of your college with tourism sectors for employing students?	Private	55	3.5636	1.33005	.859	.392

The results of the T-test showed that only 2 variables were of significant differences for the acceptance levels by the two groups of private and public universities, these were for: the number of specialization credits compared to university and faculty requirements ( $t=2.595$ ,  $p=.011$ ), and the coverage of foreign languages skills (other than English), one variable was close though to statistical significance, that was for the coverage of English language skills ( $t=1.816$ ,  $p=.072$ ), where means were higher for private universities group, indicating then a lower acceptance level (Table 4).

## CONCLUSION

Such results initiate the need to put more efforts by Jordanian universities to train and introduce students to employment market; more communication and coordination with employers in tourism and hospitality business should take place, where their needs and expectations are considered during the stages of curricula design, training and job selection. Not less important is improving the quality of the programs to acquaint students with necessary skills needed for tourism careers. This becomes more important if we consider that there is a general low level of satisfaction among Jordanian tourism and hospitality employers regarding educational outputs of university programs, as well as the degree of communication between universities and the industry to facilitate training and employment (Mustafa, 2012). Some clear differences could be noticed between the responses of students in private and public universities; private universities are exceeding public universities in terms of training facilities and connections with private sector, which explains the higher agreement frequencies (Table 3) and acceptance levels (Table 4) by students in private universities' group. Though, private universities are in most cases offering tourism and hospitality management programs through their schools of business, this is reflected in their faculty compulsory courses, which usually include general courses on accounting, management, economics, and finance; this might explain the low level of acceptance among students for the number of specialization credits, the same can be said about English and other foreign languages, where public universities provide more of these with several levels. This indicates the urgent need to improve educational inputs by both public universities (training and facilitating employment) and private universities (study plan course topics and coherence).

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## **THE DEVELOPMENT STRATEGY OF FISH FUMIGATION INDUSTRY AS A DRIVING FORCE OF CULINARY TOURISM DESTINATION IN BANDARHARJO, SEMARANG-INDONESIA**

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**Abstract:** this study was aimed at formulating the development strategy of the fish fumigation industry as one of the main attractions of culinary destination in Bandarhajo, Semarang–Indonesia. This study employed quantitative approach with ex–post facto non–experimental design. The data of this study were analyzed using Analytical Hierarchy Process (AHP) by Saaty. The results of the development strategy of the fish fumigation industry as one of the main attraction of culinary destination were: human resource, means of production for fish fumigation, product promotion, and waste management and occupational health and safety.

**Key words:** development strategy, fish fumigation industry, analytical hierarchy process, culinary destination, Bandarharjo, Semarang-Indonesia

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### **INTRODUCTION**

Globalization, urbanization, modernization, and migration have changed the way people consume food (UNWTO, 2017). The consumption of food and beverage is affected by taste, cost, health care, satisfaction, comfort which affects by behavior pattern and the manifestation and human identity (Privitera et al., 2018). When the location of tourist attraction is visited by the tourists, then the behavior of the tourists change because of the food, and become the main part of the travel experience (Scott & Duncan, 2015)

The culinary tourism is not only centered around food for the tourists, but also exploration of culture of region or a country (Long, 2004). Local food can be globalized

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and branding would increase the identity and accelerate its introduction to the global audience (Richards, 2012). Tourists who are familiar with culinary tourism can be attracted to a tourist destination in the area (Godfrey & Clarke, 2000; Yeoman, 2012).

From an economic standpoint, Telfer & Wall (2000) reported that tourists spend their one third of the total cost of travel expenditure in a culinary section. This reflects the importance of food consumption in tourism. This reflects the importance of food consumption in tourism. Local food is a major component of tourist destinations in the holiday and tourism industry business (Kivela & Crotts, 2005). Improvement in the tourism sector and culinary experience for tourists play a role in economic development, even education (Bertella, 2011). The Ministry of Tourism of Indonesia continues to improve the number of tourists visiting the country. One of them is by establishing three Indonesian culinary tourist destinations: Bali, Bandung and Joglosemar (Yogyakarta, Solo, Semarang). Fish in culinary tourism can use these following processing: direct selling, salting, fermentation, drying, or fumigation. Fish processing technology always evolves while maintaining a specific taste and aroma to become a consumer attraction (Egbal et al., 2010). However, fish processing is still mostly performed manually as in Nigeria (Davies & Davies, 2009), including in Indonesia (Hadromi, 2018). The criteria adopted to choose the proper technology significantly depends on the costs and benefits of the processed products.

Culinary icon in the Central Java is Semarang (Rahma, 2017). Semarang native cuisine has unique characteristics, especially in terms of taste. The ingredients used in culinary processing generally use traditional recipes. Some Semarang specialties include spring rolls, tahu gimbal (tofu and fried shrimp made with peanut sauce, tofu pong, presto milkfish, and wingko babad, as well as smoked fish. These Semarang culinary menus are rarely found in other regions in Indonesia and the prices offered are relatively affordable. This also makes culinary tourism in Semarang a memorable tourist destination, both taste and price. The smoked fish products in Semarang come from twenty-one fish fumigation industries in Bandarharjo, Northern Semarang (Hadromi et al., 2018). The location of twenty-one fish fumigation industries is around the residential area of the citizens (Figure 1). If the fish fumigation industries are not properly processed, it can lead to environmental problems such as: slum, dirtiness, smells and it becomes a source of various diseases (Hadromi et al., 2018; Dutta et al., 2018).

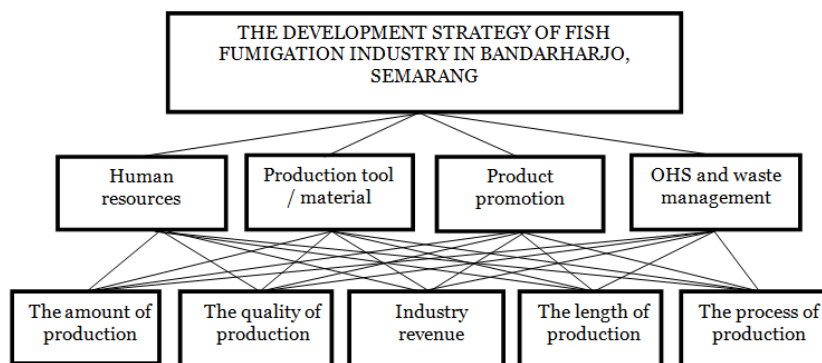
Globally, the smoked fish becomes a popular product in some countries, such as the coastal districts such as Cox's Bazar since the ancient time. Generally, fish fumigation in Southeast Asia is practiced to give the desired color and taste (Clucas & Ward, 1996). Local people have found a delicious dish of smoked fish products for their own consumption. The appetizing colors and delicious taste have made smoked fish become favorite food in this area (Nowsad AKMA, 2007).



**Figure 1.** Aerial shot on the location of the fish fumigation industry in Bandarharjo

The raw materials for the fish fumigation industry were obtained from around the Semarang. The data showed that the amount of fish sold in the city of Semarang is 460.881 kg/day. The amount of fish from the fish fumigation process is 30%, 23% from preserving, salting / drying from 19%, while others use other techniques. This condition shows that fumigation is the most common processing technique for fish products (Central Java Central of Statistics, 2016). Furthermore, the results of the fish fumigation industry are sold around the Central Java Province. The products of the fish fumigation industry are the smoked fish products and ready-to-eat food. Smoked fish products from Bandarharjo are consumed by local people and foreign tourists.

The initial survey from the previous study showed that the fish fumigation industry in producing smoked fish has not been well managed. It was indicated from the amount of pollution as the residues of the production process (Hadromi et al., 2018). Various sources of pollution in smoked fish production processes are disperse smoke, unpleasant odors from fish waste such as fish offal, coconut shell charcoal waste from combustion. Other problems are still unskilled labor resources, low product promotion, unmarketable packaging quality, limited sales area as a result of weak promotions, lack of attention from industry owners on occupational health and safety (OHS), and limited production tools. This present study aims to formulate a strategy to develop fish fumigation industry as a driving force for culinary tourism destinations in the Bandarharjo sub-district, Semarang, Indonesia. The application of the development strategy for the fish fuming industry is expected to increase the number of products, product quality, industry revenue, to shorten production time, and to simplify the production process.



**Figure 2.** AHP hierarchy structure

## METHOD

This descriptive study was conducted to formulate the development strategy for fish fumigation as a driving force in the culinary tourism destinations in Bandarharjo Village, Semarang, Indonesia. This study employed primary data obtained from interviews and observation sheets on the labor of fish fumigation industry, and citizens around the industry. The secondary data were obtained from Bandarharjo village, and fish fumigation cooperation. Focus group discussion (FGD) was carried out on 20 representatives from the fish fumigation industry, Bandarharjo village government, and citizens around the industry to determine the scale of the AHP hierarchy rating.

### Data Analysis of Analytical Hierarchy Process (AHP) Method

Strategy analysis of the fish fumigation industry development as a driving force in the culinary tourism destinations Bandarharjo Urban Village, Semarang, used Analytical

Hierarchy Process (AHP) method developed by Thomas L. Saaty (1986), as seen in Figure 3, with these following steps:

1. Defining the problem and determining the desired solution clearly, in detail, and easily understood. There can be more than one solutions for the problems.

2. Making hierarchical structure which began with the main goal, followed by criteria and alternative choices were ranked (Figure 2). The network was made based on a comprehensive structure related to the problems developed (Baidya, 2015).

3. Determining the pairwise comparison assessment. The pairwise comparison scale was introduced by Thomas Lorie Saaty in Table 1. Comparative results are based on the judgment of the decision maker.

4. The AHP method calculation used a comparison matrix (Formula 1) if  $A_{ij} = a$ , then  $A_{ji} = 1 / a$ . If  $A_i$  has the same interests as  $A_j$ , then  $A_{ij} = A_{ji} = 1$ , for special matters,  $A_{ij} = 1$  for all  $i$ .

$$[A] = \begin{bmatrix} 1 & a_{(1,2)} & \dots & a_{(1,n)} \\ 1/a_{(1,2)} & 1 & \dots & a_{(2,n)} \\ \dots & \dots & \dots & \dots \\ \dots & \dots & \dots & \dots \\ 1/a_{(1,n)} & 1/a_{(2,n)} & \dots & 1 \end{bmatrix} \dots\dots\dots (1)$$

**Table 1.** Hierarchy rating scale

Scale	Definition	Information
1	Equal Importance	KPI A is equally important compared to KPI B
3	Weak Importance is one over another	KPI A is slightly more important with KPI B
5	Essential or strong Importance	KPI A is more important than the KPI B
7	Demonstrated Importance	KPI A is very important compared to KPI B
9	Extreme Importance	KPI A is very important compared to KPI B
2, 4, 6, 8	Intermediate values between the two adjacent judgments.	The values between the two adjacent judgments.
Reciprocal	The opposite	If activity i gets one score compared to activity j, then j has the opposite value with i.

5. Calculating the Eigen values and testing their consistency. The principle of transitivity or 100% consistency is not the main requirement of AHP.  $CR \leq 1$  indicates consistency, if the CR value exceeds 1, then the pairwise comparison assessment needs to be repeated. The assessment of the consistency value used this following formula:

$$CR = \frac{CI}{RI} \dots\dots\dots (2)$$

Where: CR: Consistency ratio

CI: Consistency index

RI: Random index, according to Saaty: 1990.

6. Repeating steps c, d, and e for all levels of the hierarchy.

7. Calculating vector priority

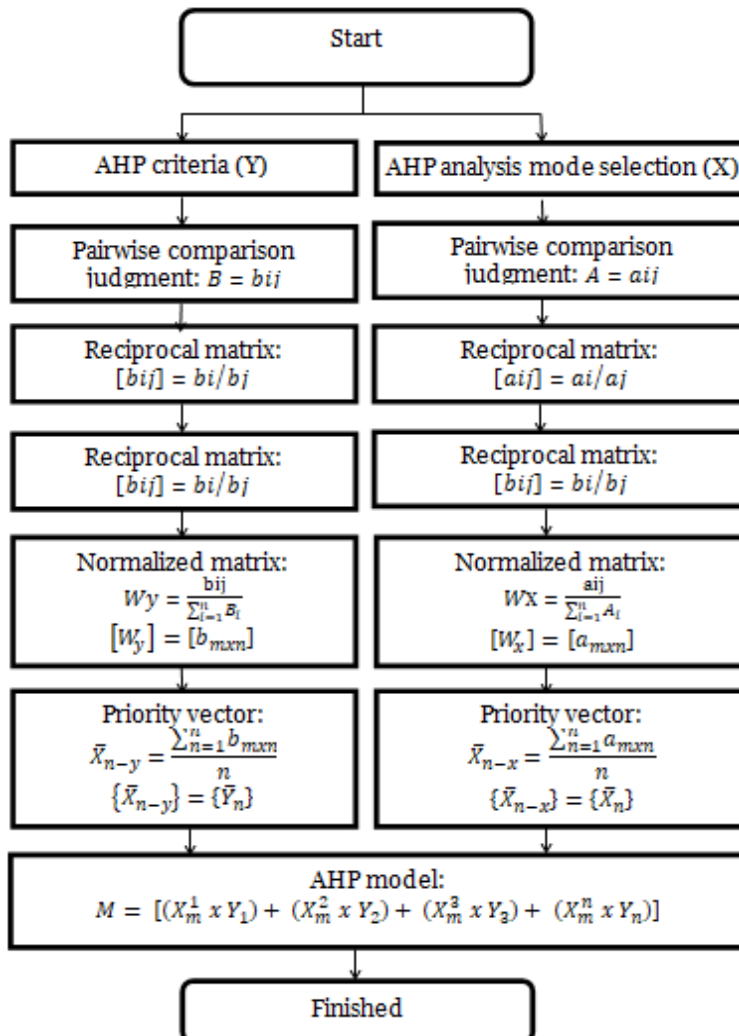
## RESULTS AND DISCUSSION

### A. The results of the Study

Based on the results AHP, the strategy of fish fumigation industry development as a driving force in the culinary tourism destinations Bandarharjo Village, Semarang, Indonesia can be seen in Table 2.

## B. Discussion

The formulation of the strategy of fish fumigation industry development as a driving force in the culinary tourism destinations Bandarharjo Village, Semarang was obtained based on the level of interest according to the weight in Table 2 are as follows (1) human resources, (2) Smoked fish production equipment, (3) Promotion of products, and (4) Management of waste and OHS. Improving the components leads to the increase of these following aspects: (1) the number of smoked fish products, (2) the quality of smoked fish products, (3) industry revenues, (4) shorten production time, and (5) simplify the production process.

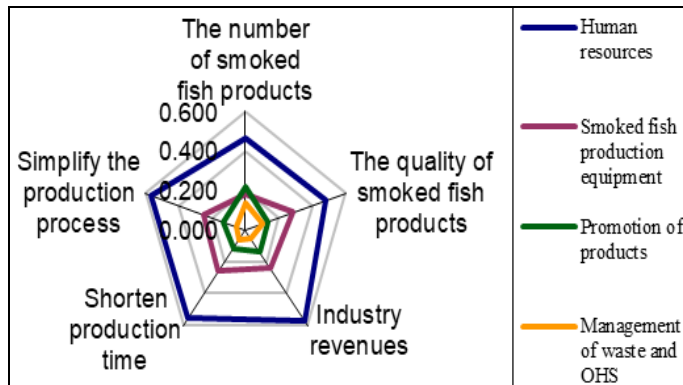


**Figure 3.** The flow chart of analytical hierarchy process

Based on the final score of the AHP method, then schematically the strategy of development of the fish fumigation industry as a driving force in the culinary tourism destinations Bandarharjo Village, Semarang city is illustrated in Figure 4.

**Table 2.** The strategy of fish fumigation industry development as a driving force in the culinary tourism destinations Bandarharjo Village, Semarang

Summary	Total production of smoked fish		Quality of smoked fish products		Industry revenue		Production time		Production process		Final score
	Weighting	Score	Weighting	Score	Weighting	Score	Weighting	Score	Weighting	Score	
HR labor	0.38	0.47	0.30	0.48	0.16	0.58	0.09	0.55	0.07	0.57	0.50
Smoked fish production equipment	0.38	0.18	0.30	0.28	0.16	0.24	0.09	0.26	0.07	0.25	0.23
Promotion of the product	0.38	0.22	0.30	0.14	0.16	0.14	0.09	0.12	0.07	0.13	0.16
Waste and OHS management	0.38	0.14	0.30	0.10	0.16	0.05	0.09	0.07	0.07	0.06	0.10



**Figure 4.** Final score of the strategy of development of the fish fumigation industry

Human resource in the fish fumigation industry is at the top of the score that needs to be improved. The labor of the human resource in fish fumigation industry in Bandarharjo village is dominated by elementary school graduates, and knowledge of how to smoke fish is obtained from generation to generation from their parents (Hadromi, 2018). If this issue is connected with the industrial era 4.0, then it is appropriate that the advancement of technology contributes to improving the quality, and the process of fish fumigation (Amos & Paulina, 2017). Increasing labor resources can be performed by training in the location of the fish fumigation industry, or work internships in other similar industries (Hadromi, 2018). Furthermore, the experience and knowledge obtained can be applied in the fish fumigation industry. Management of fish fumigation starts from harvesting, processing, packaging, and distribution employs a lot of labor and provide income in the form of foreign exchange to many countries (Al-Jufaili & Opara, 2006). Processing fish into smoked fish is affected the production equipment, and market quality. The process of processing fish into smoked fish must ensure the safety and hygiene of smoked fish products. In some countries, the management of the fish fumigation industry is still performed manually, as in Nigeria (Davies & Davies, 2009), in Indonesia (Hadromi, 2018). Furthermore, the implementation of advanced technology in harvesting, processing and storage of smoked fish production processes has started in the fish fumigation industry (Akinneye et al., 2007, Davies, 2005). The results of the Multi-Objective analysis showed that popular management in achieving its objectives in various sectors including fisheries management process can achieve its objectives in the field

of economics, biology, environment, and politics (Pinto et al., 2018; Pascoe et al., 2013; Rodgers & Hunter, 1991). Waste treatment and occupational safety and health at the fish fumigation industry in the Bandarharjo, Semarang, Indonesia must be improved. Globally, the bad practice of waste management and occupational health and safety occur in several countries such as China, India and Brazil. The environmental management practices regarding water supply and quality, environmental management regulatory standards and green supply chain management practices are still priorities that need to be improved (Pinto et al., 2018). In an effort to improve sales, the promotion of smoked fish products plays an important role (Del Vecchio et al., 2006). The application of sales promotion tools such as: coupons, prices, discounts, free samples, bonus packages, and displays influence consumer behavior in buying products (Nububisi et al., 2005). Kumar et al., (2005) studied the impact of the sale of the brand to increase consumer buying interest. Packaging plays an important function in determining the price criteria for a product, a promotional campaign, defining the character of the product, as a determinant of trends and creating a brand identity. Regular packaging acts as a first and last impression for consumers to buy (Silayoi & Speece, 2007). Especially in the field of food processing industry: smoked fish, culinary products must pay attention to the quality of the product. In general, fish-based food contains high nutritional value and represents about 15-20% of animal protein (Abolagba & Melle, 2008). The nutritional value of fish also depends on the freshness of the fish (Eyo, 2001). Each type of food has natural characteristics such as appearance, texture, smell, and taste, any change of the characteristics of the food leads to changes in the quality of the food (Shori, 2017).

## CONCLUSION

The formulation of the strategy of fish fumigation industry development as a driving force in the culinary tourism destinations Bandarharjo Village, Semarang was obtained based on the level of interest according to the weight in Table 2 is as follows (1) human resources, (2) Smoked fish production equipment, (3) Promotion of products, and (4) Management of waste and OHS. Improving the components leads to the increase of these following aspects: (1) the number of smoked fish products, (2) the quality of smoked fish products, (3) industry revenues, (4) shorten production time, and (5) simplify the production process. Increasing labor resources can be performed by conducting training in the location of the fish fumigation industry, or work internships in other similar industries. Better changes in the quality of labor resources facilitate the development of the fish fumigation industry as a driving force of culinary tourism destinations.

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## **THE MESA OF OYBIN (UPPER LUSATIA, GERMANY) AND ITS IMPORTANCE FOR GEOLOGY AND GEOTOURISM**

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**Abstract:** The aim of this article is to call attention to the most interesting place in the Zittau Mountains (Upper Lusatia, Germany), the mesa of Oybin. Besides ruins of the medieval Oybin castle and monastery, there are several examples of geological processes connected with the Upper Cretaceous sedimentation and later erosion in local quartz sandstones. The mesa itself provides an excellent witness of the deposition cycles, probable subaquatic landslides as well as various examples of later weathering. Selected features have been photographed, consulted with relevant literary sources and their probable origin discussed within the text. Photos of selected phenomena are included and explained in details. Visibly denoted and enlightened geological features could increase the tourist attractiveness of the mesa in terms of a complete description of this interesting mountain.

**Key words:** Zittau Mountains, Oybin mesa, Oybin castle and monastery, Upper Cretaceous sandstones, Lusatian fault, erosion, suffosion

\* \* \* \* \*

### **INTRODUCTION**

The aim of this article is describing several interesting geological features of the Oybin mesa in the Lužické (Lusatian) Mountains in order to explain these phenomenons to people interested in nature. This part of the Upper Lusatia represents a very interesting area with specific geology. The Upper Cretaceous sediments were penetrated by Tertiary igneous rocks. The main controlling structure – Lusatian fault – was in detail described by Fediuk et al., (1958) and later Chlupáč (1987) emphasized its importance for vertical

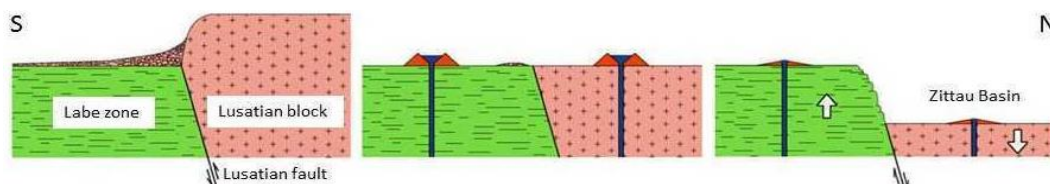
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In the simplified geological map, particular symbols mean: **G<sup>x</sup>** are pre-Variscan metagranites, metagranodiorites and orthogneisses; **y<sup>x</sup>** pre-Variscan granites and granodiorites; **y<sup>+</sup>** Variscan intrusions; **f** phyllites (uncertain age); **B** Precambrian green schists; **qsKt** Lower-Upper Turonian (quartz sandstones); **sKts** Upper Turonian-Santonian (siltstones, fine sandstones, quartz sandstones); **mKts** Upper Turonian-Santonian, calcareous claystones and marls; **β<sub>o</sub>** olivinic igneous rocks; **β<sub>1o</sub>** subaquatic effusions and intrusions (Eger graben); **β<sub>1</sub>** pyroclastic materials; **τβ** trachytes; **v** phonolites; **ab** Miocene (Aquitainian-Badenian) – sands, gravels, clay, inferior coal seams. The direct segment of frontier (bottom left, dash-dotted) represents 13.2 km here. The Mesa of Oybin is situated within the light green area, indicated with the symbol of **qsKt**. North is oriented upwards (red arrow). One full segment of dash-dotted line represents a distance about 1,5 km. The whole block was uplifted along the Lusatian fault while the Zittau basin in the North dropped. These motions were most intensive between 1.3 Ma and 340 Ka (Wenger et al., 2017). Today, altitudinal differences are in the order of hundreds meters. Moreover, such vertical ascends and descents (see the simplified geological profile - Figure 3) have still been going on and they are known as the Saxonian tectonics (Svoboda, 1983). The left part of Fig. 3 demonstrates the Middle Paleocene – Lower Eocene (62 – 50 Ma) phase; Lusatian block is uplifted and granitic alluvial fans drop down into the Labe zone. In the center, situation between the Upper Eocene and Lower Oligocene (34 – 29 Ma) is depicted – the relief between both blocks is leveled. The right part demonstrates the Lower Pleistocene conditions (after 1.3 Ma). Lusatian Mountains are upthrown (max. uplift ~ 320 Ka) due to revived basin subsidence and sandstones are exposed to erosion. Green blocks represent the Cretaceous sediments of the Labe zone, Lusatian granites and their alluvial fans are red and brown, respectively. Tertiary volcanoes are indicated too (center, right).



**Figure 3.** Geological profile across the Lusatian fault, the profile is drawn in Figure 2 (red arrow)  
(Source: Adapted from Wenger, 2017)

During the Turonian, a shallow epikontinental sea penetrated from NW far into the Bohemian Massif along the zone of Labe (Elbe) lineament. There were three isolated sources of eroded materials – the Krušné hory (Erzgebirge) mountains area (then a flat elevation as the main source of sediments), the Lusatian Island and another flat land in the East (Wilmsen & Niebuhr 2014). In the Lower Turonian, there was a shallow strait between the Lusatian Island and the Erzgebirge area. Sediments had a coastal character (i.e. conglomerates and coarse sandstones of the so called Oybin formation). The sea level would vary in cycles; rocks have the slant bedding and progradation pattern in the tidal zone. Materials were transported to NW and sediments – still finer – are typical for the Saxon Switzerland (Wilmsen & Niebuhr, 2014). After a short but considerable phase of regression, the sea deepened again at the beginning of Middle Turonian. The Erzgebirge region lost its importance as the key area of denudation; the Western Sudetes Island assumed its role. A major part of siliciclastic rocks as well as fine grained fractions (marls) comes from this island (Wilmsen & Niebuhr, 2014). Sandstones of the formation are roughly dated between 94 – 90 Ma (Wilmsen & Niebuhr, 2014). They still preserve their authentic horizontal position. This fact is very interesting in view of the fact that near the Lusatian fault strata are usually slanted or even overturned (Chlupáč, 2002).

## METHODOLOGY

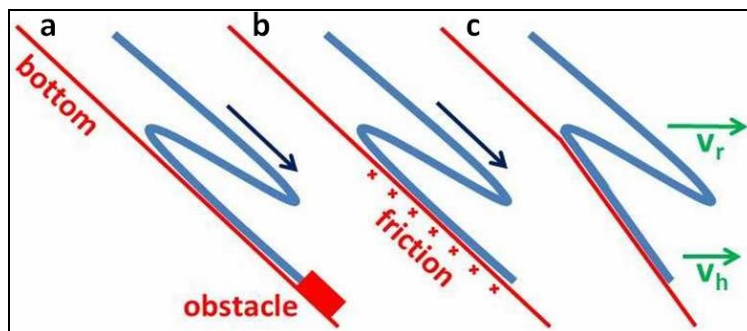
Wide-angle photos of selected geological features were taken in order to describe them in details as well as to explain their origin. However, they could not be exactly measured because they are mostly inaccessible. Their size was thus estimated on the basis of measuring the distance (Stanley SHT1 laser meter) and comparison with known objects (stone blocks, portals, etc.). In the case of subaquatic fold described below, three probable scenarios of its origin were proposed and depicted. All features were carefully consulted with respective literary sources, in several cases scarce or less attainable. The resulting text could answer for a basic knowledge of these geological phenomena (in future, information leaflets with indicated locations might be printed or information plates installed for castle visitors to make of the local geology).

## GEOLOGICAL ATTRACTIONS OF THE MESA

A very interesting geological phenomenon is situated in the northern part of mesa massif. Among adjacent (almost horizontal) sandstones there is a typical isoclinal fold – better expressed, its remnant due to weathering (Figure 4). The fold axial plane is inclined towards the North by some 40 degrees. Such a fold is very unusual.



**Figure 4.** Remnants of underwater landslide folding in a later stage of lithification (diagenesis)

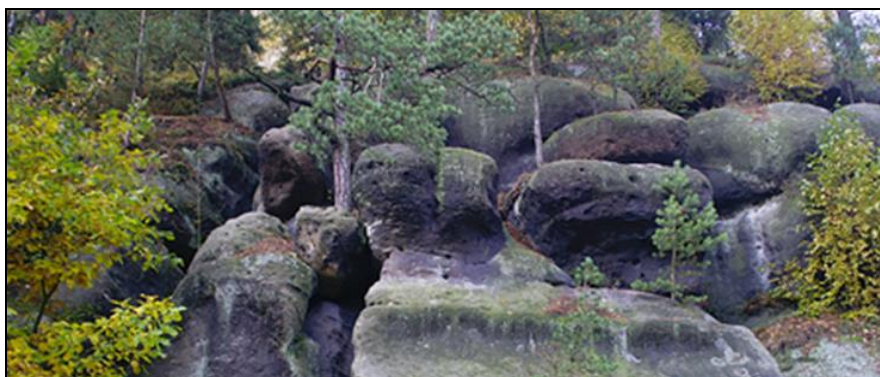


**Figure 5 a, b, c.** Three proposed scenarios of the fold origin

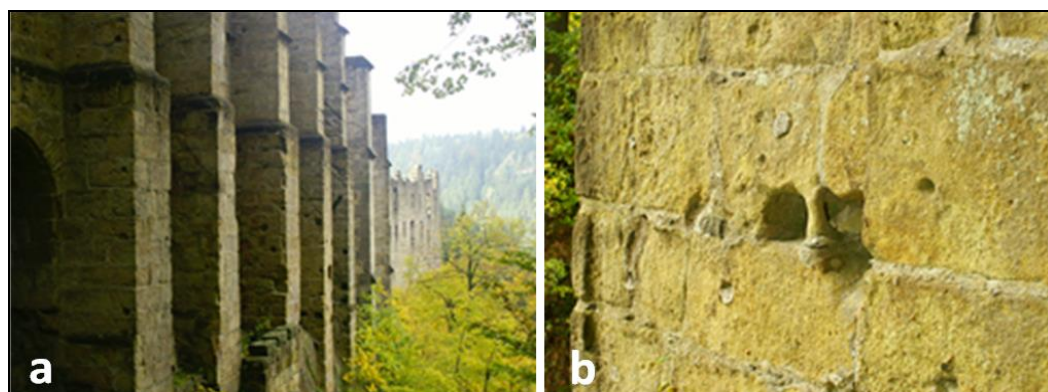
It is not very easy to explain its origin – however, the so called Saxon tectonics may be reliably rejected: the above mentioned Lusatian fault does not affect nearby rocks in any way. Some authors (Lewis, 1971; Ricketts, 2018) have described similar structures



which could origin during the later phase of sedimentation. Rock layers are still plastic to avoid any brittle deformation but they already prove an adequate cohesion. This usually happens during the process of lithification (diagenesis) and the Oybin fold may thus be explained in the following way (Figure 5) – a moving layer of underwater landslide probably run into an obstacle. Its face stopped, while the rest upfolded over it before the slide definitely stood still (Figure 5a). Of course, there are further possibilities – friction might decelerate the slide face as well (Figure 5b). An abrupt increase of the bottom inclination would lead to the similar result as the horizontal speed component of the rear slide part ( $v_r$ ) is larger than in the case of head ( $v_h$ ) – Figure 5c. The fold is the only example in horizontally layered surrounding rocks – no other was seen in a wider outskirt and nearby sandstone massifs are not accessible without a climbing equipment.



**Figure 6.** Loaf-like weathering of the Oybin mesa

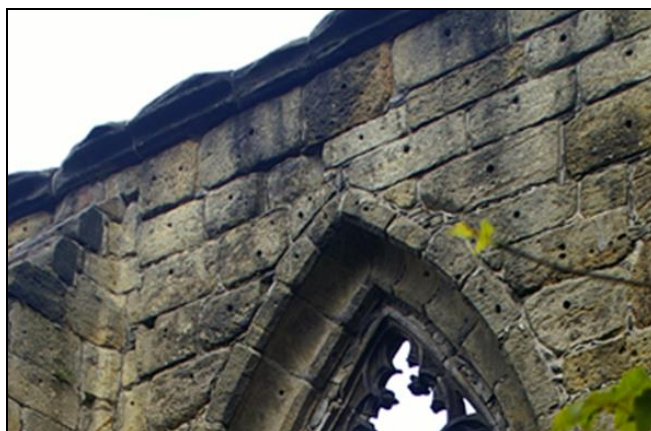


**Figure 7 a, b.** Buttresses (a) and the pillar in one of blocks (b)

The mesa is also a good example of a specific form of weathering. Particular blocks of sandstones are eroded into the shape of loaves (Figure 6). These forms resemble the erosion in sandstones on the Czech side of frontier (Rynoltice); nevertheless, sandstones near Rynoltice are of a similar (Upper Cretaceous) age but their composition is somewhat different. At the mesa foot, there are huge eased blocks loosened from the massif. Besides these large forms, the mesa offers many finer examples of selective erosion. The northern wall of Oybin castle was built of sandstone blocks about 30 cm thick. These blocks were also used for transverse supporting buttresses, located in the castle northern wall (Figure 7a). One of stones exhibits a phenomenon usual in nature but not in manmade structures

– about 10 centimeters high pillar facing outwards (Figure 7b). Like the mentioned above fold, this feature is unique here. The question of its origin may be answered in two ways (Bryan & Jones, 1997). A generally accepted principle of weathering in sandstones and origin of typical forms (crusts, honeycombs, ledges, cavities, pillars, etc.) is called suffosion or piping (Demek, 1987). This process does not represent karsting *sensu stricto* - water only dilutes the cement component in the rock. Loosened grains are then transported away. Contrary to the genuine karst, such a material does not form any new structures.

There is also another and very interesting explanation. Recently, geologists from the Charles University in Prague have performed experiments with so called locked sands (Bruthans et al., 2014), first mentioned at the end of 1970's (Dusseault & Morgenstern, 1979). Particular grains are not cemented or they are cemented very slightly. But a permanent load of overlaying strata locks grains together and such a material looks like a firm rock, though very brittle. Experiments of Czech geologists (Bruthans et al., 2014) have demonstrated the following fact: if the superjacent strata burden their bedrock less (for example due to erosion), the subjacent rock becomes instable and grains get loose. This degradation proceed from outside towards the rock interior. But such a process decreases loaded horizontal cross-sections in the structure and further destruction is stopped because a residual superjacent load is able to lock remaining grains of underlying sands again. According to the authors (Bruthans et al., 2014), this process can lead to the origin of rock windows and portals, cavities, pillars and other bizarre forms. Nonetheless, in this particular case, suffosion is more probable. According to the visual inspection, the block in the buttress is really solitary and the load of overlying stones must be considerable. The effects of locked sands would have certainly been observed in higher structures as well.

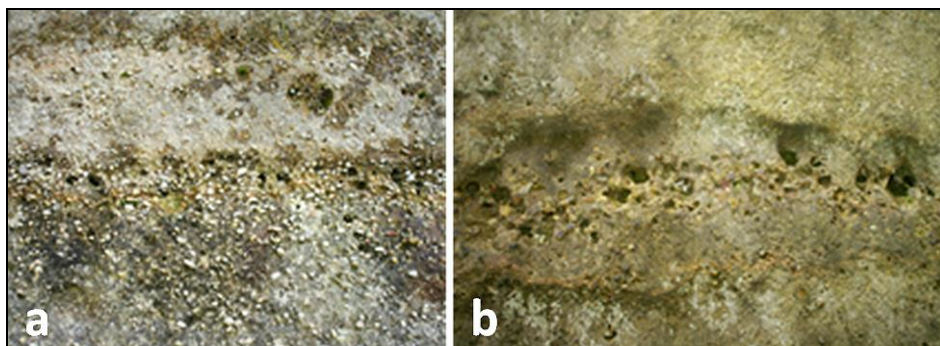


**Figure 8.** Handling dents for crampon jaws

In the opinion of this article authors, a possible scenario of the pillar origin may be as follows: Medieval masons used a cubic block of sandstone – blocks vary in their shapes and sizes. Two neighboring stones were cemented with mortar, however, not consistently. Precipitation water leaked into the joint and diluted the cement from inside, while joints between other blocks are full of mortar and stones are thus better protected. Exposed surfaces of surrounding blocks were slowly weathering (dimples, crusts), while water penetrating through the joint between the blocks gradually formed a cavity which finally proliferated onto the outer surface through two nearby holes (today divided by the pillar). Water drains via the nearer opening where it has formed a well visible groove.

According to the date of conversion ordered by Charles IV, the whole process is not older than 650 years because medieval wallers would not use an improper block. The cavity between the stones still enlarges. On the other hand, there are numerous dents in blocks which are not of natural origin. Dents provided easy handling with blocks (masons used the so called crampons and made these pits intentionally (Šefců 2013 – Figure 8). Some of them are fitted with mortar, especially in lower parts of walls and buttresses.

In other accessible locations it is possible to find cyclically arranged sandstones and conglomerates; however the size of grains within particular cycles increases upwards. Such a texture is typical for the mentioned above progradation. During this stage of sedimentation, the sea was regressing towards NW and materials transported from the land were thus coarser. A new transgression at the beginning of another cycle brought a fast change – coarse sands and conglomerates were replaced with fine deep water sediments again (Wilmsen & Niebuhr, 2014). This fact is well documented in Figure 9a. Selective weathering (Figure 9b) more affects coarser parts of each cycle: conglomerates, if directly exposed to precipitation, degrade faster than subjacent finer materials do. In conglomerates, the volume of dissolvable cement is higher so they are more liable to suffosion. On the top of the mesa, weathering left most obvious traces. Rocks are deeply eroded here – there are wide joints and clefts; suffosion also caused slacking ledges and irregular honeycombs in less stable coarse strata.



**Figure 9 a,b.** Progradation pattern (left) and selective erosion in coarse layers (right). Progradation is well visible at the main castle gate (Figure 1 - left); other forms of weathering are circled in the Figure 1 right part (the top of the mesa) or indicated by arrows. Loaf like weathering is indicated rightmost there

## CONCLUSION

The mesa of Oybin is a „textbook example“ of processes which asserted in the course of sedimentation and weathering after the complex of sandstones was uplifted along the Lusatian fault. Folding within a later stage of lithification is indicated as well as later selective weathering. The role of suffosion – as the main form of erosion – is emphasized here. A unique rock pillar in one of sandstone construction blocks indicates how long such a phenomenon can be formed for. Oybin with its attractive surroundings represents a good choice for those who are interested in history and nature. The Zittau region does not belong among richest ones and tourism is one of the main sources of income for local people. Moreover, the Zittau Mountains have an advanced infrastructure; between Zittau and Oybin it is possible to travel on historical narrow gauge trains (perennial traffic) which serve as the suburban transportation here (Zittauer schmalspurbahn, official website). The location is well accessible from the Czech Republic as well via a good road from Jablunné. The authors thus assume that connecting historical landmarks with natural features could bring a better level of experience tourism in this part of Germany.

## Acknowledgments

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## **CARRYING CAPACITY ASSESSMENT AND SUSTAINABLE TOURISM MANAGEMENT IN AGRA CITY, UTTAR PRADESH (INDIA)**

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**Abstract:** The issues of tourism sustainability and management have become main concern for tourism industry of Agra city. Presently, tourism becomes global activity and impact worldwide, therefore it is a requirement for sustainable tourism management and it is possible through calculating carrying capacity. This study explores present tourism status of Agra city and its problems. The main aim of the study is to disclose carrying capacity of Agra city and prepare the sustainable development plan for tourism sector. The uniqueness and assessment of this study is based on empirical research with the help of a field survey. Evaluating Carrying capacity of Agra by DPSIR Model (Drivers, Pressures, State, Impacts, and Responses) which is develop by the European Environmental Agency, which highlights critical links and relationships between human activities, pressures on the environment and impacts on ecosystems (European Environment Agency, 1999). Calculating, physical, environmental and social carrying capacity of Agra exposes the pressure on city and future scope of tourism development. The poor carrying capacity of Agra, lead to poor satisfaction level of visitor at Agra city that damage its status around the world. The output of study support forthcoming researches in the area of managing sustainable tourism development.

**Keywords:** Tourism Carrying Capacity, Sustainable Tourism Management, DPSIR Model, Combined Satisfaction Index

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### **INTRODUCTION**

Tourism is one of the most wide spread activity in the world may be more than ever and its impact become more visible on world landscape in term of positive and negative.

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Tourism activities cause change of Physical, Environmental and cultural properties of any tourist destination. It is sustainable tourism with a primary focus on experiencing the earth's geological features in a way that fosters environmental and cultural understanding, appreciation and conservation, and is locally beneficial (Dowling & Newsome, 2006).

Therefore, the aim of this study is to explore how sustainable tourism development of Agra can be achieved and managed through the concept of carrying capacity. World Tourism Organization has defined Tourism Carrying Capacity as "the maximum number of person which could visit a location within a given period, such that local environmental, physical, economic and socio-cultural characteristics are not compromised and without reducing tourist satisfaction" (Castellani et al., 2007) defines the types of carrying capacity such as Physical, Economic and Social. a) The physical carrying capacity is a threshold limit, beyond which natural and cultural heritage destination is destroyed by tourism. b) Economic carrying capacity is the threshold limit over which tourism growth becomes economically intolerable due to the presence of a great number of tourists makes the destination uncomfortable and causes a reduction in tourism demand. Another reason behind the tourist destination turns into economically unsuitable when tourism interferes with other economic activities obstructing their development. c) The social carrying capacity is the threshold value beyond which the social profile of the host community badly influenced and damaged by tourism activities. This situation creates conflict between tourists and the local host community. A better understanding of the earth with reference to its geological attraction is the goal of geotourism which arises from the motivation of enjoying unique features amidst of landscape (Adriansyah et al., 2015). The unprecedented growth of tourism raises a number of concerns over the environmental and cultural integrity of tourist destination that led to a re-examination of tourism development in the light of the increasingly popular concept of sustainable development, (Drost, 1996). The unplanned and haphazard growth of tourism industry is resulting in major environmental problems.

This results in ruining of cultural heritage, vanishing of historical depictions and degeneration of natural beauties over many parts of the globe. It is a great loss for human society. To protect physical as well as socio-cultural environment of tourist sites it is necessary to follow the principles of sustainability with increasing growth of this industry (Nimesh, 2013). The 1982 joint declaration of the World Tourism Organization (WTO) and the United Nations Environment Program (UNEP) develop the goal of sustainable tourism: the protection, enhancement and improvement of the various components of man's environments are among the fundamental conditions for the harmonious development of tourism. Similarly, rational management of tourism may contribute to a large extent to protecting and developing the physical environment and the cultural heritage, as well as improving the quality of life. Geotourism is emerging as a new global phenomenon (Dowling, 2008a). In September 2015 post Millennium Development Goals period, the United Nations Sustainable Development Summit was held and here the world leaders adopted 2030 Agenda for Sustainable Development, that includes a set of 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change by 2030. The main focus is early intervention and future partnerships between the public, private and voluntary sector for effective planning action and impact on World heritage conservation. Sustainable development calls for wise management of natural and socio-cultural resources in destination areas. Resources are exploiting by both tourist as well as local host. When this happens, sustainable development is severely threatened: economic wellbeing declines, environmental conditions worsen, social injustice grows, and tourist satisfaction drops (Briassoulis, 2002). Krishnanand and Raman (2019) have highlighted the geographical analysis of geotourism based seasonal economy in Lahaul and Spiti district of Himachal Pradesh.

STUDY AREA

Agra city is situated on the bank of River Yamuna in the state of Uttar Pradesh, was preferred by Mugal Emperor Akbar as his capital. Agra, the city of Taj Mahal is widely recognized as one of the most artistically inspiring cities around the world. Taj Mahal, (4.09 million visitor) was the most visited monuments in 2016 for domestic visitors followed by, Qutub Minar, Delhi (2.22 million) and Red Fort, Delhi (2.18 million).

In respect of foreign visitors Taj Mahal (0.396 million) was the most visited monuments, in 2016, followed by Agra Fort, Agra (0.34 million) and Qutub Minar, Delhi (0.33 million), (India tourism statistics report, 2017). There are three UNESCO World Heritage sites: the Taj Mahal, Agra Fort and Fatehpur Sikri. Every year a large number of domestic as well as international tourists visit to this historically important destination. Most of these tourist places are highly significant as they are classified under the UNESCO World Heritage sites. Agra is well connected within the Golden Triangle circuit. It has emerged as the apple of an eye for international and domestic tourists. Delhi - Jaipur and the Uttar Pradesh Heritage Arc is a key factor for generating revenue from the tourism. The city of Agra is perfect example of 'Authenticity'. Robinson (2012), define that any item or activity which is original and genuine. The climate of Agra is tropical in nature with variation in temperature dropping to 3°C in winter and rises to 47°C in summer. The city is covered with thick fog which makes travel uncomfortable during December and January. Rainy season start from June till September, the annual rainfall of 686 mm is recorded (Wikipedia). November to February is winter season (Slum Free City Plan of Action - Agra). Total population of Agra city is 15.74 lakhs with a decadal growth rate of 23.45 percent. The density of city is 11,167 persons per sq.km which is very high when compared to state average of 819 persons per sq.km (SFD Promotion Initiative, Final Report Agra, India, 2016). The city covers an area of 141 sq. km under Agra Municipal Corporation.

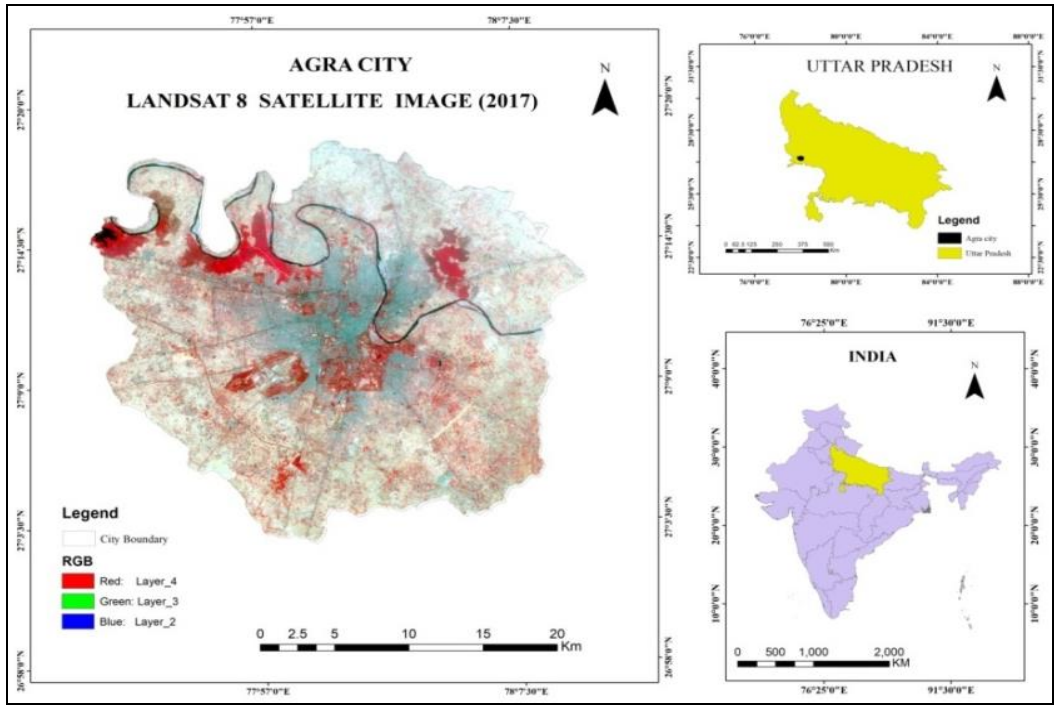
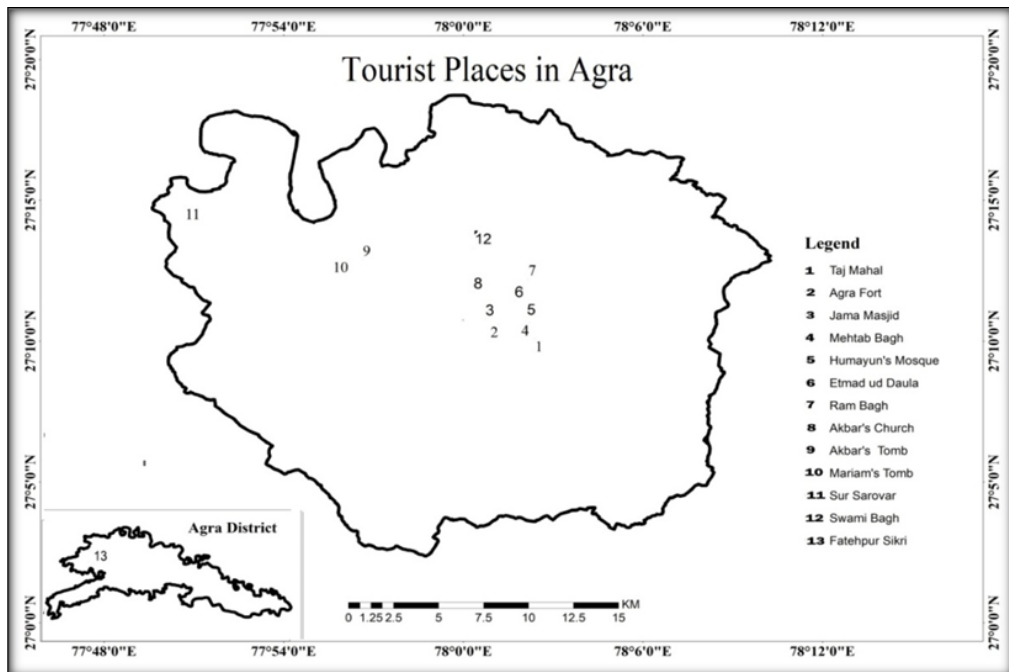


Figure 1. Study Area, 2017

The Figure 1, shows the map of the study area which was prepared through geospatial technique and Figure 2 shows the different tourist places at Agra city. Agra has its own importance as a commercial city. There are a lot of industrial activities such as Micro, Small and Medium Enterprises (MSME). The major industries are handicraft, marble, leather, carpet, brassware and jeweler crafts. The city has more than five thousand small and medium scale industries which are principally food processing, leather, wood product, electrical and repairing service industries (State Profile of Uttar Pradesh 2014–15). According to slum-free city plan, there are more than 50,000 shops and commercial establishments registered at Agra Nagar Nigam. Small industries include cotton and textile, wood paper products like stationery, leather goods and metal products. Handicrafts include stone carving, inlay work and carpet's making. Shoe making industries are also major source of income and employment. The city has become a major hub for tourist activities which has transformed the whole economy of the city. The major polluting industries have been shifted to other designated industrial areas after the order of Supreme Court (<https://lawtimesjournal.in>, 2018).



**Figure 2.** Tourist Places in Agra City, Uttar Pradesh, India

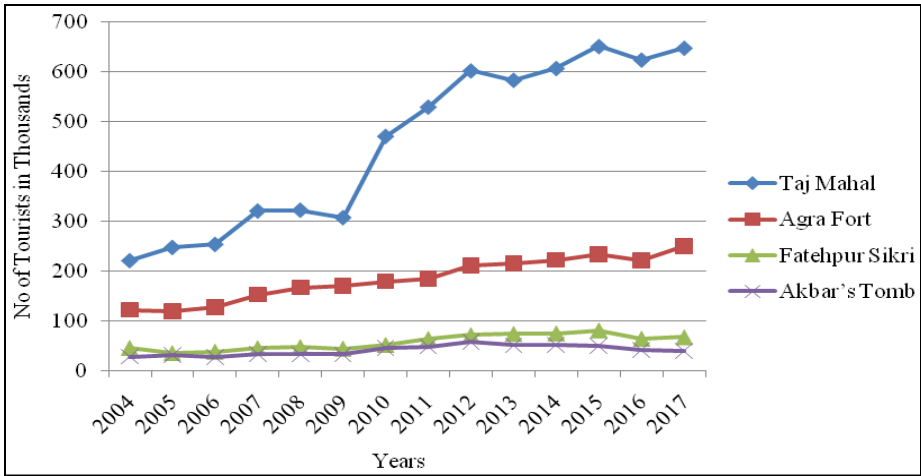
### PURPOSE AND METHODOLOGY

The main objective of the study is to figure out the tourism carrying capacity and sustainable tourism development in Agra. The study is based on primary data collected during the field visits in Agra city and during 2017 and 2018. Primary data sources include the field observation of different monuments of Agra through extensive field survey that includes focused interview and questioners. For analysis of tourism status of Agra city, number of field visit was conducted during the various peak tourist periods in 2017 to 2018. This study uses a participant observation approach to examine the status of tourism. These observations base on informal interview and discussion with international and domestic tourist, government stakeholders, local people, hotel staff,

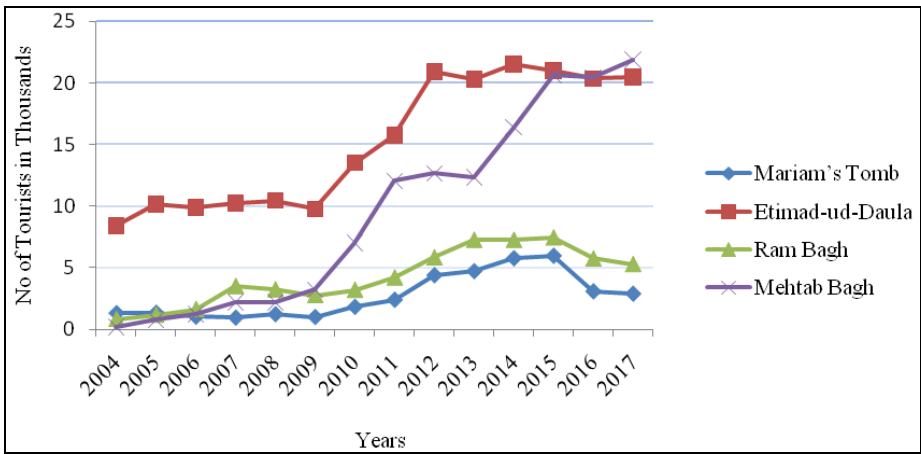
skilled and unskilled workers. Secondary data of tourist visitors both for international and domestic tourist were collected from the tourism Department of Uttar Pradesh, Ministry of Tourism, India and various reports and of tourism from 2001 to 2018.

RESULTS AND DISCUSSIONS

Figure 3 and 4 highlight the annual tourists flow from 2004 to 2017 at different monuments in Agra which are under Archeological Survey of India.



**Figure 3.** Tourist Flow at Taj Mahal, Agra Fort, Fatehpur Sikri, and Akbar's Tomb (Source: Annual Tourist Visits Statistics, 2004 – 2017, Uttar Pradesh Tourism Department)



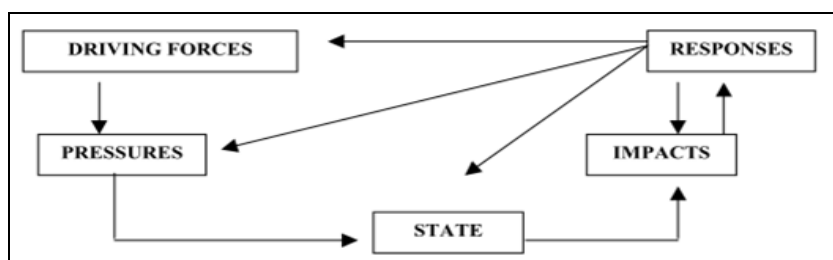
**Figure 4** Tourist Flow at Mariam Tomb, Etimad-ud-Daula, Ram Bagh and Mehtab Bagh (Source: Annual Tourist Visits Statistics, 2004 – 2017, Uttar Pradesh Tourism Department)

According to India tourism statistics report, 2017, annual tourist visitors at Taj Mahal in 2017 are 64,802,77 visitors as compared to 22,129,52 visitors in 2004 with high positive growth in tourist flow at Taj Mahal (Table 1). The Red Fort has a positive growth of visitors from 2014 to 2017 and the number of visitors at Red Fort are 12,263,40 in 2014 and it reached to 25,050,99 visitors in 2017. During 2011 to 2015 there is steady growth in tourist arrival but the year of 2016 was witness of less visitors.

The annual visitor at Etmad- ul- Daulah in year 2004 is 84,287 visitors which rapidly increasing and reached 20, 488,6 visitor in 2017. But Akbar's Tomb, facing ups and down in number of visitor from 2004 to 2017. The number of annual tourist visitors at Akbar's tomb is high in the year of 2012 but after 2012 there is declining pattern of tourist flow till 2017. The recent trend of visitor flow at Fatehpur Sikri is less as compared to the year of 2015 and shows the declining trend. The main aim of this study is to calculate the tourism carrying capacity and to prepare a sustainable tourism management plan for Agra city. Many of researcher applied carrying capacity as a tool in tourism field (Vishal et al., 2016; Bera et al., 2015). The analysis of tourism sector based on DPSIR model allows one to identify main issues related to tourism activities and to address tourism carrying capacity assessment (Castellani et al., 2007; Kristensen, 2004). The methodology is inspired by DPSIR model framework for sustainable tourism development of Agra city (Figure 5).

**Table 1.** Annual Tourist Visitors at Monuments (Agra City, India)  
(Data Source: Annual Tourist Visits Statistics- 2004 – 2017, Uttar Pradesh Tourism Department)

Mehtab Bagh	Ram Bagh	Etimad-ud- Daula	Mariam's Tomb	Akbar's tomb	Fatehpur Sikri	Agra Fort	Taj Mahal	Year
1937	8251	84287	13239	290027	467218	1226340	2212952	2004
7700	11695	101319	13461	325890	364121	1194117	2478923	2005
12189	16261	98811	10244	281651	392015	1274717	2539471	2006
22149	35040	102550	9473	347393	461672	1534703	3210190	2007
22096	32406	104518	12291	334305	483725	1675507	3226843	2008
32152	27623	97651	10054	335974	453988	1713006	3077114	2009
69965	32011	135128	18292	461968	525870	1799120	4709151	2010
120505	42127	157421	24114	492885	647135	1854610	5296935	2011
126508	58508	208936	44050	585567	720984	2110591	6024816	2012
123210	72879	202784	47365	519081	744538	2158560	5835342	2013
163956	72781	215100	57876	524135	756766	2224914	6072263	2014
206575	74735	209916	59954	500671	814781	2344260	6513543	2015
204352	57602	203555	30924	420885	651535	2215939	6242180	2016
218947	52991	204886	29005	406391	678917	2505009	6480277	2017



**Figure 5.** Methodological Flow Chart (Source: Defining, Measuring and Evaluating Carrying capacity in European Tourism Destination, Athens, December 2001)

In this research major issues from the different aspect have been recognized through deep analysis of literature, field survey, discussions with stakeholders and implement through DPSIR model (European Environment Agency, 1999) in this study (Table 2). To calculate the tourism carrying capacity of any tourist destination is a complex task because of its multi-dimensional characteristics. The tourism industry is directly or indirectly linked with the environmental, ecological and socio-cultural aspect of the tourist destination. Here an attempt has been made to calculate physical, accommodation, environmental and economic carrying capacity of Agra city. For calculating the environmental carrying capacity

there are two components, air quality and biodiversity of Keetham Lake has been examined. The physical carrying capacity of Taj Mahal and accommodation carrying capacity, hospitality density, crowd at heritage place and average revenue generation from the tourism industry is also analyzed. Table 3 summarized the Tourism carrying capacity of Agra city.

**Table 2.** Application of DPSIR Model of Tourism

Drivers	Tourist attendance, Urban traffic, Hospitality structures, Urbanization, Status of environment
Pressures	Air quality, Production of urban solid waste, Use of land, Presence of tourists in protected areas
State	Concentration of pollutant in air, Change of land use, State of local host community and Tourist satisfaction
Impacts	Adverse impact on heritage structures and local host community as well as profile of tourism industry
Responses	Awareness about sustainable tourism activities, Promote eco-friendly transport and to Promote eco-tourism activities

**Table 3.** Tourism Carrying Capacity of Agra City

Types	Drivers	Indicator	State/Classes (Hectares)			Status
Physical Carrying Capacity	Land use	City land use / Level of urbanization Buffer of Taj Mahal	Classes	1999	2017	Classes
			Water	25.11	33.66	Good
			Green	159.61	166.05	Good
			Open space	124.58	70.65	Bad
			Settlement	149.16	191.88	Bad
	Agriculture	49.77	45.99	Bad		
	PPC of Taj Mahal	A * U/a * Rf (Vishal S. et. al. 2016)	Compiled by Author			75,111 persons /day
Crowding in heritage place	Crowding of natural sites and streets	Low Mean High			High	
Accommodation Carrying Capacity	Number of Beds in hotels in Agra	(TTPM / NM) TTPM: Total tourist in peak month NM: Number of days In a month	Good Bad Poor			31,132 persons /day
Environmental Carrying Capacity	Air Quality	NO2, SO, PM10, NOx, Co,O3	Average of 24 hour			Moderate
	Biodiversity of Keetham lake	Loss of species	Judgement through personal interview/questionnaire			Good
Economic Carrying Capacity	Revenue from tickets	Monuments of Agra circle	Year	Total Revenue		Increasing
			2014-15	400176055		
			2015-16	439612150		
			2016-17	885180634		
			2017-18	1113203021		

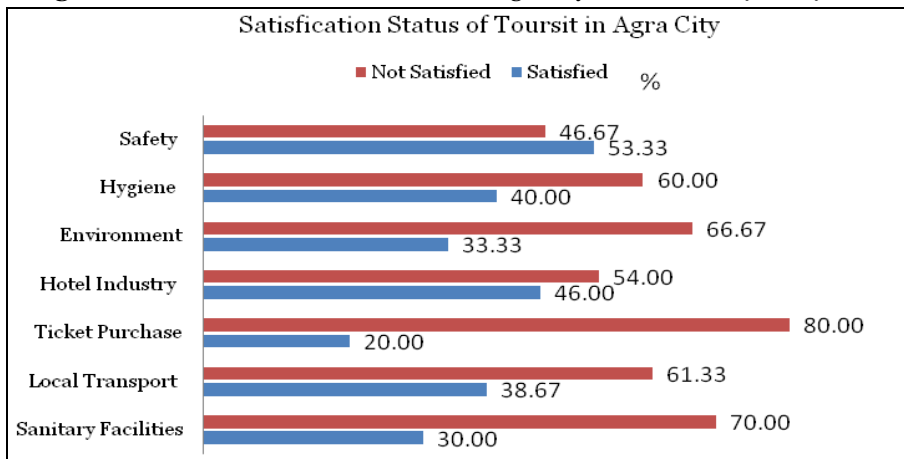
### Tourist Satisfaction Composite Index

After comprehensive analysis of primary survey and secondary data, it can be concluded that some essential steps are required to improve the condition of tourist satisfaction in the city. Figure 6 shows the status of satisfaction regarding safety, hygiene, environment, hotel, local transport and sanitary facilities. Most of the respondents are not satisfied with the tourist amenities available in the city. Satisfaction of tourist is the key

indicator which shows the present and future perspective of any tourist destination. Figure 6 shows that more than 50 % respondents are unsatisfied with status of hygiene, environment and sanitary facilities which is a matter of serious concern for city that is known for Taj Mahal. These three factors are interlinked with each other.

There is urgent requirement to improve the basic tourist infrastucture in the city to boost tourism. Ticket purchasing at Taj Mahal is very inconvenience activity due to huge number of visitors in peak tourist season. Lack of secure transportation facilities to reach different monuments in the city became a cause of low satisfaction status of Local transportation. Numbre of low budget and unprofessional hotels staff make condition more worst, result decline the tourist satisfaction. All the indecater of satisfacion status shows that high number of percentage of respendent are not satisfied with current satisfaction status of tourism at Agra city.

**Figure 6.** Satisfaction Status of Tourists in Agra city (Source: Primary Survey, 2017)



## CONCLUSION

The New Tourism Policy of Uttar Pradesh, 2018 encompasses all required dimensions of sustainable tourism management, therefore it's proper and timely implementation is very essential. Further, developing Agra as a smart city will bring new dimensions in tourism sector in the region. There is urgent need to improve basic urban infrastructure for tourists in Agra. Carrying capacity assessment of tourism in Agra city is really a challenging task. In the context of Agra, the DPSIR model is most suitable for tourism. Various components of DPSIR model are implemented in Agra city and their results are also satisfactory. As we know that the tourism industry is linked with socio-economic, demographic and ecological parameters of the study area. For assessment of ecological carrying capacity, air quality and biodiversity are taken into consideration.

The air quality in the city is not satisfactory but Keetham Lake is very rich in biodiversity so it has good ecological carrying capacity. If we look at the economic carrying capacity, the revenue from tourism sector is increasing at various monuments of Agra circle. Therefore, economic carrying capacity of town is increasing.

The sustainable and eco-tourism development is possible by taking various socio-cultural, environmental and economic dimensions into consideration. Various tourism laws and policies have been formulated from time to time but their implementation part is lacking at various levels. Proposed activities like development of Yamuna river front and proposed bridge between MehtabBagh and Taj Mahal, redevelopment of Keetham

lake and Sur Sarovar bird sanctuary and development of rural tourism is required for transformation of tourism industry in the region and its surroundings. Master Plan 2021 and City Development Plan (CDP) 2006 both have integrated and holistic planning parameters for various sectors including tourism but their implementation is a real challenge. The Public Private Partnership (PPP) model can help in implementing the various amenities through civic bodies like Agra Nagar Nigam etc. Agra as a smart city can be made a smart tourist destination with the help of latest technology. Recently several initiatives have been taken by the central government to promote tourism in the country, probably; it shall have positive impact in Agra city as well. These include PRASAD, creation of world class tourism infrastructure, and growth of tourist footfalls, multilingual tourist helpline, skill development and Adarsh Smarak etc.

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## INTERNATIONAL DEMAND AND MOTIVES FOR AFRICAN COMMUNITY-BASED TOURISM

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**Abstract:** This study utilizes the push-pull model to understand demand for community-based tourism (CBT) in sub-Saharan Africa (SSA). Data was collected through an online Google Form survey undertaken with respondents in Eberswalde, Germany. The findings show that there is a substantial international demand for CBT. The push motives behind the demand are not only limited to interaction, novelty seeking, authentic and new knowledge and sharing economy ethos, but also include physical motives of relaxation. This is in contrast to a dominant argument that motives for CBT represent the dichotomous polarized discourses of *soft* versus *hard* with reference to the notions of interaction *versus* relaxation. The findings also show that the mere presence of natural and cultural resources does not structure pull motives, but critical in pulling tourists are the traditional use of the resources by the local community, safety and security, accessibility, quality of service and sustainability aspects of CBTs. In addition, the findings indicate that potential tourists prefer to arrange CBT tour themselves through the internet and website. The implications of these findings are examined for conceptualizing tourism demand and motives and marketing of CBT in SSA.

**Key words:** Community-based tourism; Sub-Saharan Africa; international tourism demand; tourist motivation

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### INTRODUCTION

The region of Sub-Saharan Africa (SSA) has recorded a decline in rates of poverty from 56% in 1990 to 43% by 2012 (World Bank, 2017). The region's economic growth is expected to rise to 3.6 percent in 2020 from 2.3 percent in 2017 (World Bank, 2019). Tourism is among the key industries which are driving change in SSA. From a small base of 6.7 million visitors in 1990, the region attracted 33.8 million tourists in 2012 generating over USD 36 billion and 2.8% of GDP in the region (World Travel and Tourism Council (WTTC), 2013). In 2017 tourism's direct contribution to GDP was USD 43.7 billion or about 2.7 of total GDP (WTTC, 2018). Attractions that draw international

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tourists to SSA have mainly been nature-based to iconic state-controlled national parks and game and forest reserves. This said, tourism's potential to enhance poverty alleviation in the region depends on tourist direct visits and spending in local communities.

Community-based tourism (CBT) is a form of tourism that involves tourists visiting and experiencing local community's cultural and natural heritage resources, where the community has a substantial control over, and involvement in their development and management, and where a major proportion of the benefits remain within the community (Rozemeijer, 2001). CBT provides to urban or (more commonly) rural disadvantaged communities opportunities for new income opportunities to complement traditional livelihoods, including for selling local products (Rozemeijer, 2001; World Tourism Organization, 2002; Rogerson, 2006, 2007; Teh & Cabanban, 2007; López-Guzmán et al., 2011; Stone & Rogerson, 2011; Croes, 2014; Reggers et al., 2016; Wang et al., 2016; Thompson et al., 2016; Dodds et al., 2018). Although CBT is not a panacea for all rural impoverished areas, under certain circumstances it can contribute both to economic diversification and the consolidation of small-scale traditional livelihoods by providing complementary revenue (Manyara & Jones, 2007; Zapata et al., 2011).

Consequently, many developing countries currently promote it as an alternative form of tourism development which is intended to counter unsustainable practices of conventional mass tourism to nature-based attractions, and as an inclusive type of tourism that, in contrast to state or privately-owned designated sites promotes community ownership and development (Rozemeijer, 2001; Hall, 2010; Mgonja et al., 2015; Mtapuri et al., 2015; Atanga, 2019; Strydom et al., 2019).

Despite the promising benefits of CBT initiatives, several academic studies and industry reports indicate that their economic performance is relatively poor (Goodwin & Santilli, 2009; Stone & Rogerson, 2011). Most CBT initiatives are observed to have a low economic impact on poverty alleviation as compared to the effects of mainstream tourism or other alternative economic activities (Mitchell & Muckosy, 2008). In addition, many initiatives are short-lived due to a failure to self-sustain financially especially after external funding from donors and NGOs ends (Sebele, 2010; Salazar, 2011; Zapata et al., 2011; Mgonja et al., 2015). Existing studies attribute CBT failures to several factors which include limited funding, inadequate infrastructure as well as know-how necessary for planning, implementing and monitoring business-oriented activities, unfavorable remote locations, and limited connection to mainstream tourism enterprises and existing tourism supply chains (EplerWood, 1998; Akunaay et al., 2003; Nyaupane et al., 2006; Anderson, 2015; Mgonja et al., 2015). In addition, its benefits often are co-opted and monopolized by elites as a result of exclusion of the poor/have nots from CBT structures (Mowforth & Munt, 2003). In addition, from the point of view of CBT business, a core factor underpinning CBT problems in SSA – and the concern of this study – is their inability to attract adequate number of tourists for sustainable operations (Goodwin & Santilli, 2009; Mtapuri et al., 2015; Lubbe et al., 2016; Atanga, 2019). In SSA CBTs depend highly on international tourists, especially from Europe, to generate profits and financial contributions to the local economy (Mitchell & Ashley, 2007; Rogerson, 2007; Kayat, 2014). In some research it is reported almost 50% of mainstream European tourists express an increased interest in CBT products (CBI, 2015) but CBT initiatives still receive a relatively limited number of these international tourists. Beyond their failure to attract tourists from their source markets, CBT initiatives often fail even to capture adequate market share from tourists visiting state and private-controlled national parks and reserves in their vicinity. For example, in Tanzania, while state-controlled parks and reserves receive more than one million tourists annually, CBT initiatives located in villages around the parks receive only about 30,000 tourists (URT, 2017). Arguably, CBT initiatives in SSA hold

limited marketing information and skills necessary to attract and satisfy international tourists (Goodwin & Santilli, 2009; Anderson, 2015 Mgonja et al., 2015).

In most cases, they depend on either intermediaries such as responsible tour operators or support from NGOs to carry out the marketing function (Lwoga & Asubisye, 2016). For sustainable CBT initiatives in SSA an improved knowledge about international market demand, especially of tourist motivations for CBT products is warranted.

Pull-push motivation theory places motivations to visit tourism products into the categories of *push* and *pull*. Push factors include socio-psychological motives and forces in people's lives that generate the desire to travel and visit places (Klenosky et al., 2007; Sing'ambi & Lwoga, 2018). Pull factors include destination/product-generated forces that attract people to select one destination/product over another once the decision to travel has been made (Klenosky et al., 2007). The extant knowledge regarding motivations to visit CBT products, based on pull-push theory, is criticized to have emerged mostly from other regions than SSA, and from examination of CBT tourists during their actual visits and post-visits rather than pre-visits. It thus overlooks the demand insights from SSA perspective, and from the pre-visit tourists in their originating region. It is well-known that differences exist in cultures, tourism economies, history, geopolitics, social and demographics between SSA and other world regions that influence the way foreign tourists perceive SSA tourism products (Timothy & Nyaupane, 2009).

In particular, it is not clear whether potential international tourists to SSA – a region well-known for nature-based tourism - have CBTs as a preferred attraction in their minds, and how this would happen, before actual visits. This knowledge is vital for the development and marketing of CBT products and for their financial sustainability.

Understanding the SSA CBT market from the perspective of potential international tourists during pre-visit may lead to widening insight into demand, and thus, the estimation of the potential marketability of CBTs. This exploratory study based on push-pull theory examines potential German tourists, mostly from Eberswalde, a university town near the German capital (Berlin), and seeks to address a range of issues surrounding potential demand for SSA CBT. The study specifically intends to answer the following questions: Are Europeans (specifically Germans) interested in choosing SSA CBTs as part of their holiday experiences? What factors motivate them to consider CBTs? What are means through which they receive information about SSA CBT? How would they wish to arrange their travel to SSA CBT destinations? An exploration of the demand for SSA CBTs during pre-visits – when their views are limitedly intertwined with on-travel experiences - allows for a broader understanding of tourists' choice to visit CBTs. In addition, it provides critical inputs to CBT coordinators and practitioners to determine appropriate CBT product development and marketing strategies.

## **THEORETICAL FRAMEWORK**

### **Community-based Tourism**

Since the 1970s two significant changes are observable concerning the tastes of tourists and a new direction in tourism development agendas to support the inclusion of local communities. On the one hand, tourist tastes moved towards experiences (apart from mass tourism) and in destinations with a greater focus on local customs, history, ethics, ecotourism and environmental-friendly activities (López-Guzmán et al., 2011).

On the other hand, tourism linked to a community's inherent cultural and natural resources and to active participation of local communities became key influences in fostering the upliftment of such communities (López-Guzmán et al., 2011). An increased interest in community heritage and culture, as well as ownership, participation and management of tourism activities by local communities shaped the concept of

community-based tourism (CBT) (Murphy, 1985; Rozemeijer, 2001; Mtapuri et al., 2015). It is argued that the concept of CBT emerged as part of counter-cultural responses and sustainable alternative to mass/mainstream tourism and its negative impacts upon the environment and the socio-cultural aspects of destination communities (Goodwin & Santilli, 2009). CBT is one among several types of alternative tourism that are considered to have potential for achieving the goals of sustainable tourism and development (Atanga, 2019). Most alternative kinds of tourism, including ecotourism, place the natural environment and its conservation as the core subject of their developments with their operations often favoring elite business and state interests. By contrast, CBT is an approach that focuses on the community dimension of tourism with the hope of placing the needs and capabilities of communities at the forefront of tourism development (e.g. Heenan, 1978). Since its emergence in early tourism works of the 1970s, many scholars, activists and practitioners have attempted to define CBT (Strydom et al., 2019).

Goodwin & Santilli (2009) broadly define it as tourism that is owned and/or managed by communities and intended to deliver wider community benefits. Lapeyre (2010) views it as an activity which, through increased intensities of participation, provides widespread economic and other benefits and decision-making power to communities, and advocates capacity building and empowerment. Zapata et al. (2011) consider it as any business organizational form grounded on the property and self-management of the community's patrimonial assets, according to democratic and solidarity practices; and on the distribution of the benefits generated by the supply of tourist services, with the aim at supporting intercultural quality meetings with the visitors.

Overall, several features define CBT (Strydom et al., 2019). These include location, participation, equitable distribution of benefits, empowerment and ownership, and activities. In terms of location, scholars agree that CBT takes place and utilises resources, mainly people's way of life, *culture* and nature – conventionally - within a small rural community, but today extends also into urban settings. In terms of participation, CBT management is done by community members who can influence the decision-making, development and monitoring processes. Regarding the equitable distribution of social and economic benefits, local communities capture most revenue generated on site and maximise linkages for the local economy. Collective benefits are provided through contributions to community funds for the development of community assets such as schools, clinics, grinding mills, water wells, and through the creation of opportunities such as paid employment in the CBT enterprises, micro-enterprise sales and purchases from local industries. In terms of empowerment and ownership, since local inhabitants fully and actively participate in the management of CBT, the community members gain institutional and managerial capacity, and a sense of ownership of tourism. Although what constitutes an acceptable balance between individual initiatives and community benefits is contested, the importance of ownership and/or management by communities for empowerment is viewed as significant (Kontogeorgopoulos et al., 2014).

Conventionally, most CBT activities focus on nature conservation through an ecotourism product in rural context; more recently, it involves a broader range of products such as rural and urban local culture and folklore, lodges or homestays, walking trails to community heritage assets, local restaurants, interpretation center, souvenir shops, local museum and cultural centers, camping sites, as well as local guiding and traditional transport service/attraction (Goodwin & Santilli, 2009; Zapata et al., 2011). These activities and products are organized differently, ranging from a purely communitarian co-operative (village tourism) to several community enterprise group or NGOs, to more conventional destination, public and business management models. (Zapata et al., 2011). Hitchins & Highstead (2005) caution that structure of CBT often

subscribes to some forms of charity, thereby depending on donors and fail to survive as independent entities in the long-term. However, because its core function in tourism as a commercial business rather than a charity function, CBT's structure needs to build a sustainable enterprise that is self-sufficient (Hitchins & Highstead, 2005).

In most cases, the CBT structures which succeed in ensuring economic sustainability, apart from being in prime areas and well connected to the private sector, are marketing-oriented in their function (Hitchins & Highstead, 2005). Thus, understanding CBT market is critical to the structuring of a successful CBT entity.

### **Tourists' Choice of Tourism Products: Push-Pull Theory**

The quest for understanding the choice of a tourism product falls within the domain of tourism marketing theories, and specifically, motivation, consumer or tourist behavior theories. The theory of *push* and *pull* is the most dominant (Klenosky et al., 2007). Push-pull theory posits that individuals visit places because they are *pushed* by internal desire and *pulled* by external forces (Crompton, 1979; Klenosky et al., 2007). The importance of the theory is inherent in its *push* and *pull* dimensions that represent the two major segments of the tourism system, that is, the *demand and supply*. Regarding this, the theory has been useful in directing tourism managers that, individual tourists have control over their decision to visit places, and it is up to the managers to address the motivation *benefits sought* of tourists (Sing'ambi & Lwoga, 2018). Push factors refer to motivations including individual internal and psychological forces that cause or *push* them to visit places outside their usual environment (Klenosky et al., 2007).

They are specifically a set of needs that cause a person to engage in a tourism activity, and in most cases, occur because of cultural and socio-psychological disequilibrium that a person feels, and requires a travel experience to be corrected (Park & Yoon, 2009). Regarding this, the push factors or motivations often are intangible and tourist-origin oriented (Park & Yoon, 2009). Maslow's hierarchy of needs, which puts human needs into the categories of physiological, safety, social, esteem and self-actualization, posits that the next need appears once the lower need is satisfied (Iso-Ahola, 1982). This means that a person's decision to visit a place is associated with her/his requirements, and adjusted according to the need that has to be fulfilled. Although the hierarchy of needs has been criticized, the category of needs such as the need for recognition, self-esteem and self-actualization, provides insights into the push factors.

Most existing empirical studies which investigate tourist motivations focus on general or specific kinds of tourism rather than specifically on community-based tourism products. Goeldner & Ritchie (2006) differentiate four categories of tourist motivation, namely physical such as relaxation, cultural such as discovering new geographical areas, interpersonal such as socializing and meeting new people, and prestige such as self-esteem and self-actualization. Pearce & Lee (2005) argue that escape from a perceived mundane environment, relaxation, relationship enhancement and self-development are central motivations for all types of tourists. Jang & Wu (2006) revealed that knowledge-seeking, relaxation and family togetherness are significant motivations. The limited studies that address CBT related products have found similar motivations. For example one report on European tourist's expectations and demands for CBT argues that CBT tourists' motives can be put into two polar categories (CBI, 2015). These are *hard CBT tourists* who seek deep, genuine cultural experiences and the authenticity of community life and *soft CBT tourists* who seek interaction with local communities but with some levels of comfort. Nevertheless, with reference to tourists visiting rural tourism villages in Korea, Park & Yoon (2009) found that relaxation represents a central distinguishing motivational theme, followed by *interaction, learning, family togetherness, novelty* and *excitement*. Guttentag et al. (2018) examine tourists' choice to reserve and stay in local

rural residences in Europe and America through Airbnb and disclosed interaction is a central motivation, followed by *home benefits* (staying in a home-like environment), *novelty, sharing economy ethos* (contributing to local communities economically and environmentally) and *local authenticity* (need to have an authentic local experience in a non-touristy neighborhood). Agyeiwaah (2013) focused on international tourists' motivation for choosing homestay in Ghana, and found the following motivations as important: (i) socio-cultural motives such as interaction with local folks, making new friends in Ghanaian community, enjoying authentic local experience, self-development and relaxation, speaking Ghanaian language, cooking Ghanaian foods, enjoying a sense of home, understanding local lifestyle and experiencing Ghanaian religious life, and (ii) educational motivations such as learning new things from local communities and serving in local schools. According to Agyeiwaah (2013) the interaction with local people was the most important motivational attribute for international tourists' choices of homestay in Ghana. Overall a debate still exists on whether push motives are limited to either hard or soft categories or a plurality of motives, including whether relaxation or interaction is the most important factor. Pull factors refer to destination-generated forces that attract individuals and influence them to select one destination over another once the decision to travel has been made (Klenosky et al., 2007; Sing'ambi & Lwoga, 2018). They are the functions of the tourism product *supply* that stimulate tourists to choose it (Hsu & Lin, 2011). These include destination attributes such as its natural and cultural attractions, infrastructure that translate into access, service dimensions such as accessibility, cost, safety, quality, social facilities, sanitation and comfort, and the extent the image of a destination is promoted (Jang & Wu, 2006; Isa & Ramli, 2014). Destination attractions are considered key constituents in *pull* factors because they translate into activities that tourists can be engaged in and build the *image* of the destination (Sing'ambi & Lwoga, 2018). In fact, activities are considered as central to understanding the tourism decision-making process because they not only translate directly to action or behaviour but can also be treated as the outcome of tourist preferences (Mumuni & Mansour, 2014). This means that, with its inherent association with attraction, tourism activity forms an important criterion that affects tourist's choice of a destination. In general, the kinds of tourism activities that can *pull* tourists to visit a place can be put into various categories. These include visiting historic/cultural sites, challenging nature-based activities, relaxing nature-based activities and pleasure-based activities (Mehmetoglu, 2007). Choi & Tsang (2000) offer a different categorization scheme, that is, sightseeing activities; outdoor sport activities, entertainment activities, and friends/relatives visiting activities from activity items. In addition, Madrigal & Kahle (1994) consider visits to ancestral homelands as another tourism activity. Studies that have focused on rural destination environment - albeit not necessarily on CBT - find that while nature and scenery for passive tourist gaze or more physically demanding outdoor activities are dominant *pull* factors (Kline et al., 2014), rural culture and way of life form a minority or secondary interest (Sidalı & Schulz, 2010). The rural culture and way of life is, however, popular as an attraction to special-interest tourists such as those interested in local wine and foods, specific outdoor sports and wellness pursuits (Sidalı & Schulz, 2010; Kline et al., 2014; Perkins et al., 2015). In the case of South Korea, agriculture, cultural and historical elements in the countryside are important attractions to a number of rural tourists (Park et al., 2004). In rural South Carolina, USA Huang et al. (2016) found that nature-based and less-adventurous sports-related activities, heritage sites, local souvenirs, local foods and festivals were popular *pull* factors.

Based upon research in rural Portugal using an activity-based approach Eusébio et al., (2017) revealed that visitors were mostly motivated by - in rank order - resting, appreciating the landscape, contact with nature, cultural enrichment (visiting historical

villages), tasting local gastronomy, visiting monuments, visiting friends and relatives, and interacting with local people. The following activities were least referred to when visiting the countryside: participating in traditional local economic activities, going on thematic tours (e.g. wine, chestnut and blueberry tours) and fishing (Eusébio et al., 2017).

According to Eusébio et al. (2017) these results suggest four categories of tourists based on activity-attributes. These include (i) *active visitors* who undertake a wide range of activities and mostly in nature-related activities such as observing local fauna and flora, appreciating the beauty of the landscape, and in cultural activities such as visiting museums, monuments and historic villages, tasting local cuisine as well as interact more than others with local residents; (ii) *Passive nature observers* who explore the countryside in a relatively superficial manner, as they undertake a limited number of activities, mainly landscape observation, contacting with nature and resting; (iii) *Inactives* who engage in few activities mainly resting and visiting friends and relatives; and (iv) *Summer Family Vacationers* who have a higher tendency to interact with locals in a VFR context, to go to the beach, contact with typical local products and economic activities (e.g. tasting local cuisine, wines and agricultural products, buying local crafts and visiting historical and traditional villages). Other research studies on tourist motivation find that visiting friends and relatives (VFR) attracts tourists are nostalgically interested in revisiting rural places where their family roots lie (Pesonen, 2012; Rodrigues et al., 2012; Rogerson, 2018; Rogerson & Rogerson, 2019). Germany (the focus of this study) historically colonized parts of SSA including Togoland (now part of Ghana and Togo), Cameroon, German East Africa (now Rwanda, Burundi and Tanzania) and German South-West Africa (now Namibia). Consequently, as a result of the colonial record there are many places in Africa with German colonial heritage and offer opportunities that their existing heritage assets and history might attract certain Germans to visit African destinations for curiosity about their history. Overall, in terms of the tourism market of Germany the enjoyment of natural scenery was disclosed as the leading factor in choice of a place to visit in surveys undertaken in 2007/2008 and again in 2015/16 (German Consumer and Travel Trade Research, 2008 – in Koppalova 2014). According to ADAC Reise-Monitor (2016) the motivations of most German tourists are to experience beautiful scenery (58%), sunshine and nice weather (57%) and bathing/swimming (46%), followed by culture including experiencing the local life (47%) and getting to know other countries and cultures (40%) as the most important reasons to go on holiday. The findings reported by the German Consumer and Travel Trade Research of 2008 show also that experiencing local culture and interacting with the local people, and visiting historic sites, museums and galleries as among important reasons for Germans to go on holiday. This said limited research has examined specific motives for Germans to visit CBT products in SSA.

Beyond tourism activities, another important key component of *pull* factors is service. Regarding service dimension, Hsu & Lin (2011), in a study of CBT product *homestay* motivation in Taiwan, found that quality, prices, sanitation and comfort, transportation and social demands and facilities were important *pull* factors in tourist's selection of homestay. Wang (2007)'s research on Naxi homestays in China found the destination activity attribute of Naxi culture and lifestyle to be the primary motivation for guests' choice of homestay. Other relevant factors include service attributes such as price, comfort/convenience in the houses and local architecture. Agyeiwaah (2013) found that tourist's considerations that *homestay* as a way of giving back to locals, as a product that offers lower prices and value for money, and promotes community development were the most important *pull* factors in her/his choice of homestay in Ghana, followed by tourist's considerations of homestay as secured form of accommodation offering comfortable and convenient quality service (security and comfort), and homestay as promoter of

environmental preservation (environmental factors). In addition, it has been shown that European CBT tourists consider health and safety, authentic accommodation, eco-friendly and social responsibility *sustainability* features and internet access among key service factors that would *pull* them to a particular CBT place (CBI, 2015). Mtapuri et al.'s (2015) Visitor Affinity Index (showing tourists' expectations for CBT) indicates that quality of visitor access and infrastructure (e.g. road and water), facilities (e.g. toilet, shower and bath, accommodation), quality versus price value, cleanness and hygiene, and general safety and security as important service elements. What emerges from a literature search is that while relaxation and nature seem to be fundamental *push* and pull factors in international tourists' choice of visiting tourism places in general, for CBT products issues of interaction and rural culture seem important *push* and pull factors. In addition, consideration of CBT as a way of giving back to community, and concerns over security and safety are also key in tourists' choice of CBT. This conclusion needs to be considered with caution as most existing scholarship relates only to a single unit of a CBT product that relates to accommodation (ie the *homestay*) whereas as discussed earlier a tourist consumes diverse array of product lines when visiting CBT places. Further, with the exception of Agyeiwaah (2013), most studies focus on contexts other than SSA. Of note also is that few studies examine tourist motivations at the pre-visit stage. This gap in knowledge limits the holistic understanding of CBT demand given that the nature of the tourism supply, economic, cultural and geographical settings, as well as images, and thus the set-up of CBT products, differ between sites in the developed world and in SSA, and the tourist motivations differ between pre-visits and on-visit stages due to on-travel influences.

## **METHODOLOGY**

### **Research Design and Study Area**

The study is part of a wider research undertaking that intends to explore and examine the market for CBT in sub-Sahara Africa. This paper is an exploratory case study drawing on the German market. The study was basically an exploratory cross-sectional research which was guided by critical realism and its ontomological and epistemological underpinnings for mixed-method research (Creswell, 2003). With this philosophical direction, while objectivism was maintained, the complexity of the social phenomenon, that is, people's choices and the motives behind them, was recognized by enabling a role for values and interpretive meaning. The study applied mixed methods, combining close-ended and open-ended questions concurrently using a mixed survey instrument as articulated by Creswell (2003) and Tashakkori & Teddlie (1998).

While the quantitative part of a mixed survey instrument with close-ended questions framed within the pre-conceived constructs from past research dominated, the qualitative open-ended questions aided the elicitation of qualitative and contextual information free from the conceptual boundaries. This helped the study to gain in-depth insights that aided the interpretation of the quantitative data and revealed new issues regarding motives for choosing SSA CBTs. The study focused on residents of Eberswalde, a major town and administration centre of the Barnim District in Brandenburg State, 50 kilometers from Berlin. The deliberate selection of German market for research was guided by a number of reasons. First, German residents lead other European residents in terms of outbound travels, meaning that they have a high propensity to travel and spend abroad (CBI, 2015). Second, for sub-Saharan Africa, Germany is among top three tourist originating countries (see URT 2018). Three, it is established that Germans are increasingly interested in unique and authentic experiences such as engaging with the local community, and are ethically conscious tourists who consider the question of their contribution to local communities (CBI, 2015).



### Sampling Procedures and Data Collection

The target population were potential tourists to SSA in their country of origin, that is, people living around Eberswalde University of Sustainable Development. The sample size was 150 respondents. The study conducted random sampling inside and outside the premises of the Eberswalde University since relatively educated people are more likely to travel abroad. Respondents interested in participating in the study were informed about the aims of the study and the anonymity of their responses and were asked to provide their email addresses. A total of 121 persons answered the questionnaire. The respondents, as shown in Table 1, involved 60.3% female and 39.7% male. In terms of age range the largest share ranged between 18 and 29 years (48.8%). In terms of occupation, the majority were university students (45.5%), followed by university staff including administrators, academicians, researchers and scientists (27.2%) and those engaging in private businesses (12.4%). Respondents were well-educated as is shown on Table 1; the majority (88.4%) had no children also reflecting that the sample is dominated by youth and students.

**Table 1.** Characteristics of respondents (N = 121)

<b>Variable</b>	<b>Frequency</b>	<b>%</b>
<b>Sex</b>		
Female	73	60.3
Male	48	39.7
<b>Age</b>		
18 – 29	59	48.8
30 – 49	31	25.6
50 – 64	30	24.8
65+	1	0.8
<b>Education</b>		
Bachelor/ F-H Abschluss	53	43.8
Master/ Universitätsabschluss	49	40.5
Promotional/ PhD	19	15.7
<b>Number of Children</b>		
No Child	107	88.4
1	8	6.6
2	6	5.0
<b>Occupation</b>		
University Student	55	45.5
University Administration	16	13.2
Journalist	3	2.5
Lecturer/Researcher/Scientist	13	10.7
Professor	4	3.3
Art Therapist	3	2.5
Teacher	5	4.1
Consultant/Travel or Tourism Agent	7	5.8
Business	15	12.4
<b>Visited SSA Before?</b>		
No	60	49.6
Yes	61	50.4

A mixed survey instrument was used to collect data including behavioral, opinion and attribute-based data. The instrument had both close and open-ended questions, prepared in English but with some German descriptions. The close-ended questions dominated the survey, and had scaled and categorical questions. The instrument was designed to start with the categorical question regarding choice of visiting SSA in general

(1 = No, 2 = Maybe, 3 = Yes), including countries of preference (nominal) and image of SSA tourism with eight items adopted from past research (Mtapuri, 2015) and anchored at the agreement scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

It then continued with choice of SSA CBT in specific using variables such as wishes to participate in CBT when visiting SSA in future (1 = No, 2 = Maybe, 3 = Yes). Regarding this, those who responded *Yes* were directed to respond to question regarding motives behind choice to participate in CBT when visiting SSA in future with ten items adopted from past research (Park & Yoon, 2009; Agyeiwaah, 2013; Guttentag et al., 2017; Eusébio et al., 2017) and anchored at the importance scale ranging from 1 = Not Important at All to 5 = Very Important. In addition, an open-ended question asking them to provide further motives behind their choice to visit SSA CBT was provided. On the other hand, those who responded either *No* or *Maybe* were subjected to an open-ended question asking them to provide reasons behind. The instrument also inquired about source of information about SSA CBTs and preferable travel arrangements to SSA CBT destinations using items borrowed from past research (CBI, 2015). The survey instrument was pre-tested before implementation using the survey tool (Google form web-based questionnaire) during November-December 2018. Data were exported from the web-survey tool (Google Form) to Excel and SPSS, and were cleaned, coded and checked for appropriateness. Since the study is exploratory in nature, exploratory and descriptive statistics such as mean and standard deviation statistics were used to analyse scaled quantitative data. Frequency and percentage tables were used to analyse categorical data, and thematic analysis was used to draw themes and meaning from qualitative statements.

## FINDINGS

### Respondents' choice of SSA in general

Descriptive statistics were employed to explore demand for SSA and specifically its CBT. Respondents were asked the question: "Do you wish to go on holiday in SSA?"; in total 72.7 percent of them responded "Yes" and 27.3 percent of them responded "Maybe" (Table 2). Respondents who answered "Yes" were asked to mention which country they wish to visit in SSA. As indicated in Table 3, the most preferable country destination is South Africa (20.7%), followed by Namibia (12.5%) and Tanzania (10.7%).

The results indicate that countries in West Africa, with exception to Ghana, are less popular. Respondents were also asked to reveal their image of African tourism. The results indicated in Table 4 show overall that respondents hold a positive image about the SSA tourism product (overall mean > 3.5). They specifically hold a good image of the SSA tourism product in terms of its authentic culture and unspoiled nature (mean > 3.5). By contrast, the findings indicate that respondents hold relatively poor image of SSA tourism product in terms of accessibility (mean = 3.02), easiness of obtaining touristic information (mean = 3.24), and safety and security (mean = 3.23).

### Respondents' choice of SSA's CBT

In order to understand their demand for SSA's CBT in particular, respondents were asked "If given a chance to go on holiday in SSA, would you wish to participate in CBT and engage with local communities in their rural/urban setting as part of your holiday?". The affirmative findings are reported on Table 5.

**Table 2.** Choice of destination in Sub-Sahara Africa

	Frequency	Percent
Wish to Visit SSA		
Maybe	33	27.3
Yes	88	72.7
<b>Total</b>	<b>121</b>	<b>100.0</b>

**Table 3.** Preferable SSA Countries for Visits

<b>SSA Region and Countries</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Southern Africa Region</b>		
South Africa	25	20.7
Namibia	15	12.4
Botswana	8	6.6
Zimbabwe	8	6.6
Lesotho	4	3.3
Malawi	2	1.7
Zambia	2	1.7
Mozambique	1	0.8
<b>Eastern Africa Region</b>		
Tanzania	13	10.7
Kenya	11	9.1
Uganda	7	5.8
Ethiopia	4	3.3
Rwanda	2	1.7
<b>Western Africa Region</b>		
Ghana	7	5.8
Senegal	1	0.8
Cameroon	1	0.8
Cote d'Ivoire	1	0.8
Togo	1	0.8
Benin	1	0.8
Guinea	1	0.8
<b>Islands</b>		
Comoros	3	2.5
Seychelles	3	2.5
<b>Total</b>	<b>121</b>	<b>100</b>

**Table 4.** Image of tourism product in general in SSA

<b>Measurement Item</b>	<b>Mean</b>	<b>Std. Deviation</b>
its products offer value for money	3.42	1.031
it is safe and secure to visit	3.23	0.846
it offers quality service	3.44	0.982
<b>it can be easily reached/accessed</b>	<b>3.02</b>	<b>0.894</b>
its information is easy to obtain	3.24	0.875
<b>it has unspoiled nature</b>	<b>4.36</b>	<b>0.874</b>
<b>It has authentic culture</b>	<b>4.37</b>	<b>0.914</b>
It has plenty of historic sites and monuments, including German monuments in Africa	3.32	1.008
<b>Overall</b>	<b>3.67</b>	<b>0.928</b>

**Table 5.** Wish to participate in CBT when visiting SSA in future

<b>Wish to Participate in CBT</b>		
Maybe	23	19.0
Yes	98	81.0
<b>Total</b>	<b>121</b>	<b>100.0</b>

In order to explore motivation behind choice of SSA CBT, respondents were requested to rate the importance (1 = "Not important at all" to 5 = "Very Important") of various motivations in influencing their wish to choose SSA CBTs as part of their holiday.

Table 6 indicates that *push* factors such as “interacting with local communities” (mean statistics of 4.26, standard deviation of 0.801) and “learning new things from local communities like preparing traditional foods/drinks, traditional knowledge and practices” (mean statistics of 4.21, standard deviation of 0.763) were the most important, followed by “giving back to local communities, contributing something directly to them” (mean statistics of 4.12, Standard Deviation of 0.905). On the other hand, *pull* factors such as “local fauna and flora, and their traditional uses” (mean statistics of 4.45, standard deviation of 0.806) and “history and heritage of local communities” (mean statistics of 4.18, standard deviation of 0.707) were the most important motivations, followed by “non-touristy neighborhood” (mean statistics of 4.05, Standard Deviation of 0.999). In addition, while the opportunity for “volunteering in local community activities such as in schools, clinics and orphanage centers” was a less important motivation (mean statistics of 2.91, Standard Deviation of 1.118), the need for “relaxing and entertained by local community through local festivals and entertainments” was rated as fairly important (mean statistics of 3.84, Standard Deviation of 0.919).

**Table 6.** The importance of different factors in influencing participation in community-based tourism in sub-Sahara Africa

	Mean	Std. Deviation
<b>interacting with local communities</b>	<b>4.26</b>	<b>0.801</b>
learning new things from local communities like preparing traditional foods/drinks, traditional knowledge and practices etc.	4.21	0.763
experiencing traditional activities such as healing, rituals, making of traditional huts and vernacular architecture	3.88	1.002
<b>volunteering in local community e.g schools, clinics, orphanage centres</b>	<b>2.91</b>	<b>1.118</b>
giving back to local communities, contributing something directly to them	4.12	0.905
staying longer with communities for in-depth experience of their daily life	3.75	0.933
Relaxing and entertained by local community e.g. festivals, entertainment	3.85	0.919
<b>local fauna and flora, and their traditional uses</b>	<b>4.45</b>	<b>0.806</b>
history and heritage of local communities	4.18	0.707
non-touristy neighborhood	4.03	0.999

An open-ended question was asked to respondents in order to obtain more insights regarding motivations behind their choice of SSA CBT. Table 7 shows the key responses. Some respondents mentioned that “meeting and interacting with local people is the best way to discover and know a country better”. CBT offers opportunities to meet local people and satisfy tourists’ desire to know better and discover a country. Motives such as “to ask for advice from local people regarding what to see and discover in the community, like local hidden objects such as gems” were mentioned by some respondents.

This means that some potential tourists believe that the local community holds some experience that they would otherwise not get if not engaged in CBTs. They would thus wish to engage in an experience of discovery about communities and their beliefs. Other reported reasons include “visiting local religious places”, “having unique experience like seeing different things”, “spending a few nights with local communities”, “getting deeper into local culture”, “getting in touch with people behind the normal scenery of landscape and wildlife, what routines and rituals they have and how their day-to-day life looks like”, and “to know point of views of local communities”.

They also include “to learn and know local cultures and traditions including traditional rituals and wisdom, cuisine (food preparation and tasting). With respect to learning some potential tourists consider their interaction with the local communities as mutual exchange where they also learn by talking to the local people.

**Table 7.** Responses to open-ended question regarding reasons for choosing SSA CBT

Themes	Verbatim
To Meet friends and relatives and families	...a friend of mine whom we want to visit in Tanzania works in communities... ...I would like to get in contact with young families out there...
To Discover a country	"Because it is the best way to discover a country" "the most interesting part of a country is its people" "To get to know the Country and the people better."
To get into local culture	"yes, because I think it is important to get into local culture and to get to know local people"
Mutual exchange and Interaction	"Yes, if it is a mutual exchange" "exchange ideas" "engaging with the local culture is always one of my strongest motivations for travelling" "to talk to the local people" "If I just want to see mountains and elephants, I can watch a BBC documentary. The real experience begins with interaction"
Authentic/real local experience	"...get in touch with local people in real world..." "Get to know culture and the authentic local life" "would like to experience the real Africa away from the big cities" "it's part of having a genuine local experience,"
To learn local traditions	"I am very interested to learn more about local traditions" "To be able to celebrates and respects traditional cultures, rituals and wisdom."
Local food experience	"Culinary", "I would love to engage in, for example, cooking"
To know/learn local culture and society	"Getting to know the local culture is important for me" "I would like to meet nice people and engage in conversation or learn something, for example a cooking course, but also learn about politics and society" "It is interesting to try to see how people live in other countries"
To discover local hidden objects/part	"asking for advice what to see especially hidden gems"
Religious	"visits to a local church are things I like to do"
Spend somedays with local communities	"spend a few nights there with local communities"
Have unique experience	"...and have a unique experience", "...in order to see different things"
Getting deeper into local culture	"I like to get deeper into the culture(s), to get in touch with people behind the normal "Scenery" (beautiful landscape and Wildlife Safaris)"... "see how they live, what routines and rituals they have and how their day-to-day live looks like, how they feel etc"
Its most interesting part of holiday	"I think that would be the most interesting part of a holiday"
Be integrated in the community	"I would like to feel myself integrated in the community"
To know local point of view	"I would like to know more About their way of handling Things, their point of view"
To contribute to community	"But the people who offer such opportunities should really profit from it themselves. And I don't want to be a part of postcolonial tourism, where communities are reduced to their "traditional" lifestyle, only to satisfy white tourists and give them "authentic" experiences" "I would like to support local communities through tourism" "means of empowerment for communities (but it has to be done right)"
To avoid ghetto-situations (touristic settings)	"It's a way to avoid typical ghetto-situations like in big hotels"

Another notable response was that of "to avoid ghetto-situations" and viewing CBTs as a means to avoid ghetto/touristic-situations "like in big hotels and towns and

cities". Some potential tourists consider CBT offers authentic or real local experience, and that they will be able to get in touch with the real world of local communities, and experience 'the real and genuine Africa away' which is seen as away from big cities and designated parks. Typical responses included the following:

"If I just want to see mountains and elephants, I can watch a BBC documentary. The real experience begins with interaction".

"Well, in previous holidays, I had several of these kinds of encounters/chances to meet people like that and it was most rewarding. However, I personally make a distinction between ordinary "holiday", where I do not have so much time i.e. 2-3 weeks. In this case, the engagement can only be brief (1-3 days) in order to see different things. The other possibility for me personally is more like a "vacation/journey", where I have more time on my handy (more than 4 weeks). Then, a longer engagement is brilliant".

"I would like to meet nice people and engage in conversation or learn something, for example a cooking course, but also learn about politics and society. But the people who offer such opportunities should really profit from it themselves. And I don't want to be a part of postcolonial tourism, where communities are reduced to their "traditional" lifestyle, only to satisfy white tourists and give them "authentic" experiences".

Respondents who were unsure regarding their choice to visit SSA CBT if given a chance also responded to the open-ended question inquiring the reasons. Responses include "I do not want to interfere with their (local community) daily life" ... "I do not want to be a nuisance". "I think time would be too short to really have an impact" ... "I would love to do that, but it needs be organized in a professional way" ... "safety in terms of diseases". In addition, other responses include "infections", "crimes", and "flying to Africa increases my carbon footprint way beyond my global share". Such results strengthen earlier findings (Table 4) about poor image regarding safety and security, and quality of services reflected with the need for professionally - delivered CBT products are among critical problems that tarnish the image of SSA's tourism. They also add that potential tourists' concerns to sustainability matters such as socio-cultural interference and environmental pollution they might cause when visiting SSA CBTs possibly can affect their choices.

#### **Source of information and Travel arrangements**

The study, as part of demand analysis, asked respondents about the means through which they receive information on SSA CBTs. As indicated in Table 8, a segment of respondents (15.7%) percent had never heard or aware about SSA CBT products.

For the remainder the internet and websites (34.7%), word-of-mouth (26.4%) were the most popular sources for information. Other sources include tourism publications such as guide books, brochure and travel magazine (9.9%), mass media (5.8%) and education institutions (5%). Travel agents in Germany (1.7%) and fairs and exhibitions (0.8%) were the least significant sources of information.

**Table 8.** Sources of information about SSA CBTs

	Frequency	Percent
I have never heard or learnt about community-based tourism products of sub-Sahara Africa	19	15.7
Internet and websites	42	34.7
Tourism publications such as guide books, brochure, travel magazine	12	9.9
Travel agents in Germany	2	1.7
Word of mouth - family members, and friends and relatives	32	26.4
Fairs and exhibitions	1	0.8
Schools, colleges and universities	6	5.0
Mass media such as television and radio stations, and newspapers	7	5.8
<b>Total</b>	<b>121</b>	<b>100.0</b>

In order to understand CBT demand respondents were asked about modalities in which they would wish to arrange their travel to SSA CBT destinations. Several modalities from past literature were considered. Results as shown in Table 9 indicate that the majority (75.3 percent) would wish to arrange the tour themselves ie an individual arrangement. This includes individual arrangement via direct contact with destinations and product providers, via mainstream online booking channels and travel search engines or combining direct contact with product providers and mainstream online booking channels and travel search engines. Almost a quarter of respondents prefer an intermediary, such as tour operators or travel agents, arrange their travel to SSA CBT. A small number would use both intermediaries and individual arrangements, including using friends and relatives who are in SSA (Table 9).

**Table 9.** SSA CBT tour arrangement

	Frequency	Percent
Arrange the tour myself (individual arrangement) via direct contact with destinations and product providers in sub-Saharan Africa	44	36.4
Arrange the tour myself (individual arrangement) via direct contact with destinations and product providers in sub-Saharan Africa, friends who have contacts there	3	2.5
Arrange the tour myself (individual arrangement) via mainstream online booking channels and travel search engines	23	19.0
Arrange the tour myself (individual arrangement) via mainstream online booking channels and travel search engines, Arrange the tour myself (individual arrangement) via direct contact with destinations and product providers in sub-Saharan Africa	18	14.9
Arrange the tour myself (individual arrangement) via mainstream online booking channels and travel search engines, Arrange the tour myself (individual arrangement) via direct contact with destinations and product providers in sub-Saharan Africa, a mix of the last two options	3	2.5
If it is the first time, I'd have it arranged by tour operators; if not, I'd get in contact with providers in sub-Saharan Africa	1	.8
Maybe organized-tour arranged by a local community operator.	1	.8
mix of those, an organized tour by tour operator, that works only with local providers, so that benefits stay at the destination	3	2.5
Organized-tour arranged by tour operators/travel agents	13	10.7
Organized-tour arranged by tour operators/travel agents, Arrange the tour myself (individual arrangement) via direct contact with destinations and product providers in sub-Saharan Africa	1	.8
Organized-tour arranged by tour operators/travel agents, Arrange the tour myself (individual arrangement) via mainstream online booking channels and travel search engines	4	3.3
Organized-tour arranged by tour operators/travel agents, Arrange the tour myself (individual arrangement) via mainstream online booking channels and travel search engines, Arrange the tour myself (individual arrangement) via direct contact with destinations and product providers in sub-Saharan Africa	3	2.5
Organized-tour arranged by tour operators/travel agents, Arrange the tour myself (individual arrangement) via mainstream online booking channels and travel search engines, Mixture between organized tours and individual arrangement	1	.8
Organized-tour arranged by tour operators/travel agents, to be organized by a local friend/relative	3	2.5
<b>Total</b>	<b>121</b>	<b>100.0</b>

## DISCUSSION

Overall, the findings of this study disclose a considerable potential demand for SSA tourism in general, and for CBT in particular and most especially for South Africa,

Tanzania and Namibia. This demand corresponds to potential tourists who would wish to meet and interact with local communities, to experience their lifestyle and traditions, and stay longer with the local community in order better to understand the way people live. Apart from the interaction-based push factor, the findings reveal cultural motives such as novelty, authenticity and gaining new knowledge, especially learning new things from local communities such as preparing traditional foods/drinks, traditional knowledge and practices, sharing economy ethos and issues such as relaxation are important influences. Interaction is expressed by some respondents as the best way to discover and know a country better. Accordingly, CBTs are thought to offer opportunities to meet local people of a country and thus satisfy tourist desires to not only socialize, but also to know better and discover a country “knowledge”. The analysis shows that interaction and knowledge/education appeared the most important push factors for CBT.

The study also reveals that potential tourists would wish to go beyond the normal *common* scenes and ‘get deeper’ into a community’s culture. Qualitative statements such as “getting in touch with people behind the normal scenery of landscape and wildlife, what routines and rituals they have and how their day-to-day life looks like”, and “to know point of views of local communities” express the desire to have unfamiliar and novel experiences that enhance individual’s knowledge. Statements such as “to avoid ghetto-situations” signal a desire for authentic *local* experiences rather than traditional touristic settings such as at hotels or lodges. This implies some potential tourists consider CBT for authentic or real local experience. Such results suggest that CBT planners and managers should design products to satisfy multiple motives including interaction, knowledge/education, novelty and authenticity. To foster interaction, communication is a key, and thus having local communities or guides who can communicate effectively with tourists is critical. Local communities should be set to interact with the tourists in a meaningful and mutually beneficial way. This is where CBT product elements such as home stays, cultural centers and storytelling can be useful. The interaction modality should be accompanied by effective interpretation strategies which can be used to foster knowledge/education.

New (or perhaps interesting) local stories and legends, as well as locally blended tourist facilities like homestays can aid into fostering novelty and authentic experience. In common with other research, the findings in this study reveals the desire to volunteer in local “other” community activities such as schools, clinics and orphanage centers was a less important motivation (Table 6). In this research, relaxation was a fairly important motive behind visits to CBT in Africa combined with relaxation experiences in dominant forms of tourism in Africa such as beach and safari visits. Tourists traveling with the core reason of relaxation would rarely set time aside for volunteering. Regarding CBT, interaction, learning, novelty and authentic experiences, rather than engagement in volunteering in terms of working in the community, may form part of relaxation experience. Arguably, the volunteer motive is expressed in another way, especially with potential tourists’ desire to share economy ethos such as desires to give to “other” communities and contributing something directly to them. Accordingly, the item “giving back to local communities, contributing something directly to them” is an important motive for deciding to visit CBT.

Overall, regarding push motives, the study indicates that interaction is the most important motive. This finding corroborates results by Guttentag et al. (2018) and Agyeiwaah (2013). Multiple motives that involve interaction, a mix of cultural motives, altruistic with some levels of physical relaxation imply that motives behind choice of CBT probably extend beyond dichotomous polarized discourses of *hard* versus *soft* as contended by CBI (2015). Indeed, this research reveals the plurality of potential tourist demand for CBT in Africa and its broader outline dominated by interaction as the most important push motive. Potential tourists to SSA can be attracted by *pull* factors



including local fauna and flora, but in the CBT context are more concerned about their traditional uses, and history and heritage of local communities. With respect to the tourism product in general in SSA, the research highlights potential tourists hold a good image regarding the region's tourism product in terms of its authentic culture and unspoiled nature. Natural and cultural attractions that translate into tourist activities at the destination dominate as *pull* factors, a finding that reflects other studies (see Jang & Wu, 2006; Isa & Ramli, 2014). This said, the findings reveal that what pulls tourists to CBTs in particular is not only the object authenticity of African cultural and natural attractions but also their traditional uses by the communities. While nature including flora and fauna and its scenery are dominant pull factors among general tourists to Africa, their cultural and functional dimensions in terms of community uses, are primary pull factors among CBT tourists. Arguably, while culture, heritage and history are secondary interests to general tourists to Africa (Kline et al., 2014; Sidali & Schulz, 2010) they are primary to potential CBT tourists, who often combine CBT with other attractions. CBT managers should strive therefore not only to showcase community's flora and fauna and natural scenery, but also to portray their functional dimensions, including their historic and cultural values as well as traditional and contemporary uses by local communities. This would portray differences between tourist's experience of nature-based tourism and experience of CBT, and thus justify visits to CBT products.

The results in this study also demonstrate that conventional factors such as accessibility including transport and infrastructure, safety and security, and value for money (quality of services) are important for tourists in deciding to visit CBTs. Several qualitative responses included "crime" and "infections" were expressed by respondents who were unsure whether they would wish to visit CBT. This strengthen the argument that potential tourists' perception of security (peace) and safety including cleanliness and hygiene of facilities (such as toilets, showers, accommodation and kitchens) at the destination are among critical considerations in decisions to visit SSA CBTs. In addition, there is a general concern over the quality of service provided by CBTs, implying that providers of services (e.g. tour guides, home stays, cooks, waiters and waitresses) need to ensure professionalism, cleanliness and hygiene, and comfort in their delivery of service. In addition, the research found that the factor *German spoken at the destination* is important for potential tourists to decide to visit CBT. Interaction is key for experiencing CBTs, and thus communication and access to information through German-speaking tour guides, interpreters and information/interpretation labels with multiple languages are critical in ensuring successful interaction. Findings in this study indicate there is a segment of respondents that are unsure if given the chance that they would visit SSA CBTs. Concerns were highlighted over sustainability elements, especially interference they may cause to socio-cultural and environmental components of the communities, and time available to visit the CBTs. Potential tourists are concerned with the fact that their visit to CBT would interfere communities and may end up being nuisance to local communities. Others expressed concerns about their impacts in environmental pollution especially to remote and rural areas of African communities. Finally, responses indicate that potential tourists are concerned with time factor in their choice to visit CBT in future. They perceive that much time is needed to engage and interact with the local community to satisfy their experience. Of course, it is well known from the past literature that, while experiencing culture often demands substantial amounts of time, tourists travel on finite time budget to capture multiple experiences that they would desire (McKercher et al., 2002).

With reference to distance decay theory (McKercher et al., 2002) demand for CBT products varies inversely with distance traveled which reflects tourists' consideration of time spent to reach the attractions. This suggests that demand for CBT would probably

decline exponentially as time (distance) required increase, with a reservation that most tourists to SSA are traditionally and primarily attracted by warm climate, beach and the wilderness. The implication of this finding is that, the proximity of CBT products to gateways and major tourism iconic destinations like national parks, or on the other hand, the presence of transport facilities such as air transport that can quickly and reliably connect between *iconic* destinations and CBT products may probably influence their potential visitation. Overall, regarding CBT tourist *pull* factors, while attractions, accessibility, services and facilities and their attributes like quality (value for money), safety and security and professionalism appear well in past CBT research (Wang, 2007; Hsu & Lin, 2011; Koppalova, 2014; Mtapuri et al., 2015; ADAC Reise-Monitor, 2016), the sustainability and time factors rarely appears in literature. Arguably, to pull tourist, CBTs should not only focus on promoting natural and cultural heritage attractions, address access, services, facilities, quality and professionalism, but should also promote their sustainability concerns and time-effective experiences. This implies that CBT products can portray consumption-time effective by utilizing its multiple activities to deliver multiple complementary experiences. This will make tourists, especially those who visit SSA primarily for other experiences than CBT, to find a justification for visiting CBTs. In terms of information access the findings point to the internet and websites, word-of-mouth and tourism publications as the most common means through which potential tourists get information about SSA CBT. Such findings indicate that mainstream online booking channels and travel search engines are important means through which potential tourists can individually arrange their travel, others being direct contact with destinations and product providers, and friends and relatives who are in SSA. It is evident that potential tourists prefer individual arrangements than intermediaries and use multiple sources for information.

## CONCLUSIONS

Several studies report the relatively poor economic performance of CBTs (Mitchell & Muckosy, 2008; Goodwin & Santilli, 2009). The limited empirical information regarding potential market demand and its motives make it challenging for CBTs to attract sufficient numbers of tourists in order to be financially sustainable. It is against this backdrop that the research explored potential demand and motives for SSA CBT based on potential German tourists in their pre-visit stage. It is evident based on the empirical findings that potential international tourists for a traditionally nature-based destination - the SSA - have a desire to visit the local communities as part of their holiday travels. There is thus a considerable opportunity for SSA CBTs. It was shown that interaction is the major push motive for choosing to visit CBT products. This is different from motives behind conventional nature-based tourism where the physical factor related to relaxation and excitement is the major motive. This said, relaxation in terms of having fun and being entertained by local community is part of important motives for choosing CBTs the others are search for novel, authentic and education experiences. Overall, the research findings argue for the plurality of motives behind the choice to visit CBTs.

This result contrasts with the conventional argument that the push motives represent the dichotomous polarized discourses of *soft* versus *hard* with reference to the notion of relaxation – the former involving relaxation as key motive while the latter involving authenticity-seeking as central motive. The dichotomous polarized argument understates the plurality of people's motives and choices that this study reveals. For CBT managers and policy makers this implies that motives behind demand for CBT products are complex and not confined simply to either *hard* or *soft* desires. It means that while efforts must be made to provide opportunities for deep interaction and for educative, novel and authentic experiences CBT managers should not overlook opportunities for

satisfying the sharing economic ethos as well as the imperative to ensure a relaxing comfortable experience. Regarding this, relaxation should be complementary part of the CBT experience so as to not overload visitors with too much interaction and intentional learning. The consideration of a sample of potential tourists in their pre-visit, a stage where their desires are not affected by on-travel experiences and interactions, has revealed important issues regarding demand for CBTs. However, due to the small sample size and market confined to a single German locality around Eberswalde, mostly people associated with the university (students and staff) – a university that is committed to sustainable development - and with relatively advantaged potential for travelling abroad, the results can be used as a basic framework for further studies. The study considered a sample of residents in their pre-visit stage in Germany as an origin region. The results might be viewed as biased to the extent that the influence of the on-travel experiences and interactions that tourists would have on their wishes and desire for CBT are not reflected here. Nevertheless, by not considering on-travel effects this study broadens our understanding of tourists' decision-making process of choosing to visit a place based on pre-visit perceptions which can be more genuine and intrinsic motives than motives changes occurring on-travel. In future, the knowledge base about international demand for CBT products can build upon this exploratory study more particularly by the pursuit of larger-scale investigations.

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## **VALUATION AND MOTIVATION OF THE MEETING INDUSTRY: A CASE STUDY FROM GUAYAQUIL, ECUADOR**

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**Abstract:** Conferences and events should be a proposal to develop cities that have facilities for this type of demand. The objective of this empirical study was to analyze the motivations and valuation of participants in an International Congress in Guayaquil City (Ecuador). A survey was applied, for which univariate and bivariate statistical techniques were used. The results show that the participants arrived mainly accompanied, and is a tourist with high spending on their stay. The main motivations were: Learning about the content of the workshops, getting to know the participants, the desire to know new places and contributing knowledge in the workshops. Regarding satisfaction, the most valued variables were: accessibility to the work rooms, the care and cleanliness of the premises, the brightness of the premises and the means of transport for their movements. The

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variables that have a greater influence on tourist satisfaction were: learning about the content of the workshops, getting to know the participants, disconnecting from everyday routine and contributing knowledge to the workshops. Regarding the assessment of the city for the meeting industry, the most valued variables were: the attention and quality of the accommodations, the beauty of the city, the hospitality of the residents and the conservation of the monumental heritage.

**Key words:** Events, congresses, festivals, conventions, Ecuador

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## INTRODUCTION

International tourist arrivals grew by 6% in the first four months of 2018, compared to the same period last year, not only continuing the strong trend of 2017, but exceeding the forecasts of the World Tourism Organization (UNWTO, 2018). Business tourism has gained increasing importance in the last decades worldwide (Iacuone & Zarrilli, 2018). This article focuses on one of the fastest growing segments in tourism, called MICE (meeting tourism, incentives, conferences and exhibitions), which worldwide has increased simultaneously with economic growth and globalization trends, there are many reasons, among the most mentioned are the economic benefits for the destination and community (Horváth, 2011; Martín et al., 2017; Xie & Sinwald, 2016), because it generates on average a higher level of expenditure, reduces seasonality, contributes to the regeneration of destinations, disseminates knowledge and improves innovation and creativity (OMT, 2014), this type of tourism was valued at \$ 752 billion in 2016 (Allied Market Research, 2016). United Nations World Tourism Organization UNWTO, in a publication about tourism terms, classifies the industry of meetings (for commercial or professional purposes) in "attendance at meetings, conferences or congresses, trade fairs and exhibitions" and "other commercial and professional purposes" (UNWTO, 2014, 6). In addition, a meeting is defined as a number of people in one place, to confer or carry out a particular activity as a whole. Broadly, the number of participants helps to classify meetings with less than 50 participants (local), 100 participants (national) and 300 participants (international). Regarding to the International Association of Congresses and Conventions (ICCA), which requires at least 300 participants for an international meeting and that at least 40% of the participants must be from other countries or a minimum of five nationalities (Morrison, 2013, p.523).

The understanding of the differences in MICE guides the strategies for the cities use to achieve the image of the desired city and they differ from each other (Gelders & Van Zuilen, 2013). For example, a congress is a regular meeting of several people who discuss a particular topic for many days and have simultaneous sessions (ICCA, 2017). While a conference is smaller in scale, it is a participatory meeting and not frequent and with respect to the participants, it is selective. Between shows for consumers and the commercial emphasis on trade fairs and exhibitions (Getz & Stephen, 2016), participants can combine experiences and ideas during the discussions (Schneider et al., 2018).

The main characteristics of the trip, the motivations of the visitors and the value of the destination are areas of interest for the researchers in the meeting industry; however, no scientific studies have been carried out on this subject and particularly in the city of Guayaquil (Ecuador). This research is one of the first studies in the motivational field and the factors of value that influence the attendance of visitors to the events of this important city. This article contributes to the literature about

conferences that have not been studied in this city yet, filling a gap that currently exists in this area of research. There are many studies conducted in a regional context, for example: in the United Kingdom (Getz & Stephen, 2016), Malaysia (Jalilah & Normala, 2016) or Asia and Latin America (ICCA, 2013); But there are few studies that analyze motivations and satisfaction directly in an International Congress.

Regarding the best cities in the meetings industry, Guayaquil is following the model to be a destination for meetings such as Barcelona, Vienna, Paris, Madrid, Berlin, Singapore, London, Lisbon, Amsterdam and Prague (ICCA, 2017). Trying to achieve the advantages in (1) demographic and social changes, (2) technology, (3) investments in facilities, infrastructure and equipment, (4) institutional and legal framework, (5) environmental issues, (6) and security (Giaoutzi, 2017). In terms of economic development, in the last 40 years, tourism has become an important activity in this growing sector in many countries, through which destinations develop tourist activities. The purpose of this document is to evaluate the main characteristics of the trip, the motivation, satisfaction and assessment of the destination by the visitors in the FOLAC 2019 International Congress, in order to contribute with policies to benefit the destination. To achieve this goal, the document is structured in the following parts: introduction, the literature review, description of the study area, methodology, results and discussion. The article ends with the conclusions of the research and the references used.

## **THEORETICAL FRAMEWORK**

### **Meeting industry**

The first studies on tourism events and festivals appeared in the 80s and 90s. On the other hand, Getz has studied widely event tourism in recent years because when tourism and events come together, it is more attractive for people (Chibir & Shirko, 2015). In addition, he describes it as a "type of trip with special interest that, in its context, one travels to attend an event or attend an event while traveling" (Getz, 2008). According to Laing (2017) events are a social phenomenon that can attract different audiences and be useful for a variety of purposes. The meetings industry allows continuous social exchange in a given space. For this reason, it would be better to be a link between the guest and the host culture, so that the success of the events can be influenced by accommodation tourism (Canavan, 2016). Particularly, Gets (2008) includes the meetings industry in its general perspective categorization (purposes) consisting of: (1) Meetings, incentives, conferences and exhibitions (MICE) as an industry, (2) Sports events such as the Olympic Games and the world competitions, and (3) Cultural celebrations and celebrations. Although, Panfiluk (2015) proposed that events can be classified for a better study, in five basic trends: (1) motivations and objectives, (2) participation of residents and non-residents, (3) the economic impact, (4) methods used in the economic impact, and (5) sociodemographic and cultural factors. Social interaction is part of the characteristics of the event (Laing, 2017), and psychology is part of the behavior of visitors. In other words, different research sciences generate several classifications of events.

Cities focus their resources to build their image, combining strategies to use it so they can be different, compared to other cities in the region (Gelders & Van Zuilen, 2013). For this reason, it is necessary to be specific about the terms: congress, conference and fairs. ICCA in 2017 mentioned that a congress is a meeting with people who discuss specific issues during sessions and simultaneous days. In contrast, a conference has a smaller and more selective number of participants who are part of the discussion during the days without regular meetings. In fairs and exhibitions, there is an emphasis on shows for consumers and business opportunities (Getz & Stephen,



2016); also participants can combine knowledge, skills and ideas during discussions (Schneider et al., 2018). Cities are spaces for interaction and lively experiences (Antchak, 2018) and market research is very important before an event, so the locations satisfy the needs (Terzi et al., 2013). Today, destinations adopt leveraging strategies in their marketing mix for events of all scales (Kelly, 2018) because MICE improves culture and economics, including offering outdoor entertainment, more interesting places and cultural attractions, acceptable frequency of airline arrivals, good pricing policies and taxes and quality of service (Caber et al., 2017). As a result, MICE is one of the fastest growing and fastest growing sectors (Opperman, 1996), not only because of its financial income, but also because of the development of destinations (Terzi et al., 2013).

### **Value of the meeting industry**

The level of satisfaction experienced by the attendees is a critical element in determining loyalty to events, intentions to return and some recommendations to other people (Lu & Cai, 2011; Lee & Min, 2016), a better understanding of the attendees and an evaluation of their experience during an event is necessary to develop a stronger competition between destinations. In the context of conventions or conferences, academics in most of the researches have focused especially on the economic impacts of event tourism, as a type of business trip. The tourism of conventions (MICE) is highly desirable compared to leisure travelers; these tourists have a high expenditure and stay more time at the destination (Spiller, 2002). Therefore, market segmentation can help to implement quality service programs, specific marketing and promotion campaigns by analyzing the relevance of demographic characteristics such as gender, nationality or age (Venter et al., 2015). It is important to emphasize that the image and profile of a destination can be improved (Lawson, 2000), which means that events are the tool for the city brand (Gelders et al., 2013). Consequently, countries are doing everything that is possible to establish the city image through the MICE industry (Pearlman, 2016).

Since potential visitors take into consideration several factors before attending an event, in an extensive literature review, the following have been found: program, cost, networking, external activities and location (Severt et al., 2009; Zhang et al., 2007; Mair & Thompson, 2009; Yoo & Zhao, 2010; Borghans et al., 2010). The factors of the program include: interesting subject, reputation, program and quality of the exhibitors. The cost factors include: transportation cost, accommodation cost and registration price. Network factors include: renewing business contacts, generating new business, networking opportunities. The factors of external activities include: visiting friends and family, visiting nearby areas, seeking employment, required by my company, attending with a friend / family. Location factors include: accessible location, attractiveness of the location, hotel facilities, climate and image of destination (Tanford et al., 2012), emphasizing that accessibility was an important element in the decisions of the conference venue.

Another dimension of motivation that has been widely confirmed is the accessibility in terms of location and transportation, accommodation, technological assistance in the hotel and destination of the event, expenses of the participants, good quality services by the staff (Talebpour et al., 2017). In addition, facilities and services actively promote cultural and natural attractions for foreign tourists to extend their stay before or after a convention (Kim et al., 2016). On the other hand, the value perceptions during an event are given by the attendees. In fact, the quality of the event and its perceived value have a significant effect on behavioral intentions (Jin et al., 2013). In addition, the destination image determines the visitors' perceptions of value. In their findings, Wu et al. (2016) suggested that the quality of the exhibition service consists of interaction, the physical environment, the result and the quality of access that positively

influence the perceived value, which in turn leads to greater satisfaction and behavioral intention. In addition, it is important to evaluate the satisfaction of the convention attendees to understand what should be presented, continued or suspended in a meeting. The satisfaction of the attendees is linked to a variety of factors that include sociodemographic and psychological characteristics (Mair, 2010). For example, Getz and Stephen (2016), based on research from The Business Tourism Partnership in the United Kingdom, indicates that people who attend corporate events generally travel accompanied and even return to their destination with family and friends. Also highlight that the expenditure of each visitor of business tourism represents three times the spending of an average visitor (Jalilah & Normala, 2016). All these are important facts, therefore, organizations and researchers must pay attention to the answers of the assistants when evaluating the quality of their conventions, in particular the intention to return and recommend the convention to others (Lee & Min, 2016).

### **Motivation in the meeting industry**

Motivation is a set of biological and spiritual needs and desires that motivate someone to perform specific activities (Crompton & McKay, 1997). Based on this, visitors choose a destination related to their needs and desires or are motivated to visit a destination due to their characteristics, attractions and attributes (Sunı & Komppula, 2012). Therefore, it can be said that tourist motivation is often complex and multidimensional (Crompton, 1979; Uysal et al., 1993) since it depends on situational parameters such as opportunity, time and money (Gnoth, 1997). For many years, motivation was considered as the only one that intervenes between the stimulus and the response to consumer behavior, the literature on tourist motivation has been enriched, based on the approach of psychology and sociology (Sédek, 1974) and it has been studied for a long time. Some of the first studies are (Plog, 1974; Iso-Ahola, 1982).

There are motivating and determining factors that influence the tourist in the purchase of any product. For example, "the motivating factors motivate tourists to want to buy, and the determining factors refer to whether the tourist can buy the desired product" (Swarbrooke & Horner, 2007, p16). Other authors consider the motivation of tourists in two categories: the motivation that leads a person to choose to travel and the motivation that leads a person to choose a particular holiday, a specific destination and a specific time (Mahika, 2011). Another classification is more complex and is accepted and used by many specialists. According to this, the motivations are psychological, emotional, personal, personal development, status, culture (Swarbrooke & Horner, 2007). The tourism experience is greater in the levels of motivation, particularly for the dimensions of personal search and personal escape (Snepenger et al., 2006). In addition, there are two limitations, such as the quantity and quality of available resources (Giaoutzi, 2017).

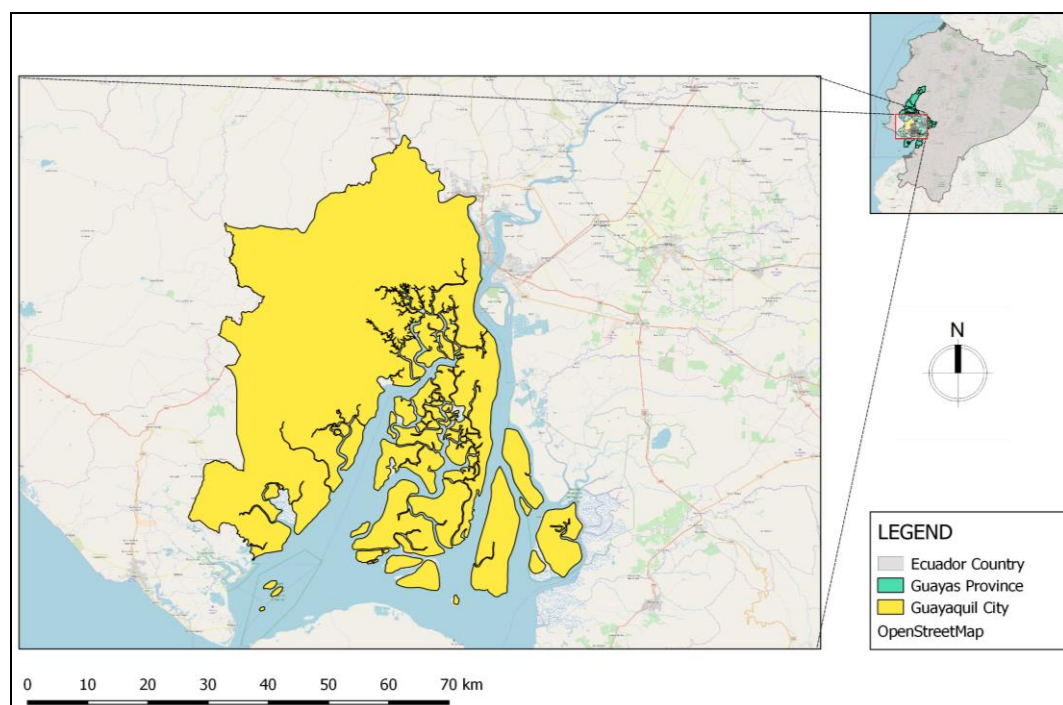
The available theories present the push-pull approach that often complements the Iso-Ahola model (Crompton, 1979). In 1997, Crompton and McKay indicated that impulse factors (internal motives) such as escape motives and traction factors (external stimuli) as search motives. In summary, motivation and expectation can improve the understanding of perceptions, experience and evaluations (Gnoth, 1997). The motives differ from the motivations in direction and objective, while the motivations are an interaction between motives and situations (Gnoth, 1997). In simpler words, the motivation is "some kind of internal impulse, which pushes someone to do things to achieve something" (Harmer, 2001, p.51). However, the objectives that a tourist wants to achieve have a direct concern with the life cycle of a destination that is divided into discovery, growing popularity, fashion and saturation, decreasing fashion, and decrease (Giaoutzi, 2017). In comparison with any type of tourism and focusing on the decision process, the motivating factors for

attending events are: educational purposes, educational information in exhibitions, reasonable travel time to the place and commercial activities (Severt et al., 2009).

In this sense, Kitchen (2017) affirms that the creation of networks is a key motivation for attending events, but few studies have explored this topic and the extent to which people benefit and maintain their connections. The motivation is characterized by dynamic sociodemographic variables of tourism demand (age, marital status, education, income, etc.) and has a direct influence on: balance of payments, regional development, economic diversification, income levels, state income and employment opportunities (Pearce, 1981). On this basis, local governments find in event tourism an opportunity to increase the motivation to visit the city, apart from its local attractions. In summary, tourism began as a massive industry, while motivation began to differ with respect to events. Later, the motivations changed widely because the visitors held more specialized and organized meetings for more specific purposes.

### STUDY AREA

This study is limited to "Santiago de Guayaquil", known as Guayaquil, the largest city in Ecuador, located in the northwest of South America with a warm and humid climate. It is easily accessible, thanks to the Guayas River that surrounds the city on the east and the "Estuario del Salado" surrounding it on the west. It is not only the commercial heart of Ecuador, but also a vibrant and expanding city, increasingly safe with more than 2,350,915 inhabitants (National Institute of Statistics and Census, 2010).



**Figure 1.** Geographical Location of the city of Guayaquil (Ecuador)

The city is also the focus of Ecuador's international trade and commerce. Economically, it is the most important city in Ecuador, because its seaport handles more

or less 90% of the country's imports and 50% of its exports with products such as: bananas, coffee and cocoa. At the same time, the economy of the city is given by government and private participation, with small and medium-sized enterprises (SMEs), international commercial companies and also by the performance of agricultural and aquaculture activities, wholesale and retail sales retail represent 57.4% of the companies in the city (Municipality of Guayaquil, 2017) (Figure 1).

### **The city of Guayaquil as a meeting destination**

Guayaquil has been strengthened as a destination for tourism meetings due to its characteristics, such as the "José Joaquín de Olmedo" international airport, which is open 365 days a year, the capacity of the city to accommodate more than 3,500 people. In fact, it is one of the first digital cities in South America, due to the 4,000 internet points installed. The city has enabled certain spaces for meetings and events, such as the Plaza Rodolfo Baquerizo Moreno Exhibition Center with a meeting room of more than 600 people and the Crystal Palace Exhibition and Convention Center (Municipality of Guayaquil, 2017). In this context, Rusko et al. (2009) show that municipalities have an essential role in the development of destinations, such as decisions at the strategic level of zoning and land use policies, and that investments in infrastructure create opportunities for companies to develop their businesses. For this reason, Panfiluk (2015) explains that the efficiency of event management needs a continuous monitoring system related to the needs of visitors. To be successful, it is important to continue with research on the motivation of visitors and the community, to encourage the active participation of key actors in all disciplines to understand the social phenomenon of the meetings industry (Laing, 2017). Based on this idea, it is important to highlight that one of the strategic objectives of the Municipality of Guayaquil (Tourism, Civic Promotion and International Relations) is to make Guayaquil a national and international destination for fairs, congresses, conventions, events and visitors. This shows the interest of the mayor to promote this type of tourism (Municipality of Guayaquil, 2018). As an example, Guayaquil has hosted important events, such as: The World Banana Summit, the World Cocoa Summit, the World Orchid Congress, Comic On, Roots Fair, Travel Mart Latin America, the Congress of Latin American Tourist Cities, there are also several factors that are currently being worked on in favor of Guayaquil as a meeting destination, such as the facilities to access places (transfer from one place to another), with good infrastructure, tourism and with a wide gastronomic offer. This city, known as the "Pearl of the Pacific", has won two consecutive 2016 and 2017 Travel Awards that qualified it as the main South American destination for business trips (World Travel Awards, 2016, 2017).

### **METHODOLOGY**

The present empirical research is based on fieldwork that consist of some conducted surveys to a simple random sample of visitors attending the Lions International Forum FOLAC from 18 to 22 January 2017 (Edition: XLVI), this event took place in Guayaquil city and welcomed 1000 members from 23 participating countries approximately. So far, three editions have been held in Ecuador in two different cities: Quito (1978) (2006) and Guayaquil (1993). In the edition XLVI, visitors filled out surveys independently and some pollsters were very close to them if there was any question. The authors of this article trained students from ESPOL University before they conducted the surveys in this fieldwork. The survey was prepared based on previous studies about Meeting Industry (Zhang et al., 2007; Severt et al., 2009; Mair & Thompson 2009; Yoo & Zhao, 2010; Borghans et al., 2010; Tanford et al., 2012; Talebpour et al., 2017) Moreover, 5 unstructured interviews were conducted with specialists in the area, in order to contrast

the formulated questions. To confirm its effectiveness, a pilot test with 20 surveys was conducted to guests in Hilton Colon Hotel or tourists at “Crystal Palace”, who attended the event in January 2017, but carried out various social activities after the event.

The survey consisted of 17 questions that were divided into 3 sections: the first focused on obtaining socio-demographic information from visitors, the second related to the characteristics of the trip, and the third dealt with the motivation and valuation of Guayaquil as a destination for the meeting industry development.

The survey was conducted to national and foreign tourists over 18 years’ old who attended the international event; they were the target population of this study. For this study, closed questions, multiple choice and Likert scale were used, designed to obtain reliable results to achieve the objective of the study. There were 280 surveys applied, 251 were valid, this was the sample size. For the estimation of the sample, the finite population was selected, with the universe of 1,000 attending the international event. With the valid surveys obtained, the study was conducted with a margin of error of +/- 5.36%, obtaining a confidence level of 95% and a variance of 50% (Table 1). For the present study, the gathered data was organized, tabulated and analyzed using SPSS software version 22. The treatment of the data was done using univariate and bivariate.

**Table 1.** Sample design

Population	National and foreign visitors
Geographic area	Guayaquil city
Date of realization	January 2017
Process	Simple random sampling
Confidence level	95%
Error range	+/- 5.36%
Valid surveys	251

## RESULTS AND DISCUSSION

### Sociodemographic variables

The results from the sociodemographic variables as place of origin, gender, age, level of education, professional activity and income are found on Table 2. According to the results from Table 2, 84.9% of the visitors were foreigners and 15.1% were Ecuadorian. The people were mainly from countries as Brazil (17.9%), Peru (15.5%), Ecuador (15.1%) and Chile (13.1%). Referring to the gender, 57.8% were male and 39.8% were female. From the total of the sample, 35.1% are older than 69 years old, 33.1% were an average age from 60 to 69 years old. 45.6% of the surveyed had a university education level, 34% have reached a master degree or a Ph.D. and 18.8% had only a secondary education level.

On the other hand, about their occupational category, most of the surveyed were retired (27.6%), 26.8% were entrepreneurs, and 26% were self-employed. About their household income, most of the people, 32.3%, had a household income higher than 3500 dollars, 17.1% had a household income among the 2500 and 3500 dollars, and a 16.3% had an income from 1500 to 2500 dollars. The meetings industry is a social interaction that involves different consumers, with all kinds of motivations, which generates a cultural enrichment due to the diversity of sociodemographic factors, similar to the results found by (Canavan, 2016; Laing, 2017). These important results are useful for a market segmentation, also to implement marketing and promotion campaigns (Venter et al., 2015). In addition, it is important to highlight that this congress is an international meeting, since it had more than 300 attendees and more than 40% of the attendees were from other countries, fulfilling the requirements of ICCA (Morrison, 2013, p. 523).

**Table 2.** Sociodemographic variables

<b>Demographics</b>	<b>Categories</b>	<b>n</b>	<b>Percentage</b>
Nationality	Ecuadorian	38	15.10%
	Foreigner	213	84.90%
Country	Brazil	45	17.90%
	Chile	33	13.10%
	Ecuador	38	15.10%
	Peru	39	15.50%
	Uruguay	17	6.80%
	USA	15	6%
	Other countries	64	25.60%
Gender	Male	145	57.80%
	Female	100	39.80%
Age	< 20 years old	3	1.20%
	21– 29 years old	2	0.80%
	30-39 years old	4	1.60%
	40-49 years old	16	6.40%
	50-59 years old	55	21.90%
	60-69 years old	83	33.10%
	> 69 years old	88	35.10%
Level of education	Primary	3	1.20%
	Secondary	47	18.80%
	University	114	45.60%
	Postgraduate/ master´s degree/ Ph.D.	86	34.40%
Occupational category	Self employed	65	26%
	Entrepreneur	67	26.80%
	Civil servant	14	5.60%
	Full-time employee	20	8%
	Part-time employee	3	1.20%
	Student	0	0%
	Freelance	9	3.60%
	Unemployed	1	0.40%
	Pensioner	69	27.60%
	Housewife	2	0.80%
Household income	< 700 dollars	6	2.40%
	700 - 1000 dollars	10	4%
	1000 - 1500 dollars	22	8.80%
	1500 - 2500 dollars	41	16.30%
	2500 - 3500 dollars	43	17.10%
	> 3500 dollars	81	32.30%

**Table 3.** Who are you travelling with?

<b>Who are you travelling with?</b>	<b>Frequency</b>	<b>Percentage</b>
Alone	28	11.2%
Friends or workmates	77	30.7%
Couple	120	47.8%
Couple and children	2	0.8%
Family	12	4.8%
Others	12	4.8%
Total	251	100%

## TRAVEL CHARACTERISTICS

### Travel Company

According to Table 3, 47.8% of the people, traveled with their couple, 30.7% travel accompanied by friends or workmates and 11.2% traveled alone. The results are similar to those found by Getz and Stephen (2016), based on the Business Tourism Partnership research in 2004, which indicates that people who attend corporate events generally travel accompanied and even return to their destination with their families and friends.

**Table 4.** Relationship of gender with other variables

Variables		Gender		Total	Coefficient	Sig.
		Male	Female			
Age	Younger/equal than 20	1.3%	1.0%	1.2%	24.275 <sup>a</sup>	0.000
	Among 21– 29		2.0%	0.8%		
	Among 30-39		4.0%	1.6%		
	Among 40-49	4.7%	8.9%	6.4%		
	Among 50-59	15.3%	31.7%	21.9%		
	Among 60-69	37.3%	26.7%	33.1%		
	Older than 69 years	41.3%	25.7%	35.1%		
Total		100.0%	100.0%	100.0%		
Occupational category	Self-employed	28.9%	21.8%	26.0%	21.575 <sup>a</sup>	0.006
	Entrepreneur	29.5%	22.8%	26.8%		
	Civil servant	5.4%	5.9%	5.6%		
	Full-time employee	3.4%	14.9%	8.0%		
	Part-time employee		3.0%	1.2%		
	Freelance	3.4%	4.0%	3.6%		
	Unemployed		1.0%	0.4%		
	Retired	29.5%	24.8%	27.6%		
	Housewife		2.0%	0.8%		
Total		100.0%	100.0%	100.0%		
Who are you travelling with?	Alone	13.3%	7.9%	11.2%	15.896 <sup>a</sup>	0.007
	Friends or workmates	25.3%	38.6%	30.7%		
	Couple	54.0%	38.6%	47.8%		
	Couple and children	1.3%		0.8%		
	Family	4.0%	5.9%	4.8%		
	Others	2.0%	8.9%	4.8%		
Total		100.0%	100.0%	100.0%		

### Relationship of gender with other variables

The relationship of gender with other variables, through the Pearson square chi test is shown on Table 4. As shown on Table 4, an association between gender and age has been detected, and it is that men were older than women. On the other hand, a relationship between gender and professional activity has also been detected, with men being self-employed or entrepreneurs more than women, while women were full-time employees more than men. Also a connection between gender and who are they travelling with has been detected, finding that men usually traveled with their couples, while women traveled with their couple or friends. Previous studies on festivals show that the gender variable is of great influence in the attendance of a festival (Yolal et al., 2009; Carvache-Franco et al., 2018).

### Daily budget

Table 5, shows that most of the surveyed, 32.3% had a budget higher than 180 dollars per day, followed by other groups with budgets from 151 to 180 dollars (17.9%), 121 to 150 dollars (17.1%) and from 91 to 120 dollars (16.3%). These findings agree with

those mentioned by Spiller (2002) and Jalilah and Normala (2016), who says convention tourism is highly desirable, in comparison to leisure travelers, these tourists tend to be high-spending and stay longer in the destination, that is why countries are doing their best all over the world by looking forward to enliven national economic development through the MICE industry (Pearlman, 2016).

**Table 5.** Budget per person / day

<b>Budget</b>	<b>Frequency</b>	<b>Percentage</b>
Less than 30 dollars	6	2.4%
From 31 to 60 dollars	10	4.0%
From 61 to 90 dollars	22	8.8%
From 91 to 120 dollars	41	16.3%
From 121 to 150 dollars	43	17.1%
From 151 to 180 dollars	45	17.9%
More than 180 dollars	81	32.3%
<b>Total</b>	<b>251</b>	<b>100%</b>

### **Types of facilities for the accommodation**

About the type of accommodation that the people stay in, it is shown on Table 6, visitors stay mostly in 4 and 5 star hotels (79.9%), followed by those who stayed in 2 and 3 star hotels (11.2%). Staying in 4 and 5 star hotels confirms what (Pearlman, 2016) indicates.

**Table 6.** Types of facilities for accommodation

<b>Types of facilities for accommodation</b>	<b>Frequency</b>	<b>Percentage</b>
4 and 5 star hotels	200	79.70%
2 and 3 star hotels	28	11.20%
1 star hotel/guesthouse/hostel	3	1.20%
Relatives or friends house	19	7.60%
Tourist apartment	0	0%
Others	1	0.40%
<b>Total</b>	<b>251</b>	<b>100%</b>

## **MOTIVATIONS AND SATISFACTION**

### **Main reasons to attend the Congress**

For this investigation, the surveyed rated the motivational variables through a 5 points Likert scale (Meaning 1, very low and 5, very high). Cronbach Alpha Index was 0.873, which means it is a meritorious index among the elements of the scale. According to Table 7, the principal motivations of the surveyed to attend the Congress were: Learning about congress workshops and main topics (4.03), meet other participants (3.76), the desire to know new sites (3.33) and to contribute with their knowledge and experiences to congress workshops and main topics. (3.27). These findings agree with what was found by (Severt et al., 2009; Zhang et al., 2007; Mair & Thompson 2009; Yoo & Zhao, 2010; Borghans et al., 2010) where the main motivations for events attendance are educational purposes.

### **Level of satisfaction with services and infrastructures**

The surveyed rated their satisfaction level about services and infrastructures through 5 points Likert scale (Meaning 1, no satisfied and 5, very satisfied). Cronbach Alpha Index was 0.913, which means it is a meritorious index among the elements of the scale. According to Table 8, the mostly valued variables were: accessibility to places and/or work rooms (4.41), care and treatment of the organization (4.29), luminosity and light of places and/or work rooms (4.29) and transportation for journeys (4.25). On the



other hand, the less valued variables were Quality and diversity of lunches, dinners and / or coffee breaks (3.57), supplementary services: bar, vending machines, and others (3.66), information points and signals for participants (3.83). The highest level of satisfaction was accessibility; the results are similar to Tanford et al. (2012) who concluded that accessibility was an important element in the decisions of the conference venue because if they take place in more accessible areas they will attract more people.

**Table 7.** Main reasons to attend the Congress

<b>Motivations</b>	<b>Media</b>	<b>Ranking</b>
Learning about congress workshops and main topics	4.03	1
Meet other participants	3.76	2
The desire to know new sites	3.33	3
To contribute with my knowledge and experiences to congress workshops and main topics	3.27	4
Disconnect from everyday activities	2.92	5
Spend time with friends and/or relatives	2.79	6
The complementary offer of social and cultural leisure related to the congress	2.68	7
Is an affordable travel option for my pocket	2.65	8
The fame and tourist reputation of the city	2.64	9
Gastronomic offer of the city	2.50	10
The proximity to my place of residence	2.18	11

**Table 8.** Level of satisfaction with services and infrastructures

<b>Services e infrastructure</b>	<b>Media</b>	<b>Ranking</b>
Accessibility to places and / or work rooms	4.41	1
Care and cleaning of places and / or work rooms	4.36	2
Luminosity and lights of places and / or workrooms	4.29	3
Transportation for journeys	4.25	4
Acoustics of places and / or workrooms	4.2	5
Comfort of rooms and / or workrooms - seat comfort, adequate air conditioning temperature, and others	4.19	6
Care and treatment of the organization	4.14	7
Audio-visual resources of places and / or workrooms	4.04	8
Information points and signals for participants	3.83	9
Supplementary services: bar, vending machines, and others	3.66	10
Quality and diversity of lunches, dinners and / or coffee breaks	3.57	11

### **Satisfaction with different motivational variables**

In relation with the tourist, satisfaction with the different motivational variables, analyzed through a Spearman correlation, is shown on Table 9.

As shown on Table 9, all motivations present a positive correlation with the level of importance of the tourist satisfaction. About this, the variables that present the major influence over the satisfaction of the tourist are: learning about congress workshops and main topics (correlation coefficient= 0.310), meet other participants (correlation coefficient = 0.283), disconnect from everyday activities (correlation coefficient= 0.234) and to contribute with my knowledge and experiences to congress workshops and main topics (correlation coefficient= 0.184), which means that the activities related to the participation of the assistants in the workshops should be improved, so that in this way the level of motivation and satisfaction of the attendants increase.

**Table 9.** Satisfaction with different motivational variables

<b>Motivational variables</b>	<b>Coefficient</b>
Learning about congress workshops and main topics	0.310**
Meet other participants	0.283**
Disconnect from everyday activities	0.234**
To contribute with my knowledge and experiences to congress workshops and main topics	0.184**
The fame and tourist reputation of the city	0.180**
The desire to know new sites	0.157*
The complementary offer of social and cultural leisure related to the congress	0.144*
Gastronomic offer of the city	0.136*
Is an affordable travel option for my pocket	0.128*
Spend time with friends and/or relatives	0.122
The proximity to my place of residence	0.105

\* Significant correlation to 5%

\*\* Significant correlation to 1%

These findings agree with what was found by (Severt et al., 2009; Zhang et al., 2007; Mair & Thompson 2009; Yoo & Zhao, 2010; Borghans et al., 2010) where the main motivating for events attendance are educational purposes, also networking, external activities (visiting friends and family, visiting surrounding area, seeking employment, required by my company, attending with a friend/family), and location.

## VALUATION OF THE VISIT

### Satisfaction level of tourist visit to Guayaquil

The surveyed valued their visit to Guayaquil city through a 5 points Likert scale (Meaning 1, very low and 5, very high). Cronbach Alpha Index was 0.891, which means it is a meritorious index among the elements of the scale.

**Table 10.** Valuation of the visit

<b>Aspects</b>	<b>Media</b>	<b>Ranking</b>
Attention and quality of tourist accommodation	4.32	1
The beauty of the city	4.2	2
Hospitality of residents	4.2	3
Conservation of monuments and artistic heritage	4.07	4
Care and cleaning of the city	3.91	5
The wealth of monuments and artistic heritage	3.88	6
Attention and quality of tour guides	3.78	7
Attention and quality of restaurants and bars	3.74	8
Accessibility to emblematic buildings and monuments	3.67	9
Tourist information	3.66	10
Diversity and quality of local gastronomy	3.64	11
Citizen Security	3.5	12
Opportunity to make purchases of handicrafts and traditional cuisine	3.39	13
Public transport services	3.25	14
Relation of quality / money of the city	3.23	15
Supplementary leisure offer	3.09	16

Table 10, shows that the most valued variables in the visit to Guayaquil were: Attention and quality of tourist accommodation (4.32). Results similar (Talebpour et al., 2017) that indicates that the attention and the quality of the accommodations is an

important factor of valuation of a tourist visit to an event. Then it follows, the beauty of the city (4.20), the hospitality of residents (4.20), and conservation of monuments and artistic heritage (4.07), care and cleaning of the city (3.91) and the wealth of monuments and artistic heritage (3.88). These findings make evident that Guayaquil city has cultural heritage in order to become a destination for business, similar results (Kim et al., 2016) who supports that facilities and services actively promote cultural and natural attractions to foreign tourists to extend their stay before or after a convention.

On the other hand, the less valued variables were the supplementary leisure offer (3.09), relation of quality / money of the city (3.23), public transport services (3.25) and the opportunity to make purchases of handicrafts and traditional cuisine (3.39).

### **Experience Rating**

The surveyed valued the experience of their visit in Guayaquil city through a 5 points Likert scale. In Table 11, it is shown that the most valued variables were: After my experience, I think I will return to the next conference (4.38) and I would recommend attending conference if someone asked me for advice (4.37) which shows that Guayaquil city has the potential in order to become an important destination in the meeting industry in Latin America. About the less valued variables: I will encourage my relatives and / or friends to come to conference in future events (4.20) and my level of satisfaction with conference has been important (4.24). Results of the two variables with the highest percentage related to (Lu & Cai, 2011; Lee & Min, 2016) whose results identify that the evaluation of the experience is an important element to determine if the person have the intention to return to the destination and to recommend it (or not) to other people. The results are similar to those found by Getz and Stephen (2016) that event attendees even return to their destination with their families and friends.

**Table 11.** Experience Rating

<b>Experience Rating</b>	<b>Media</b>	<b>Ranking</b>
After my experience, I think I will return to the next conference	4.38	1
I would recommend attending conference if someone asked me for advice	4.37	2
My choice to attend conference has been successful	4.36	3
My level of satisfaction with conference has been important	4.24	4
I will encourage my relatives and / or friends to come to conference in future events	4.20	5

### **CONCLUSIONS**

The results show that the city of Guayaquil has the facilities to develop tourism for meetings and international congresses, complies with what Morrison indicated (2013, p. 523). Congress attendees usually travel accompanied by their partner and friends or colleagues. The findings show that there is an association between gender and other variables, men are older than women, men are self-employed or entrepreneurs more than women, while women are more employed full-time than men. There has also been an association between the gender and who they travel with, finding that men travel with their partners, while women travel with their partners and friends or coworkers. The expense was mainly greater than 180 dollars and the attendees stayed in 4 and 5 star hotels, which shows that the business tourist spends more on his stay than in other types of tourism (Spiller, 2001; Pearlman, 2016; Jalilah & Normala, 2016).

The main motivations of the people who attended the Congress are: learning about the content of the workshops, getting to know the participants, the desire to know new places, and contributing to the workshops and main themes, which shows that the participants are motivated by Education issues (Severt et al., 2009; Zhang et al., 2007; Mair & Thompson 2009; Yoo & Zhao, 2010; Borghans et al., 2010).

Regarding the level of satisfaction of the service and infrastructure of the event, the most valued variables are: accessibility to the work rooms, care and cleaning of the premises, brightness of the premises and means of transport for their movements. The findings show that all motivations have a positive correlation with the level of importance of tourist satisfaction, the variables that have a greater influence on tourist satisfaction are learning about the content of the workshops, getting to know the participants, disconnecting from the daily activities and contribute with my knowledge and experiences to the workshops of the congress, so that it would be important to improve the activities related to the participation of the assistants in the workshops, so that in this way the level of motivation and satisfaction of the assistants. Regarding the assessment of the city of Guayaquil for the meetings industry, the most valued variables are: Attention and quality of tourist accommodation, The beauty of the city, hospitality of residents, and conservation of monuments and artistic heritage.

Once the experience of the visit is over, most of the attendees will return to the event and recommend attending the congress. This demonstrates the potential of the city of Guayaquil to become an important destination for the meetings industry in Latin America. The study not only contributes with theoretical implications, but also points out practical recommendations for the destination, it is recommended to implement tour packages for those who travel in groups to congresses and events, to improve the accessibility in the facilities that carry out this type of events, increase the offer of congresses for educational purposes and train the employees of hotels and tour operators to receive this type of profitable customer. Finally, the study concludes that the main limitation was the temporality of it and as a future line of research, it would be interesting to analyze the relationship that exists between the motivations and the economic impact of an event.

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## **DEVELOPING A HARMONIOUS CULTURE-BASED SUSTAINABLE EVENT MODEL IN BALI TOURISM VILLAGE**

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**Abstract:** Environmental measurement standards of various events that are easy to understand are currently still in a debate in various sustainable tourism studies. This study aims to develop an environmental measurement model based on community participation and harmonious culture in an event activity in a tourism village. This study uses two approaches, qualitative and quantitative. Event organizers are selected as the research informants to deeply explore the event implementation. The result of qualitative data processing is used as a base in questionnaire construction. Respondents are selected using stratified proportional random sampling and 82 event organizers has fulfilled the questionnaire correctly. The qualitative result indicates that belief system, cultural values, and community participation are new variables to measure green event. The quantitative result indicates that event organizers have good understanding on harmonious culture-integrated environmental measurement indicators. The trial result of the model on a case study of Cultic event finds that harmonization with God and Human dominate the event activities, whereas harmonization with environment is mostly immeasurable since the event is a traditional community- and cultural-based event. The research result contributes to the development sustainability theory, especially in environmental management. The model attributes can be developed further by adding several indicators, such as government, supplier, and the existing associations.

**Key words:** harmonious culture, sustainable event, tourism village

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## INTRODUCTION

Currently, environmental issues gain more attention regarding environmentally friendly product services (Nidumolu et al., 2009). This condition is triggered by the consumption and production patterns that damage the environment, cause the loss of biodiversity and exacerbate the consequences of climate change (Maia de Souza et al., 2013; Galli et al., 2014). Related to this matter, many environmental certification systems are developed, for example those conducted by the United Nation entitled *Green Meeting Guide* (UNEP et al., 2009). The book consists of a guidance to conduct environmentally friendly events with the maximum participant scale of two hundreds. Another international standard found for event activities is ISO 20121. The ISO is a sustainable management system for events that lead to environmental certification, such as world event of London Olympic 2012, the Presidential of European Union Denmark, and French Open 2014.

These efforts are directed to environmental protection issues in various tourism activities to support sustainable development. Environmental impact and environmental standardization issues have been discussed in the Earth Summit in Rio de Janeiro in 1992 that set strategies and intervention in environmental protection. The concept gives signal of order and monitoring given to the companies to be responsible to the environment. In Europe, the first European Union regulation and ISO 14001 (ISO, 1994) aim to promote a universal approach in environmental management and organizational capacity building to measure their progress related to environmental performance. Another regulation found regarding Event Sustainability Management and environmental certification for events is ISO 201. The environmental certification, however, has limitation, which is it has not included standards to evaluate the environmental impacts of an event. It is supported by the result of previous studies explained that to obtain the certification will require great effort, huge cost and continuous updated information (Martín-Pena et al., 2014; Zilahy, 2004; Liyin et al., 2006; Turk, 2009). The issues bring hesitation among companies to obtain certification and as a consequence, violations towards environmental protection.

Some countries in the world, however, have set several policies related the impact of events on environment thus it becomes a public policy that must be truly implemented and is not merely a certification (Collins & Flynn, 2008; Getz, 2009). One of the tools used to measure environmental sustainability is Ecological Foot Print (Collins & Flynn, 2008; Collins et al., 2009) and greenhouse gas emission model (Parkes et al., 2016). Events and environment cannot be separated in tourism development (Case, 2013) and it has been explained that there is a multi-dimensional relationship between events and environment. The relationship between event and environment has given important information on how sustainable measurement practice can be included into event planning, management, and monitoring. However, thus far there is no identical measure in measuring sustainability related to an event and only economic impact receives considerable discussions (Carlsen et al., 2001). Addressing sustainability is not merely about economy. It should consider cultural, social, and environmental aspects (Smith-Cristensen, 2009). The community should receives benefits from the event while their culture is maintained.

It will provide strengths in performing sustainable tourism. Through the concept, event organizers are encouraged to consider all the involved components including the community cultures. One of Balinese cultures is *tri hita karana* (harmonious culture) that maintains a balanced relationship between human and God, other human beings, and environment. The culture receives acknowledgement from UNWTO in developing tourism. In Bali, the tool is even used to assess hotel in supporting sustainable tourism (Mika, 2015; Astawa et al., 2018). The cultural acknowledgement has been stated by Pascal Lamy the head of UN-WTO in an event of Tri Hita Karana (THK) Tourism Awards & Accreditations



in 2015 (Buku Panduan THK, 2017). The cultural concept is used as a reference in hotel operational; however, it has not used to evaluate an event. Based on the previous explanation related to the non existence of an easy-to-understand measurement standards of event that align to the environment, the research aims to present an innovative model in environmental sustainability measurement of an event based on harmonious culture. The assessment is based on several sustainable event indicators and developed into three cultural approaches, namely: the balance of relationship with God, human, and environment. The research result is in form of a new criteria model to assess a cultural-based green event. The result is a new model, based on authors' knowledge in evaluating an event.

### **Sustainable Event**

Currently, tourism world is closely related to events or festival activities including cultural and technological activities and it is used as an instrument to promote tourism village. Green event or sustainable event can be explained as an event that includes a sustainability element in its management practices and operation. The sustainability consists of environmental, economic, and socio-cultural responsibilities (Kapera, 2018). The three responsibilities are the foundation in developing green tourism and it requires all tourism industrial actors, such as tourist, companies, communities, and government, to play active roles (Astawa, 2018; Liu, et al., 2017). Sustainability term in event is a brand-new concept that has been studied for the past several years (Buckley, 2012; Clarke, 1997; Franzoni, 2015; Hunter, 1997; Kay et al., 2016; Lim, 2016). Research in this field is rapidly developed according to the policies of various countries to prevent the natural environment from pollution. The concept is in line with the urge of tourism actors to put environmentally friendly tourism forward (Getz, 2009; Hall, 2011; Musgrave, 2011). The goal of sustainable event is the balance of three aspects: economic, socio-cultural, and environmental dimensions (Smith-Cristensen, 2009). To produce great benefits for the societies, event organizers and the policy makers should adopt a holistic approach. The purpose is to maximize economic impacts, optimize socio-cultural effect, and minimize environmental impact.

### **The Impact of Sustainable Event**

Events have impact on economy, social, environment, and reputation of the venue (Arnegger & Herz, 2016; Boo & Busser, 2005; Burgan & Mules, 2001; Tyrrel & Ismail, 2005). Yet, it also brings negative consequences, such as the inconveniences felt by the community at the venue where the event is conducted and an immense local government's spending to maintain the event harmonization (Fredline & Faulkner, 2000; Kim et al., 2015). The issue cannot be measured with money since it has direct impact on the society as a whole (Andersson & Lundberg, 2013; Chirieleison & Montrone, 2013). The emergence of the issue triggers awareness on the environmental and social impacts to achieve sustainable tourism (Arcodia et al., 2012; Dredge & Whitford, 2010; Getz, 2009; Hall, 2012). Several studies on events or special festivals explained that event had positive impact on the hosting area (Getz, 2008; Getz et al., 2010; Getz & Page, 2014; Wilson & Arshed, 2016). The event hosting area gains significant direct and indirect impacts (Bracalente et al., 2011; Dwyer et al., 2006a, 2006b; Dwyer et al., 2000a, 2000b; Lee, 2007; Lee & Taylor, 2005; Tyrrel & Ismail, 2005).

The economic impacts can be seen in the tourist arrival. In this case, event is a way to attract tourist; however, it is hard to predict how many people will come (Chirieleison et al., 2013; Connell et al., 2015; Felsenstein & Fleischer, 2003; Ritchie & Beliveau, 1974). Based on the social impact, big event activity is held to strengthen tradition or culture and has positive impact on togetherness values; however, it cannot be measured quantitatively (De Bres & Davis, 2001; Derrett, 2003; Dwyer et al., 2000a; Kim et al., 2015; Richards, 2007). The application of Triple Bottom Line approach

(Elkington, 1997) has increased practitioners interest in event sustainability. Event sustainability implies that event organizers should contribute to sustainable development (Hall, 2012; O'Sullivan & Jackson, 2002; Smith-Cristensen, 2009).

A sustainable event needs to include economic, socio-cultural, and environmental goals. Therefore, sustainable event management system should set a strategy to optimize positive impacts and minimize negative impacts on social and environment (Hall, 2012; Heitmann & Dávid, 2010; Jones, 2014; Raj & Musgrave, 2009; Stettler, 2011; Whitson & Horne, 2006; Yuan, 2013). Regarding the negative social impacts, it brings out various critical researches on special event and big event, especially for hosting community (Chen, 2011; Hall & Hodges, 1996; Taks, 2013; Waitt, 2003; Whitson & Horne, 2006).

The issue is proven by various efforts conducted in literatures to evaluate the social impacts, both qualitatively and quantitatively (Andersson & Lundberg, 2013; Delamere, 1997; Fredline et al., 2005; Kim et al., 2015; Rollins & Delamere, 2007; Small, 2007; Waitt, 2003). The impact include various main weaknesses occurred in the local level, among others, traffic jam and pressure on service and infrastructures causing the decrease in the utilization by the resident and the life quality of local population during the event (Hall & Hodges, 1996; Small et al., 2005).

In addition, event organizing could generate direct cost for the community. On one hand, cultural event, in particular, often receives direct benefits from local public funding (Felsenstein & Fleischer, 2003; Mules & Dwyer, 2005; Whitson & Horne, 2006). On the other hand, some costs related to organization event are indirectly supported by participation to guarantee the smoothness of the event.

These costs are likely to include overtime for the police officers, collection and cleaning fees (Chirieleison & Montrone, 2013). The unwanted socio-cultural impacts could occur as in a case where the "tourist" of an event reduces its originality (Jansen-Verbeke, 2009; Thompson & Matheson, 2008; Xie, 2004). It is a long term compromise since the event is not in accordance with the local community. In particular, when a historical commemoration and folklore become a mass product, they could lose their authentic relationship with the community, and even their reason to exist (De Bres & Davis, 2001; Derrett, 2003; McCartney & Osti, 2007; Richards, 2007).

As for negative environmental impacts, special event could determine the use of energy and natural resources intensively and produce atmospheric pollution and water pollution not to mention the increase in waste and noise (Adema & Roehl, 2010; Hottle et al., 2015; Kulshrestha et al., 2004; Kuo et al., 2006; Wang et al., 2007). For example, recently, a mega-event is accused to be responsible for the contribution to climate change (Collins et al., 2009; Dolles & Söderman, 2010). Various methodologies have been proposed in literatures to evaluate and measure the environmental impacts of organization events, such as ecological footprint (Collins & Flynn, 2008; Dolf & Teehan, 2015; Gössling et al., 2002; Wackernagel & Rees, 1998), environmental impact assessment (Ahmed & Pretorius, 2010; Hunter & Green, 1995; Tang et al., 2009), carrying capacity (Lee & Graefe, 2003; Lindberg et al., 1997; O'Reilly, 1986), and environmental input-output table (Collins et al., 2009). Following the rapid spread of research development for event sustainability, it progressively drives the attention of the organizers and policy makers to responsible event management (Arcodia et al., 2012; Dredge & Whitford, 2010; Gaffney, 2013; Okech, 2011).

### **Sustainable Event Measurement**

The research result explains that there are various indicators used to measure the environmental impact of an event. Indicators used to represent sustainability are location, energy, water resources, catering, promotional giveaways, materials, internal travel, waste management and participatory approach (Boggia et al., 2018).

Another view states that location is the key in calculating sustainable event (Raj & Musgrave, 2009). In addition, green food, Material Natural, Waste management, Ecosystem, and culture are the important indicators to hold a green event (Astawa et al., 2018). Assessment indicators in sustainable event are explained in (Table 1).

**Table 1.** Indicators of sustainable event assessment (Source: previous research, 2018)

Variable	Item	Detail item	Unit	Source
Location	Area Saved space used	Saved space used	%	Boggia et al. 2018; Raj & Musgrave, 2009.
	Tensile tructures		yes/no	
	Signage		yes/no	
Energy	Environmental certification	Electricity saved	%	Boggia et al., 2018
	Energy classification score	Renewable energy	%	
	Energy consumption	Fuels saved	%	
		Electricity generators	yes/no	
Water management	Water saved	Non-potable	%	Boggia et al., 2018
		Drinking	%	
Catering	Company	Zero km company	%	Boggia et al., 2018; Astawa et al.,2018 Leuenberger & Jungbluth, 2009; FAO, 2013.
	Materials	Eco-friendly materials	%	
		Eco-friendly dishes	yes/no	
		Packaging	%	
	Food and beverages	Organic products	%	
		Fair trade products	%	
		Seasonal products	%	
		Zero km products	%	
		Fruit and vegetables	%	
		Bread, pasta, rice and by-products	%	
		Animal products	%	
		Certified fish	yes/no	
		Food wastage	%	
Promotional giveaways	Non-food	Eco-friendly products	%	Boggia et al., 2018; Astawa et al.,2018
		Fair trade products	%	
	Food	Organic products	%	
		Zero km products	%	
		Seasonal products	%	
Materials	Packaging	No plastics	%	Boggia et al., 2018; Astawa et al.,2018
	Flowers/plants	Endemic seasonal species	%	
		Zero km	%	
	Paper, brochures and documents	Recycled/environmentally certified paper	%	
		Electronic format	%	
		Double-sided printing	%	
	Detergents	Eco-friendly products	%	
		Other Eco-friendly products	%	
	Others	Reused and reusable products	%	
Internal travel	Packaging	On foot/public transport/car sharing	%	Boggia et al., 2018; Astawa et al., 2018
		By car	%	
Waste management	Activities	Separate collection	% yes	Hottle et al., 2015. Boggia et al., 2018; Astawa et al.,2018
Participatory approach	Activities	Question	% yes	Boggia et al., 2018; Astawa et al., 2018
Culture	Activities	Question	% yes	Astawa et al., 2018

### Harmonious Culture

Hofstede (1991) prefers to define culture as a pattern of thinking, feeling, and action of a social group that differentiate them from other social groups. Siagian (2002) defines organizational culture as refers to a shared meaning system followed by members of the organization that differentiate the company to other companies. Organizational culture has been characterized by community culture where the company is established (Windia & Ratna, 2007). One culture originated from local community is harmonious culture. The culture put harmonious relationship with God, human, and environment forward to achieve happiness. It is sourced from community tradition and has been set as the foundation of business principles, tourism development philosophy, spatial arrangement, and strategic plan for Bali region development (Peraturan Daerah No. 16/2002). Initially, it is used as guidance by *pekraman village* (traditional village) and farmers in *subak* irrigation system (agriculture) in Bali. In its development, the concept has been used in tourism business and receives acknowledgement from the Pacific Area Travel Association (PATA) and World Tourism Organization (WTO). The culture is one of national culture that contains universal values and it does not recognize differences in ethnicity, race, and religion in its concept and implementation (Windia & Ratna, 2007). The comparison of harmonious culture and Schein's culture (2004) is explained in (Table 2).

**Table 2.** The Comparison of Schein's Culture (2004),  
Harmonious Culture, and Harmony Sub-culture (Source: Astawa & Sudika, 2014)

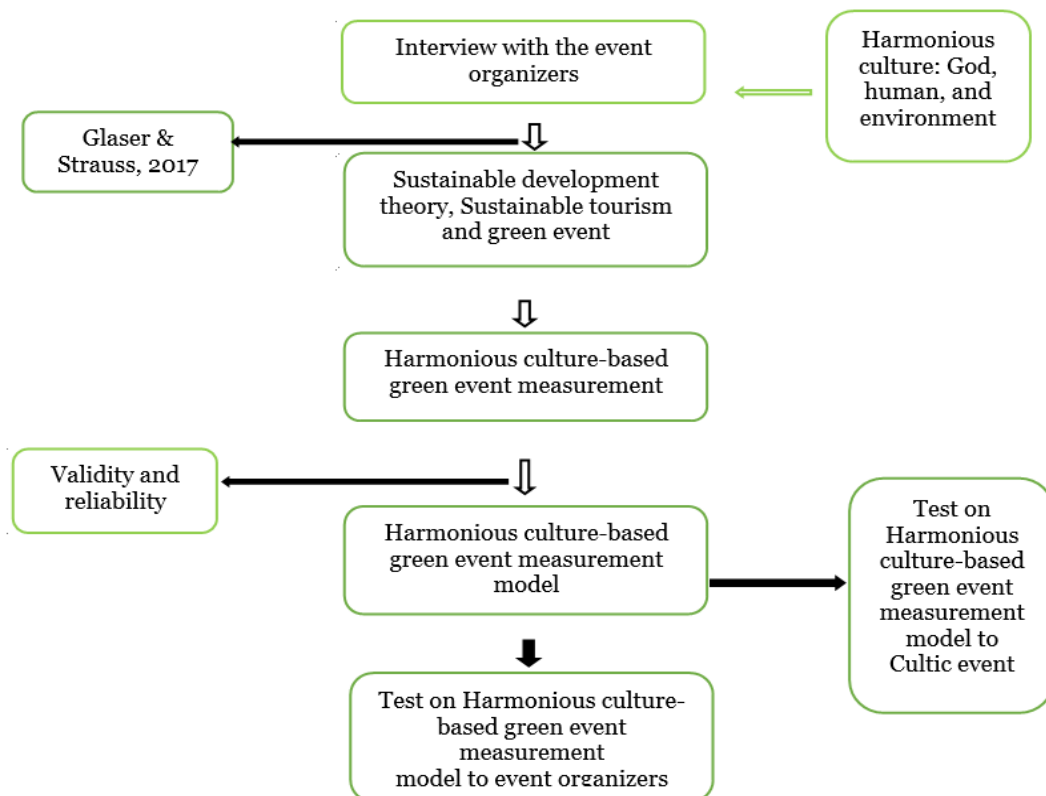
Schein (2004)	Harmonious Culture	Harmonious Sub-culture
Basic Assumption	Parahyangan	Pray and honesty
Value System	Pawongan	Work hard, mutual cooperation (gotong royong) and love each other (tatwamasi)
Artifact	Palemahan	Clean and Green

### MATERIALS AND METHODS

The research used qualitative and quantitative approaches (exploratory sequential design) (Creswell & Clark, 2017). Data collection technique was conducted using interview and questionnaire. In-depth interview was conducted to event organizers that organize an event in tourism villages in Bali Province. The organizer consisted of travel agent, accommodation (hotel), restaurant, academics, and government. Prior to the interview, a letter was sent to the event organizers by post or email consisted of the application of harmonious culture in green event indicators. The selection of key informants was based on event organizer that conducted the most green event and recommendation from the head of the tourism village. Fifteen informants were selected and the interview was conducted about 55 minutes, on average.

Data collection was conducted from February to May 2018. Data collected were compared to green event theory (Glaser & Strauss, 2017) and data coding was conducted based on Miles & Huberman (1994). The qualitative result was used to build questionnaire consisted of three aspects, namely: green event that is in harmony with God, green event that is in harmony with human, and green event that in harmony with the nature (Boggia et al., 2018; Astawa et al., 2018; Raj & Musgrave, 2009; Leuenberger & Jungbluth, 2009; FAO, 2013). The questionnaire was previously tested to determine the validity and reliability of its items. The valid questionnaire were distributed through email to 82 event organizers, as respondents, that were selected using Stratified Proportional Random Sampling (Hair et al., 2016). It aimed to test the event organizer understanding on green event. The respondents consisted of 36 travel agents, 24 accommodation (hotel), 12 restaurants, six academics, and four governments.

The questionnaire was used as a model to measure the implementation of an environmentally sound event, which was an event organized by an education institution, State Polytechnic of Bali, in Pinge tourism village. The event was Culture and Tourism International Camps (Cultic) with participant of 147 people (Astawa, et al., 2018). The research design can be explained in (Figure 1).



**Figure 1.** Research Design (Source: Creswell & Clark, 2017)

## RESULTS DISCUSSIONS

The result of qualitative study is explained in (Table 3).

Table 3 indicates that through harmonious approach with God, green event was measured using two variables, namely belief system and cultural values variables. The assessment method was by looking at the togetherness program that believed in the existence of God including prayer. The assessment on cultural values variable was conducted by measuring the involvement of event participants in maintaining the cultural values. It included, one of them, being involved in the existing cultural events in the tourism village. The approach of harmonious culture with human in the event revealed variables of internal travel, participatory approach, and villagers. In these variables, the measurement was conducted on the use of transportation mode in the internal event, the involvement of the event participants in supporting green event and the involvement of community in the event implementation. In detail, the measurement would assess the transportation mode used, such as on foot, using public transportation, sharing with friends, using car, and using bicycle and all parties, including the villagers, supported the implementation of event that align to the environment. The result of the two different cultural approaches

were different from the results of studies conducted by several researchers, such as Boggia et al., 2018; Raj & Musgrave, 2009; Leuenberger & Jungbluth, 2009.

**Table 3.** Result of Qualitative Data Processing  
of Harmonious Culture-Based Green event (Source: processed data, 2018)

Harmonious culture	Green Even Variable	Item	Detail item
Harmony with God	Belief system	Prayer	Congregation
	Cultural values	Understanding of village customs	Involvement in customary activities
Harmony with human	Internal travel	The use of transportation	On foot/public transport/car sharing
	Participatory approach	Event participants Activities	By car By bicycle
	Villagers	Villagers activities	Green support
Harmony with the natural environment	Location	Area Saved space used	Saved space used Holy/sacred places
		Tensile structures	Have removable plastic
		Signage and communication	The eco-sustainability of the event
	Energy	Environmental certification	Good practices for the use of energy
		Energy classification score	Engry classification of the location
		Energy consumption	Electricity saved
			Renewable energy
			Fuels saved
			Electricity generators
	Water management	Water saved	Non-potable Drinking
	Catering	Catering company	Zero km company
		Materials	Eco-friendly materials
			Eco-friendly dishes
			Packaging
		Food and beverages	Organic products
			Fair trade products
			Seasonal products
			Zero km products
			Fruit and vegetables
			Bread, pasta, rice and by products
			Animal products
			Certified fish
			Food wastage
	Promotional giveaways	Non-food	Eco-friendly products Fair trade products
		Food promotion giveaway	Organic products
			Zero km products
			Seasonal products
	Materials	Food Packaging	No plastic
		Flowers/plants	Endemic seasonal species
			Zero km
		Paper, brochures and documents	Recycled/environmentally Certified paper
			Electronic format
			Double-sided printing
		Detergents	Eco-friendly products
			Other Eco-friendly products
	Waste management	Waste management	Reused and reusable products

The differences were related to belief system, cultural values, and villagers variables. The differences supported a research result by Hofstede (1983) that belief system-related culture is given in nature in European countries and it requires no explanation and is attached in the behavior. This research were mostly referred to European sources, whereas, only few in Asian countries that tested an event that align to the environment, especially in Bali (Astawa et al., 2018). The assessment on green event variable related to the harmonious culture with environment was conducted on location or event venue, energy used, water management, catering, event promotion methods, materials used in the event, and waste management. The measurement of location or event venue was associated with the area used and tent structure used, which was whether or not the tent had plastic straps.

The use of plastic wrap is usually considered as unfriendly to environment. Installed signage and communication aimed to elucidate environmental preservation and environmental improvement practices in the event. There was one differential measurement item found in the location variable, which was whether or not the location used was sacred since it associated with the community belief that a sacred place cannot be used and it could have bad impact on the implementation. Location allowed for the activities was a non-sacred location determined by each village with the permission of the head of the customary village. The research result contributed to the social capital theory stating that the establishment of a company is influenced by position or place (Lin, 2001). Another contribution related to event conducted in an area having various cultures was that it can be used as a new competitive strategy due to the cultural uniqueness as a differentiator. (Porter, 2008; Madsen, 2015). Energy variable measured consisted of environmental certification ownership, energy classification score, and energy consumption. The three indicators were explained through the amount of electricity saved, the use of renewable energy, the amount of oil saved, and the existence of electricity generators. Water management variable was measured through the use of water for drinking and event activities for the booths. In catering variable, indicators assessed including the catering company, materials used and types of food and beverage produced.

The three indicators of catering would be assessed regarding the distance of the catering company to the event venue (zero km company), Eco-friendly materials, Eco-friendly dishes, Packaging, Organic products, Fair trade products, Seasonal products, Zero km products, Fruit and vegetables, Bread, pasta, rice and by-products, animal products, certified fish ownership, and food wastage arrangement. Regarding promotional giveaways, the giveaways were presented during the event. The promotional giveaways variable was measured based on the form of promotion, namely: non-food, food, and food packaging form. In non-food, the assessment was related to the percentage of eco-friendly products and percentage of fair-trade products. Items assessed in food promotion giveaways included Organic products, Zero km products, and Seasonal products. Food packaging consisted of non-plastic materials, thus it indicated an apparent alignment to the environment.

The use of less plastic materials is expected in the green event. The materials used were included in the event variable that consisted of Flowers/plants, Paper, brochures and documents, and detergent. The use of flowers/plants comprised of Endemic seasonal species and Zero km, whereas paper, brochures, and documents included items of Recycled /environmentally certified paper, Electronic format, and Double-sided printing. Regarding detergent items, the assessment was related to Eco-friendly products and Other Eco-friendly products. Waste management variable was assessed on whether or not waste management existed and items observed was Reused and reusable products. The research result integrated the application of harmonious culture. Compared to a research by Boggia et al., (2018) and Astawa et al., (2018), there was a development of variables in measuring green event, which was belief system and cultural values variables. Cultural values and

belief were the determinants of human behavior in conducting business activities (Schein, 2004; Yousef, 2000). The development of an easy-to-understand performance measurement model was a way to facilitate human action; therefore, sustainable concept in an event can be implemented well. The update of the finding supported sustainable tourism concept that considered cultural value as an indicator (Kapera, 2018). A perfect tool is meaningless if human behavior have no culture that align to the environment. This model will raise awareness that event assessment is essential. The quantitative result based on questionnaire distribution to green event organizers indicated that 86% of the organizers held bachelor's degree and the remaining were graduated from senior high school. The average of tenure was three (3) years and average age was 47 years old of 75% and the remaining was 48 years and above. Based on education, the organizers had adequate education to run management concept since higher education would mean deeper abilities to solve various problems (Dwi Atmanti, 2005). In addition, it was supported by their age where most of them were in the productive age; therefore, green event development concept could function well.

**Table 4.** Respondents' opinion on harmonious culture-based green event  
(Source: Processed primary data, 2018)

Variable	Question items	STS 1	TS 2	RR 3	S 4	SS 5	Total (weight x freq)	Average
Harmony with God	Conduct congregation			6	20	56	378	4,61
	Involvement with the customs			2	25	55	381	4,65
	Average							4,63
Harmony with human	On foot/public transportation/car sharing			5	22	55	378	4,61
	Not by car			4	30	48	372	4,54
	By bicycle			2	25	55	381	4,65
	Green support			2	25	55	381	4,65
	Average							4,61

Note: STS (strongly disagree); TS (disagree); RR (average); S agree); ST (/strongly agree)

Based on Table 4 and 5, the event organizers had understood the green component outlined in event organizing, it was proven by the average value of each question item that was larger than four (4), which was closer to strongly agree. The research result had supported the implementation of sustainable tourism through natural preservation (Getz, 2009; Hall, 2011; Musgrave, 2011). Items used in assessing event activities were in line with concept developed by Boggia et al., (2018); Astawa et al., (2018); Raj & Musgrave, (2009); Leuenberger & Jungbluth, (2009) and FAO, (2013). An interesting finding in the research was items of green measurement of an event were more towards environmental approach or harmonization with natural environment, whereas harmonization with human and belief values in customs only had six items. Belief or cultural values were predominant in supporting green behavior in green event. It was indicated by the average value of questionnaire that was closer to strongly agree.

The community attitude that believed in the cultural values was in line with a research developed by Hofstede, (1991); Siagian, (2002) stated that cultural values of a region or nation are crucial in community's character building. Belief and humanity values approaches became the main differentiator from the previous finding. The result of assessment on event organizers in implementing green event was closer to strongly agree to the attribute proposed. It means that the event organizers had commitment to support environmental alignment due to global demand as well as its environmental-alignment culture. These two pressures had been understood and believed that no matter how great a measurement is without a strong support from human or less benefits would make the guidance is meaningless (Hall & Hodges, 1996).



**Table 5.** Respondents' opinion on harmonious culture-based green event  
(Source: Processed primary data, 2018)

Variable	Question Item	STS 1	TS 2	RR 3	S 4	SS 5	Total (weight x freq)	Average
Harmony with natural environment	Saved space used				25	57	385	4,70
	Holy/sacred places				45	37	365	4,45
	Electricity saved				32	50	378	4,61
	Renewable energy			5	20	57	380	4,63
	Fuels saved			5	40	37	360	4,39
	Electricity generators			2	30	50	376	4,59
	Non-potable			6	30	46	368	4,49
	Drinking			5	20	57	380	4,63
	Eco-friendly materials			5	40	37	360	4,39
	Eco-friendly dishes			2	30	50	376	4,59
	Packaging			6	30	46	368	4,49
	Organic products			5	40	37	360	4,39
	Fair trade products			2	30	50	376	4,59
	Seasonal products			6	30	46	368	4,49
	Zero km products			5	20	57	380	4,63
	Fruit and vegetables			5	40	37	360	4,39
	Bread, pasta, rice and by-products			2	30	50	376	4,59
	Animal products			5	40	37	360	4,39
	Certified fish			2	30	50	376	4,59
	Food wastage			6	30	46	368	4,49
	Eco-friendly products			5	20	57	380	4,63
	Fair trade products			5	40	37	360	4,39
	Organic products			2	30	50	376	4,59
	Zero km products			5	40	37	360	4,39
	Seasonal products			2	30	50	376	4,59
	Endemic seasonal species			6	30	46	368	4,49
	Zero km			5	20	57	380	4,63
	Recycled/environmentally certified paper			5	40	37	360	4,39
	Electronic format			2	30	50	376	4,59
	Double-sided printing			5	40	37	360	4,39
	Eco-friendly products			2	30	50	376	4,59
	Other Eco-friendly products			6	30	46	368	4,49
	Reused and reusable products			5	20	57	380	4,63
	<b>Average</b>							<b>4,52</b>

Note: STS (strongly disagree); TS (disagree); RR (average); S (agree); ST (strongly agree)

The condition would damage the environment, community, and the already established cultural order (Hall & Hodges, 1996; Small et al., 2005). Green event measurement model as explained in (Table 4) and (Table 5) was implemented to assess an event organized by an education institution, which was State Polytechnic of Bali in Pingel tourism village. The event was Culture and Tourism International Camps (Cultic) with participant of 147 people (Astawa et al., 2018). Result of the event assessment can be explained in (Table 6). The result of event assessment as explained in Table 6 indicates the components of harmonious culture related to belief in the greatness of God through prayer activity or prayer before an activity. Every participant prayed based on their own belief and it had been conducted routinely before the beginning and end of the activity. Every participant in the event was directly involved in ceremonial or cultural activities in the village to maintain the balance of the nature through the preparation of ceremonial set.

**Table 6.** Result of Cultic Event Evaluation (Source: Processed data, 2018)

Harmonious Culture	Green Event Variables	Item Detail	Value
Harmony with God	Belief system	Congregation	87 %
	Cultural values	Involvement in customary activities	89 %
Harmony with Human	Internal travel	On foot/public transport/car sharing	100%
	Participatory approach	By car	No
		By bicycle	Yes
	Villagers	Green support	100%
Harmony with natural environment	Location	Saved space used	75%
		Holy / sacred place	100%
	Energy	Electricity saved	15%
		Renewable energy	0%
		Fuels saved	0%
		Electricity generators	No
	Water management	Non-potable	15%
		Drinking	No
	Catering	Eco-friendly materials	97%
		Eco-friendly dishes	95%
		Packaging	25%
	Promotional giveaways	Organic products	100%
		Fair trade products	56%
		Seasonal products	76%
	Materials	Zero km products	88%
		Fruit and vegetables	75%
		Bread, pasta, rice and by-products	60%
		Animal products	
		Certified fish	Not used
		Food wastage	0%
		Eco-friendly products	67%
		Fair trade products	45%
		Organic products	76%
		Zero km products	Not used
		Seasonal products	Not used
		Endemic seasonal species	Not used
		Zero km	Not used
		Recycled/environmentally certified paper	Not used
		Electronic format	78%
		Double-sided printing	Not used
	Waste management	Eco-friendly products	100%
		Other Eco-friendly products	100%
		Reused and reusable products	100%

Cultural activity integrated with religious values believed by the village was something unique from the participants' point of view since they could feel how to be a villager. In addition, it was in line with sustainable tourism concept where one of its indicator element is cultural preservation (Yuan Pan, 2018). Regarding harmonious relationship with human, it could be seen that participants used less fuel-powered transportation and preferred to use bicycle as the transportation mode and they could mingle with the community well. The villagers welcomed them and supported the event that aligned to environmental preservation. It was also related to the culture from their ancestor that they have to stay in harmony with the nature if they want to achieve happiness. The culture was manifested in rituals or ceremonies for plants, animals, and soil

or the surrounding nature. Natural preservation concept through culture was practiced together with the event participants thus the event gave positive impact (Getz & Page, 2014; Wilson et al., 2017) on the community in terms of cultural preservation and economy (Chirieleison et al., 2013; Connell et al., 2015). Community involvement in the green event became the strength in cultural sustainability (Fanni & Rezazadeh, 2018) that could be explained through several indicators in the event conducted at Pinge tourism village. Those indicators were rural tourism, cultural tourism, and heritage integrity. The integration of the three indicator components became the attraction for tourists who involved in the Cultic event. Therefore, the dominance of relationship with God and human was apparent, whereas relationship with the nature that had thirty indicators and adopted previous study, such as Boggia et al., (2018), was nonexistent since the event was adjusted to the village culture that dominated by simplicity thus many indicators were not used unlike those events in Italy, America, and Swiss (Rowley et al., 2012).

Harmonization with the nature in the event implementation had updated indicator, which was the event venue that followed *tri mandala* concept. The venue was divided into three parts, the main part, middle, and end part. The main part is a sacred or holy place; therefore, event activities could not be conducted at this place. Thus it left the middle and end parts that could be used. Every village had this type of area division using the concept and it was arranged in the village customary rules (Windia & Ratna, 2007). Although the selection of event venue used cultural concept, it also used modern indicators and raised tourism concepts at the village, such as eco-tourism, low carbon tourism, and other tourism alternatives. Cultural based event assessment was easy to understand by the guests since the event was simple and it was adjusted to the existing village culture. Moreover, before the implementation of the event, the event framework that should be followed had been distributed. Another model used had high difficulty level, such as eco-event evaluation. The evaluation is hard to understand for common people as well as the experts (Collins & Flynn, 2008; Collins et al., 2009). The form of tourism sustainability reporting that includes input-output in one of environmental aspects mathematically (Parkes et al., 2016) is difficult to understand. This model was developed through the culture of an area where the event was conducted thus community involvement was the objective in the sustainable tourism (Smith-Cristensen, 2009). Through the model, the event organizers had similar view with the community regarding green event; thus, it facilitated the implementation of environmental preservation programs from the government as well as world environmental organizations. The green event measurement model would support cultural tourism developed by Bali. It could also a competitive strategy that has differentiators in assessing green event; thus, it supports competitive strategy theory from Porter (2008).

## CONCLUSION

Harmonious culture-based green event measurement model had twelve variables agreed as one of alternatives in assessing an event conducted in the tourism village. Tourism village concept referred to a community-based tourism (CBT), which is a form of tourism that seeks to empower communities to manage tourism growth and achieve community aspirations relating to their well-being, and includes economic, social and environmental sustainable development. The model development was an innovation to support the CBT concept by considering cultural values in the society.

Harmonious culture used to measure event was an innovation in environmental management that put community culture forward in organizing an event. The concept encouraged sustainable development that required support from all parties to save the world from pollution. One indicator of success of the sustainable development is culture; therefore, cultural-based measurement in sustainable tourism development is

appropriate. The calculation model integrated modern and traditional measures or local culture in Bali. The concept was in line with cultural tourism developed by the government. To refine the measurement model would require further research from various perspectives, such as economy. Currently, at least there is a reference to assess event activity that supports environment with community participation and culture.

The model has an opportunity to be developed in a simpler direction in terms of items used by classifying types and forms of event; thus it will be uncomplicated and easier to understand. Model measurement with community participation and culture would require an observation on the involvement of government, tourism association, and supplier in building sustainable indicators of an event.

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## **WALI CITY BRANDING: MARKETING STRATEGY IN PROMOTING HALAL TOURISM DESTINATIONS DEMAK INDONESIA**

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**Abstract:** This article aims at describing the branding of wali city and marketing strategies in promoting halal tourism destinations of Demak regency. The method used is qualitative with a sociological and historical approach. The results of the research show that Wali City Branding is attached as the Icon of Demak Regency according to the history of this city. The establishment of the Demak Kingdom and the restoration of the Demak Grand Mosque are related to the role of Wali Songo. Branding of Demak Regency as a Wali City has embedded this city to the consumers. The halal tourism market segmentation is the Indonesian people and the international community who always care about the halal products, while the target market is the people who visit the tombs of Wali Songo so that Demak Regency as a destination for halal tourism has got its own position in the community. This phenomenon makes halal tourism in Demak Regency potential as a leading tourist destination in Indonesia.

**Keywords:** Branding, Wali City, Marketing, Destinations, Halal Tourism

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### **INTRODUCTION**

The product is anything that can be offered to the market to satisfy wants or needs. The marketed products include services, experiences, events, places, properties, organizations, information and ideas. Many similar products are sold by competitors, so

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companies need the brand names and other brand elements to differentiate their products from competitors. This brand can increase the product selling value, even the brand with high equity can dominate the customer's mind and the market.

The high-quality innovative products turn out to be of lower selling value if they do not have brands because the consumers will find difficulties to distinguish these similar products. The products and brands are the inseparable entities, both synergies with each other. The brand is one of the resources that can be competitive advantages for companies because they include the intangible resources that are difficult to analyze and imitate by competitors. At the same time, the brand can become a deep-rooted asset in the history of the company and has accumulated all the time (Sari, 2017). Whereas the management of producing and branding the tangible resources such as physical resources (for example sophisticated machines), which are easily observed and imitated by competitors must be a serious concern of the company for the success of their business (Sari, 2017). One element of the brand is equity, which is a set of assets and beliefs related to brands, names, or symbols that can increase or decrease the value given by a product or service, both for marketers, companies, and customers.

Thus, brand equity is an added value provided by the company through the products and services offered. The brand equity can be reflected through the customers thinking, feeling, and acting related to the brand and the price, market share, and profitability that had been given by the brand to the company (Zainal, 2017). The customer-based brand equity is the financial influence possessed and the brand knowledge on the consumer's response to the brand marketing (Corte, D'Andrea, Savastano, & Zamparelli, 2017). The principle of the customer-based brand equity model is the strength of the brand in what is seen, read, heard, learned, and thought, perceived by customers about the brand all the time. There are three substances in the customer-based brand equity: first, the brand equity arises because the differences in the customer response (Zainal, 2017). If there is no difference, essentially the brand product is a commodity or a generic version of the product. Second, the difference in response is the result of consumer knowledge about the brand.

The brand knowledge consists of all thoughts, feelings, images, experiences, and beliefs related to positioning the brand (Kocytigit, 2016). Third, the differential response from the customers that form the brand equity through the perceptions, preferences, and behaviors related to all aspects of brand marketing (Nghiem-Phú, 2018). A stronger brand will give more income. Likewise with Demak city which has been branded as a *Wali* city. The brand equity must reflect a city that is not only a religious tourism destination but also a halal city whose environment supports this brand, such as halal food, the hotel that applies the concept of sharia, the way to dress closes the genitals and so on. These phenomena make the urgency of discussion about the wali city branding especially if it is related to the marketing strategies in promoting the halal tourism destinations of Demak regency.

## **THEORETICAL BACKGROUND**

The companies are currently in an era of hyper-competition. The marketing strategy to survive is through managing its product brand which is easily remembered by consumers (Tuzunkan, 2018). The forming of consumer loyalty to a product can be realized through the embedment of the name of an item or service in the mind of consumers, so they will not hesitate to buy this brand or use it. The loyal consumers also do not hesitate to provide references to other consumers who have not used the goods or services through word of mouth as well as free promotion media for companies that produce these products. The brand is the intangible asset for the company. The more

famous the brand of a product, the higher the value. Therefore, both national and international companies have a brand management division to regulate the products.

According to Patricia F. Nicolino, a brand is an easily recognizable entity and promises the values (Nicolino, 2007). The purposes of the entity are feature differentiation, while the promises are the goods or services that gave the claims to consumers, and the value is everything that consumers get is definitely something that consumers care to a certain extent. An easily recognizable brand will help consumers separate one item similar to other products in several ways, for example through a tagline, color or logo that can be seen by consumers. So, in broad means of the brand is goods or services whose dimensions distinguish the brand from other goods or services designed to satisfy the same needs. The difference can be functional, rational, or real, and related to the product function of a brand. This difference can also be symbolic, emotional, or unreal, and related to what is presented by the brand.

The brand scope includes trademarks and service marks (Kasapi & Cela, 2017). Trademarks are brands that are used on goods traded by a person or some people together or a legal entity, to distinguish them from other similar goods. Meanwhile, service marks are brands that are used for services traded by a person or some people together or a legal entity, to distinguish them from other similar services.

Thus, for consumers or customers, a brand can be used to make a choice of goods to be purchased (Qomariah, 2017). The brand can also have several functions for producers or brand owners, including: first, the brand can be a differentiator between a product and another product company. Second, the brand can be a guarantee of reputation. In this case, the brand can also connect the product's reputation with its producers, while providing a quality guarantee for certain products. Third, the brand can be promotion to introduce and maintain the reputation of old products that are traded, as well as to dominate the market. Fourth, the brand can be investment stimuli and industrial growth. In this case, the brand can uphold industrial growth through investment in facing free markets (Zainal, 2017). The choice of the brand name needs a long process. Each company will assign a brand management division to assess from all sides. Every goods or service offered to consumers must be adjusted to their existence. For example, if the services offered relate to religious values, the company will also provide a brand name that represents its consumers.

According to Kartajaya and Sula (2006), a brand is an identity for a company's product or service. The brand reflects the value that the company provides to consumers. Value is the total get divided by total give. The total get consists of functional and emotional benefit components, while total give consists of price and other expenses components. The brand as a value indicator must reflect these four components. Usually, if the total get is higher than total give, the brand has an equity value. The brand will add the value to the goods and services offered related to its positioning and differentiation (Kartajaya & Sula, 2006). The brand is one element of heart share (value) of marketing. Many costs have been spent by the company to create and introduce brands. Even many companies try to maintain a positive brand value or communicate the goods or services brand to their customers. Philip Kotler (1993) wrote that marketing is the process of planning and implementing conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational goals (Kotler, 1993). A marketing strategy is needed to communicate the products to consumers. It is also known as segmenting, targeting, and positioning or commonly called the mind share. The market control is the key to successful marketing strategies to attach the product position or branding in the mind of the consumer. In short, consumers quickly refer to a product if it is related to a particular object.

Segmentation is an action to divide a market into different groups of buyers who need separate products or marketing combinations. The companies identify different ways to sort out markets and to develop the description of the market segments produced. The second step is market targeting, which is an action to develop the measures of market attractiveness and choose the market segments. The third step is product positioning, which is an action to put the competing position of the company and its offer on each target market (Kotler, 1993). One strategic effort that synergies with the success of mind-share is market control or mastery market share. Market share is a percentage of the entire market for a product or service category that has been selected and controlled by a product or service that issued by a company in the same category (Gunara & Sudibyo, 2007). The elements include differentiation, marketing mix, and selling. The differential is a product or service produced by a company that has a uniqueness or distinctiveness that differentiates it from its competitors. The marketing mix, also known as 4P, consists of product, place, promotion, and price. Meanwhile, selling is an effort made by sales to persuade the consumers to buy the goods or services.

After focusing on the mind share strategy and mastery of the market share, the next steps are to bring the goods or services that are owned by consumers by touching the emotional side to get the heart shares on each of the customers. The value added with emotional touching of the customer is the best way to win the customer heart share by proving sincere service to customer needs. There are also three elements of strategic business architectures, namely accuracy in the mindshare approach, mastery of the market share strategy, and touch on the customer's heart share. Meanwhile, the three pillars in winning the heart are strong branding, fast and sincere process, and friendly service. The companies that are selling their goods or services, especially for consumers who have religious sentiments, sharia marketing is necessary. Sharia marketing is a strategic business that directs the process of creating, offering, and changing the value of an initiator to its stakeholders, which in the whole process is according to the principles of business in Islam (Kartajaya & Sula, 2006). Thus, besides mind share (strategic), market share (tactic) and heart share (value), it must add a soul share component (generous) which includes honest, sincere, professional, and goodwill relationship.

Soul marketing starts with an honest attitude. The marketer must be honest to be trusted. The point of honesty is the conformity between speech and action, and it is supported by goodwill relationship that refers to the working in groups by implementing network marketing as a form of strategy for goodwill relationships (Kartajaya & Sula, 2006). If this attitude is implemented, the marketing strategies for goods and services are effective, market segmentation becomes clear, and promotional activities are right on target. A marketer has to understand the consumer behavior offering of goods and services. Religion is classified as a sub-culture in Indonesia. Because religion is plural and very personal, it makes religious groups influence people's consumption, and they will pay attention to specific preferences.

Marketers should be able to pay attention to specify preferences for goods or services produced because it will affect the behavior of buyers or users of the sub-culture of the religion. For marketers in Indonesia, where the majority of the population is Muslim, they need to get halal certification for every product related to food.

Muslim consumers are more likely to pay attention to the halalness of a product before they buy the product (Setiadi, 2003). At present in Indonesia, especially tourism destinations are starting to attract the people (Aswita et al., 2018). For Muslim, they knew religious tourism which also are known as halal tourism or sharia tourism. The Ministry of Tourism and Creative Economy launched the sharia tourism that coincides with the Indonesia Halal Expo (Index) 2013 and the Global Halal Forum which was

held on 30-October-2-November 2013. Halal tourism is one of the tourism systems for Muslim tourists whose implementation meets halal standards based on Islamic provisions. Halal tourism is one of the tourism systems for Muslim tourists whose implementation meets halal standards based on Islamic provisions.

In this case, halal provisions are not only for food but also for lodging or hotels that may not serve alcoholic beverages and must have separate swimming pools and spa facilities for men and women. Halal tourism not only tours religious sites or pilgrimages but includes halal needs related to tourism such as food, drinks, hotels, and dresses.

It is because the application of religious rules (sharia) aims to keep away from things that are harmful to humanity and the environment in the goods and services provided, and provide general benefits in accordance with the mission of religious messages which is a blessing for all nature. Even for non-Muslims, halal tourism with halal products is a health guarantee. The Islamic system teaches people to live in peace, security, and health, such as not providing alcoholic beverages, avoiding bad entertainment and security in the financial system (Muhammad, 2017). Indonesia has a potential in the development of halal tourism. If it is applied, the religious community life will be realized, so that in most parts of Indonesia which is tourism destinations will be friendly to Muslim travelers and other tourists who care about the halal products. Currently, the population in Indonesia is almost 260 million, and 80% of them are Muslims. It is a potential for the development of halal tourism, for example by creating sharia tourism packages in Indonesian tourism destinations.

One of the tourism destinations in Indonesia is Demak Regency which is famous for the Grand Mosque of Demak that was founded by *Wali Songo* (Nine Guardians) as the disseminator of Islam in Indonesia.

There is also the tomb of the kings of the Kingdom of Demak, which was the first Islamic kingdom on the Java Island and one of the tombs of Wali Songo, namely Sunan Kalijaga. Many tourists come to this regency both from Indonesia and abroad.

## RESEARCH METHODS

This research aims to explore the historical potential in Demak Regency and the implementation of the marketing strategy in promoting the tourist destinations that were only the religious tourism (pilgrimage) into halal tourism through the Wali City Branding because Demak Regency is one of the tourism destination icons based on sharia values. The research method used is a qualitative method, that views social reality as a holistic, complex, dynamic, full of meaning, and the relationship of these phenomena are interactive. (Narbuko & Ahmadi, 2002).

The qualitative method is descriptive, namely data collected in the form of words or images, not emphasizing numbers (Sugiono, 2008). The approach used is a sociological and historical approach (Abdurrahman, 2007), because the mention of the wali city is part of the dialectical process and the development of the society that is strongly related to sociology, whereas the historical approach is used to trace the origins and history of Demak Regency. The study used the analytical study method to analyze the implementation of halal tourism in Demak Regency.

This method intends to explain the nature of facts, why it occurs, and how it relates to other facts. By choosing this method, the phenomena found in the field can be interpreted through the content, meaning, and essence in more depth. Thus, the study is holistic by occupying the object of research in a complete construction and seeing objects in a natural context (Muhadjir, 1994). Data sources are obtained from primary and secondary data, namely data sources that directly and indirectly provide data to researchers, such as documents, books, and government regulations (Basrowi, 2008).

## RESULTS AND DISCUSSIONS

### 1. The Wali City as Branding

Demak Regency is known with the term *Wali* (guardian) City. The attachment of *Wali* City branding as the icon of Demak Regency because the establishment of Demak kingdom and the restoration of Demak Grand Mosque were not off from *Wali Songo* (the Nine Guardian) roles. They were the Islamic disseminator in Java Island and the consultant of Demak kingdom. The kingdom of Demak stood since the inauguration of Raden Fattah as the first king of this kingdom. The day of the inauguration itself was determined by *Wali Songo* with Sultan Fattah, that was on Monday, the 11th of Rabiul Awal 860 H or May 16th, 1482 M/1404 Saka which coincides with the Prophet Muhammad's SAW birth commemoration. This coronation was carried out by Sunan Ampel (one of the *Wali Songo*) which was witnessed by several *Wali Songo*, clerics, soldiers, and the people (Akasah, 2015). After Sultan Fattah's inauguration, the *Wali Songo* advised him to restore the mosque. Sultan Fattah accepted this advice, but the roof of the mosque must have a pointed shape similar to the Arabic one as a symbol that Allah is The One. The construction of Demak Grand Mosque was marked by *Candra Sengkala*, a round-shaped image (at the priest place). In Javanese, term "*bulus*" is arranged by "*yen mlebu sing alus*", it means that anyone who entered the mosque to worship must be subtle inwardly, humble themselves before Allah SWT.

In the book *Purwaka Caruban Nagari* was written that when the construction of the Demak mosque there are 2.000 workers and 300 experts were deployed. The chief executive of the restoration was held by Empu Supo with help of his son named Empu Supo Anom. The workers were divided into two: 1000 workers for Demak under the leadership of Empu Supo while another 1000 workers for Cirebon under the leadership of Empu Supo Anom. The construction of the Demak Grand Mosque was established in mutual cooperation from the *Wali Songo* to the society.

The *Wali Songo* who participated were Sunan Giri, Sunan Ampel, Sunan Bonang, Sunan Kudus, Sunan Kalijaga and Sunan Gunung Jati (Akasah, 2015). The role of *Wali Songo* in establishing Demak's kingdom and restoring Demak Grand Mosque makes the Demak Regency got the brand as *Kota Wali* (the city of Wali). The Wali City's branding is still inherent in the people's mind, especially those who are Moslem. So many pilgrims have come to Demak Regency to pray for the kings and Sunan Kalijaga, as well as pray at Demak Grand Mosque and know the historical heritage of Demak kingdom. The government through the Ministry of Education and Culture as stipulated in the Decree of the Minister of Education and Culture Number 243/M/2015 December 18<sup>th</sup>, 2015 stipulates that Demak Grand Mosque is a protected cultural heritage. The physical form of the protected Demak Grand Mosque includes: Land Area 12.752,74 square meters, Main Building Area 537.5 square meters, Porch of 497 square meters and a New Building Area of 3.530, 03 square meters. From the description above, Demak Regency receiving the brand of Wali City is a valuable asset. Whereas if it is viewed from marketing management, the goods or services that have been attached to the buyer's minds or services users is a winning competitive strategy. Surely all the efforts of Demak Regency and Demak Grand Mosque Administrators were able to maintain that brand.

### 2. The Golden Triangle Destination of Wali City

For Indonesian people, Demak Regency is one of the religious tourism destinations based on the fact that Demak Regency saves a lot of halal tourism potential. There are at least three (golden triangle) Wali City tourism destinations in Demak Regency, namely Demak Grand Mosque, Sultan Fattah's Tomb as the First King of Demak Kingdom and Sunan Kalijaga's Tomb as one of the most respected *Wali Songo*. Demak regency tourism potential can be observed from tourists number in the Table 1.

**Tabel 1.** Tourism Visitors in Demak Regency (Data source: Demak Regency Tourism Office, 2019)

	2016 Year	2017 Year	2018 Year
Demak Grand Mosque	591.755	534.098	603.374
Sultan Fatah Tomb	591.740	534.092	603.352
Sunan Kalijaga Tomb	868.930	815.423	872.039
TOTAL	1.460.670	1.349.515	1.475.391

## 2.1. Demak Grand Mosque

Demak Grand Mosque is one of the pilgrimage tourism destinations in Indonesia. Several new buildings such as the office of the Indonesian Ulama Council, museums, and guest accommodation are currently established alongside old buildings. However, the concept of structuring new buildings is still harmonized with the old building models (Kessler, 2015). Demak Grand Mosque was built in the Majapahit style that brought Balinese culture. This style blends harmoniously with traditional house style in Central Java. The intersection between Demak Grand Mosque architecture with Majapahit buildings can be seen from the shape of the roof.

The curved dome, which is identical to the mosque characteristic as an Islamic building is not visible. On the contrary, what is seen is precisely the adaptation of Hindu buildings. This form is believed to be acculturation and tolerance of the mosque as a means of spreading Islam in the midst of Hinduism, except for *mustoko* (the top of the mosque) which has ornate Allah and the minaret which has adopted the Malay Minaret Mosque style. The three-shaped rectangular roof made the roof of the Demak Grand Mosque more similar to the Hindus sacred building, a temple consisting of three canopies. The bottom section houses the worship room. The second canopy is smaller with the slope that is more upright than the roof below, while the highest canopy is in the form of pyramid with a more pointed slope.

The Demak Grand Mosque stands on four main pillars called *Soko guru*. The function of these pillars is to support the building from the ground to the top of the mosque. There is one unique pillar between these four pillars, known as *Soko tatal* located in the Northeast. This unique pillar is called *tatal* (wood shavings), because it is made from arranged and compacted wood chips, then tied to form a neat pillar. On the pillars of the mosque, including *soko guru*, there are carvings that still reveal the beautiful Hinduism style carved patterns. Beside of pole carving, there are also wood carvings affixed to the walls of the mosque that serve as the decorations. Inside the main building, there are main room, niche (*Mihrab*) and porch.

The function of the main room is as a congregation worship place, located in the center of the building. Whereas, the *Mihrab* building is in front of the main room, a small space and facing towards the *Qibla* (Mecca). At the back of the main room, there is a 31 x 15-meter porch, with the pillars called *Soko Majapahit* which is eight pillars and imported from the Majapahit kingdom. The Demak Grand Mosque has triple overlapping roof, using the shingles (roof made of wood) and culminating *mustaka*.

The mosque walls are made of stone and limestone. There are a *bedug* and classic pattern painting in the entrance of the mosque. There is also *Pintu Bledag* inscribed *Condro Sengkolo*, which reads *Nogo Mulat Saliro Wani*, written in 1388 Saka or 1466 AD, or 887 Hijriyah. *Pawestren* is a building made for female congregation worshippers which are built by teak wood construction, with the pyramid roof (a wood tile) in the teak wood shingles. This building is supported by 8 supporting pillars, 4 of them are decorated with the carvings from Majapahit motifs. The floor is stretching to the *Qibla* measuring 15 x 7.30 meters. This *Pawestren* was made in K.R.M.A. Arya Purbaningrat era, reflected in the form and motifs of *maksurah* or *khalwat* carvings made in 1866 AD

(Akasah, 2015). The different shape of the Demak Grand Mosque from the other mosques in Indonesia is a special attraction, besides having the historical value of the civilization of spreading Islam on Java Island.

## **2.2. Sultan Fattah Tomb, First King of Demak Kingdom**

Sultan Fattah was born in 1455 AD and died on the 13<sup>th</sup> of Jumadil Akhir 924 H / 1518 AD. It means he died at the age of 63 years was buried in the North of Demak Grand Mosque. Sultan Fattah came to power for approximately 40 years (1478 M – 1518 AD). After he died, as his successor was his crown son named Raden Pati Unus who was the Duke of Jepara which was famous as “Prince *Sabrang Lor*”. The name turned out to come from the area where he lived across the North (Duke of Jepara). Raden Pati Unus ruled Demak kingdom for 3 years (1518 AD – 1521 AD), he died on the battlefield in the Malacca Strait in a battle against the Portuguese who would colonize Indonesia. He was replaced by his young brother named Raden Trenggono (Syeh ‘Alam Akbar III) who ruled for 25 years (1521 AD – 1546 M). Raden Trenggono was killed while fighting the Portuguese in the Malacca Strait. The successor to Raden Trenggono was his son named Sunan Prawoto (Prince of Good Believers) for 3 years (1546 M – 1549 M).

Sunan Prawoto himself was not willing to be crowned sultan, then the leadership in Demak kingdom was continued by Kalinyamat Queen, sister of Sunan Prawoto and empress of Prince Hadirin (Duke of Jepara) (Akasah, 2015). It resulted in a leadership vacuum because there was no official king in the Demak kingdom for almost 14 years (1546 AD - 1560 AD). This emptiness triggered a family conflict over the leadership position between Raden Aryo Penangsang and Danang Suto Wijoyo.

The battle was won by Danang Suto Wijoyo. Wali Songo established a contest to avoid prolonged conflict and bloodshed because of vengeance. Mas Karebet (Joko Tingkir) won this contest. He moved the Demak Kingdom to Pajang (near Solo city). The tomb of the kings of Demak and his family (Sultan Fattah, Raden Pati Unus and Raden Trenggono) are on the North side of Demak Mosque and today are still an urgent part in the development of halal tourism for the Indonesian people.

## **2.3. Sunan Kalijaga Tomb**

Sunan Kalijaga was the son of Tuban Regent, Ki Tumenggung Wilatikta (Kasdi, 2017). Sunan Kalijaga is also called by names such as Raden Syahid, Raden Abdurrahman, Lokajaya, Jagabaya and Prince Tuban. In the book “*Babad Tanah Jawi*”, during his youth, Raden Syahid had studied with Sunan Ampel and also to Sunan Bonang. He was ordered to meditate on the riverbank in a village called “Kalijaga”. After finishing returning to Demak and by Wali Songo in Demak he was given the title “Sunan Kalijaga”. The hermitage place of Raden Syahid, named “Kalijaga”, is still a legacy, namely in the Kalijaga village, South of the Main Bus Terminal Cirebon city (Abu Amar, 1992). During his lifetime, Sunan Kalijaga played many roles and served the Demak Kingdom and helped restore the Demak Grand Mosque. He also spread Islam on Java Island. Sunan Kalijaga's residence in Kadilangu village was possibly due to place considerations, to always be close to Demak as the center of Islamic government at that time. Until the end of his life, he lived in Kadilangu and was buried in the village as well (+/- 3 km from Demak Grand Mosque). Everyday Sunan Kalijaga Tomb is visited by many people, most of whom aim at the pilgrimage to his tomb. Although sometimes there are also those who just come to know this historical tomb in Java.

On certain days, Sunan Kalijaga's tomb is crowded and many people make pilgrimages especially on Thursday, Friday and Sunday. Besides these days, Sunan Kalijaga's tomb is also crowded with people on the 10th of Dzulhijjah, because they want to see or follow the *Grebeg Besar Demak* procession, the ceremony to wash the heirlooms and Sunan Kalijaga's clothing (Abu Amar, 1992).

### 3. Potential Halal Tourism Demak Regency

The ethics principle in production that must be carried out by every person is to hold on to everything that God has ruled. The halal area is indeed wide, but the majority of ambitious human souls feel less satisfied with things that are awful.

So, there are many human souls tempted to something that is forbidden by breaking the God laws (Effendi, 2003). The word halal comes from Arabic which means it is permitted or in accordance with the law. Furthermore, haram words which also come from Arabic vocabulary have the opposite meaning of halal, which is prohibited or not in accordance with the law (Qardhawi, 2003). In other words, halal is something if it used does not result in getting a punishment (sin). Halal is anything that is permitted by the Sharia to be consumed and used. While haram is something that is by Allah, it is forbidden to be carried out with a strict prohibition in which the person who violates is threatened by torture by Allah in the Hereafter.

Thus, halal tourism can be defined as tourism activities or tourist attractions which if visited don't cause harm (sin). According to the provisions of the Sharia, consuming the unlawful causes the prayers offered will not be granted and all the acts of worship performed will not be accepted by Allah. On that basis, for humanity, in line with the Shariah teachings, it is desirable that all products to be used are guaranteed to be halal and chastity. According to Islamic teachings, the consuming halal, pure and good (*thayyib*) is a religious order and the law is obligatory (Amin, 2011).

The Indonesian government increasingly improves regulations that regulate comprehensively about *halal tourism*. The legal basis for halal tourism activities is based on the 2009 Law 10 of Tourism. Furthermore, the government issued technical regulations regarding halal tourism supporting facilities in the form of Tourism Minister and Creative Economy Regulation Number 2 of 2014 concerning Guidelines for Implementing Sharia Hotel Businesses. This regulation stipulates two categories, namely the hilal sharia hotel I and hilal sharia hotel II. However, finally, this regulation was revoked with the emergence of Tourism Regulation Minister No. 11 of 2016 because it received mixed reactions from the tourism industry.

Then in 2016, the National Sharia Council of the Indonesian Ulema Council (DSN-MUI) issued a fatwa Number 108 / DSN-MUI / X / 2016 concerning guidelines for Sharia-Based Tourism Organization. The tourism aspect arranged in it include hotels, spas, saunas, massages, tourist attractions, and travel agencies. However, the fatwa will not be effective if it is not positively translated into the form of a decree of the tourism minister and creative economy and law. Then, what is the potential of Demak Regency in responding to the development of *halal tourism*? Based on marketing theory and reality in the field, it can be explained that Demak Regency has the potential to develop halal tourism. The reasons are: First, the branding that Demak Regency as the Wali City has been embedded in the minds of consumers, especially those who are Moslem. The halal tourism market segmentation is clear, namely the Indonesian people and the International community who care about halal products. While the target market is the people who visit the tombs of *Wali Songo* so that the Demak Regency as a religious tourism destination (*ziarah*) has got its own position in the community.

Demak Regency has its uniqueness compared to other halal tourism destinations because it has a golden triangle of halal tourism destinations, namely Demak Grand Mosque, Sultan Fattah Tomb and the kings of the founding kingdom of Demak and the tomb of one of the *Wali Songo*, Sunan Kalijaga's Tomb. It means that Demak Regency has differentiation compared to other halal tourism places. Reviewed from the



marketing mix (4P), the three religious tourism places are very strategic because they are close to and in the city area, products (in this case services) are also known to Islamic society in Indonesia and Internationally, promotion is very effective because it is often displayed in electronic and print media especially during the holidays of Islam. While the price element is not a problem because when visiting the three objects, a fee is taken. So it is not surprising that selling (the level of pilgrimage visits) to Demak Regency is never empty of visitors. The proof is a significant increase in visitors from 1,349,515 in 2017 to 1,475,391 in 2018 (Demak Regency Tourism Office, 2019).

Secondly, the regional government of Demak Regency has ratified Perda Number 11 the Year 2018 concerning the Implementation of Entertainment Businesses in Demak Regency. In Chapter II concerning Business Fields, Article 5 (b) prohibits night entertainment including a nightclub, discos, and pubs. It shows the response of the Demak district government to the development of halal tourism. Third, the majority of Demak people are Moslem. Thus, both food and beverages consumed are halal and the majority of entrepreneurs receive halal certification from these businesses.

Fourth, most of the people in Demak Regency cover their genitals in using the dress. If the local government wants to maintain the image that Demak is the Mayor's City, then it can socialize and educate people who have not closed their genitals. As for non-Moslem citizens, they should be able to dress neatly.

## CONCLUSION

Demak Regency is one of the religious tourism destinations that has long been known by the Indonesian people, especially those who are Moslem. It is inseparable from the history of the development of Islam in Indonesia, where the first Islamic kingdom on the Java Island was in Demak. Branding as the Guardian City for Demak Regency has been embedded in the minds of consumers. The halal tourism market segmentation is clear, namely the Indonesian people and the International community who care about halal products, while the target market is the people who visit the tombs of Wali Songo so that the Demak Regency as a religious tourism destination has got its own position in the community. The uniqueness of halal tourism in Demak Regency compared to other halal tourism destinations is that Demak has a golden triangle of halal tourism destinations, namely the Demak Grand Mosque, Sultan Fattah's Tomb and the tomb of one of the *Wali Songo*, Sunan Kalijaga's Tomb.

Demak people who are mostly Muslim have a correlation with their high level of religiosity, so that tourist destinations in Demak are not only in the form of pilgrimage or religious tourism, but have also developed into halal tourism. It is because the Demak government itself has supported these efforts through Regional Regulations and the consistency of the Demak community in consuming halal products.

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## **RE-ACTUALISING THE POTENTIAL OF TEMPLES IN GREATER MALANG AS A NEW TOURIST ATTRACTION IN INDONESIA: THE NEED TO TRANSFORM REGULATIONS INTO DIGITALISED AND INTEGRATED MANAGEMENT**

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**Abstract:** This article is aimed to re-actualise the potential of temples located in the Greater Malang as a new sustainable tourist attraction. This paper is a legal research using statute, conceptual, and analytical approaches. The research result reveals that there are 7 aspects that play an important role in re-actualising the potential of temples located in the Greater Malang: managing the regulation systematically, revitalising organisations, developing infrastructure; Preservation by means of digital technology; improving marketing and promotion; involving the people living near the area of the temples; and improving the partnership of stakeholders. Thus, regulations are very important in developing tourism temples in Indonesia.

**Key words:** re-actualisation, temples, Greater Malang, new tourist attraction

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### **INTRODUCTION**

The Greater Malang is ranging from Regency of Malang, Malang municipality, and Batu City has great potential of temples. There are 29 temples (Mahfudhoh, 2016) from the total 149 temples located in Indonesia (Dokhi et al., 2016). Badut Temple located in the Regency of Malang (National Library, n.d.) and Songgoriti Temple in Batu City (Fadli

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et al., 2014) are the two oldest temples in East Java. Singasari and Majapahit Kingdom, the two greatest Hindu/Buddha kingdoms in Indonesia have also left tens of temples that serve as a symbol of the rank of their civilisation. Interestingly, Ronald Sinuwun Pralaya Jati (2017) suggests that the Greater Malang deserves its name as a Mecca for the followers of Hinduism. However, the potential has not been utilised optimally. At national level, in 2016, the foreign exchange for the state obtained from tourism sector was still at second position (Wisnubro, 2017). It is expected that by 2019 this sector could be optimised as the greatest contributor of foreign exchange to the state, as much as USD 24 billions (Ministry of Tourism of Republic of Indonesia, n.d.).

At a local level, Batu City is one of the main tourist attractions in East Java, with 65% of contribution of the total owned-source revenue (PAD) of Batu City. However, the visits by foreigners are still limited, thus improvement of promotion and the infrastructure availability is required (Christiyaningsih, 2017). In the Regency of Malang, the economy is mainly supported by agricultural and plantation sectors and trade and industrial sectors. For the tourism, the government keeps encouraging the development, in which it is expected that this sector is capable of giving optimal contribution to the owned-source revenue (Prasetyo, 2017). Despite the fact that tourist attractions available in the city are not more than the Regency of Malang and Batu have, Sutiaji (vice-Mayor of Malang) suggests that Malang may be focused more on the development of cultural art and culinary, hoping that Malang can also have the main tourism destination (Government of Malang City, 2017).

In general, temple tourism in Indonesia, especially in Greater Malang, has weaknesses in which the tourism planning has not been performed comprehensively. The planning has not involved the issuance of laws that specifically regulate how the temples are supposed to be protected and preserved, and it should also involve effective measures in terms of achieving the outcome of conservation (Liemanto, 2016). Some other shortcomings that affect the development of tourism involve limited access to road and transportation, lack of infrastructure, lack of competitiveness of tourism products offered in the market, lack of relevance to market interest, less interesting tourist objects, limited tourism promotion both at a local and international level, lack of partnership among government, private sectors, academics, NGO, and society (Cholik, 2017).

The growing development of shopping centres in the Greater Malang should be seen as a chance by the government as a way to establish partnership with private sectors in terms of developing tourist resorts at the area of the temples, which may involve the development of hotels, restaurants, and shopping centres. The existence of the weaknesses over the protection and development of temple tourism has left the temples neglected, damaged, and this condition has caused the decrease in the number Hindu visitors to the sites. This certainly causes historical and economic loss. This article is aimed to re-actualise the potential of temples located in Greater Malang by simultaneously protecting and utilising the temples as a new tourist attraction, which benefits the local government, the people living in the temple area, or the tourists. In addition to the conventional protection and utilisation, this article also elaborates how technology can be involved to add values regarding the protection and presentation of the temples that know no boundary of time and space.

#### **CONDITION AND ASSESSMENT OF TEMPLE MANAGEMENT REGARDING SUSTAINABLE TOURISM DEVELOPMENT IN GREATER MALANG**

It is inevitable that cultural heritage protection is a part of sustainable tourism development, which should meet the criteria of protection and development of cultural

heritage. Mascardo and Woods (1998) argue that sustainable development of tourism involves 3 main aspects:

1. The quality of visitors' experience and the life of the people living near the cultural heritage site
2. Sustainable tourism
3. Sustainable development, including the balance among the needs of tourists, tourism organisers, the people living in the area, and the environment.

Liao and Wang (2011) elaborate more of the details over sustainable management of cultural heritage through the following 5 criteria:

1. Existence of Specific Regulations/ SR

The key to authenticity comprises protection and maintenance, two of which would not be realised without the existence of specific regulations to protect the cultural heritage.

2. Commercial Development/ CD

Tourism commercialisation involves the development of several facilities such as restaurants, accommodations/ hotels, shops, and so forth).

3. Tourists' understanding/ TU

The knowledge of tourism regarding the values of cultural heritage can be realised in the form education, learning, classes, workshops, or other educative activities.

4. Collaboration with Tourism Industries/ CTI

Partnership and collaboration among several parties serve as an essential key to minimising conflicts that may emerge between the tourism and the development of cultural heritage. This partnership will set a balance of several interests.

5. Safeguarding quality of life in the community/ SQLC

The development of tourism heavily relies on the participation of communities existing in the area of the cultural heritage. At the same time, this situation is also expected to improve life quality of the societies, including the increase in income obtained from ticketing (TC), infrastructural development that involves the availability of transport (TR), etc. In addition, the website (W) is also essential to be accessed by all tourists, where detailed and clear information on tourist attractions can be obtained, not to mention information on visiting hours, ticket price, location and transports available to reach the tourist objects, types of attractions, and on all other facilities provided. Based on the 6 criteria, the author aims to measure the sustainable management of the temples taking place in Greater Malang.

The tick (√) indicates that the criteria are available, while the cross (x) shows unavailability. The detailed measures are presented in Table 1.

From the Table 1, generally, the management of the temples has not met the criteria of sustainability, which is shown through the following indicators:

1. Specific Regulations

Protection, development, and utilisation of cultural heritage are all regulated in Regional Regulation of the Regency of Malang, Malang City, and Batu City on Cultural Heritage. However, there is no regulation of a Regent or Mayor which either technically or specifically regulates how the regional regulation regarding Cultural Heritage should be implemented on the temples, including the blue print of the plan made to sustainably develop the tourism. Specific regulation on the protection, development, and the utilisation of temples is just mentioned in Article 44 Paragraph (9) and Article 55 Paragraph (2) (a) of Presidential Decree Number 28 of 2012 on Spatial Planning of Java-Bali Island, Article 60 Paragraph (4) of Regional Regulation of the Province of East Java Number 5 of 2012 on Spatial Planning of the Regency of Malang, especially for Jago Temple, Kidal Temple, Singosari Temple, Sumberawan Temple, and Badut

Temple (see Figure 1 to show the temples position), while other temples have not received special attention from central and regional governments.

**Table 1.** Measurement of Sustainable Management of the Temples in Greater Malang

No	Temple	SR	CD	TU	CTI	SQLC		W
						TC	TR	
1	Jago Temple	√	X	√	X	X	√	√
2	Kidal Temple	√	X	√	X	X	X	√
3	Singosari Temple	√	X	√	√	√	√	√
4	Sumberawan Temple	√	X	√	√	√	X	√
5	Selokelir Temple	X	X	X	X	X	X	√
6	Complex of Jawar Ombo Temple	X	X	X	X	√	X	√
7	Bocok Temple	X	X	X	X	X	X	X
8.	Petirtaan Watugede	X	X	√	X	√	X	X
9	Ngabab Temple	X	X	X	X	X	X	X
10	Gunung Telih Temple	X	X	X	X	X	X	X
11	Badut Temple	√	√	√	√	√	√	√
12	Songgoriti Temple	X	√	√	√	X	√	√
13	Punden Mojorejo	X	X	X	X	X	X	X
Kompleks Percandian Gunung Arjuna								
a. Sepilo Group								
14	Bhatara Guru Temple	X	X	X	X	X	X	X
15	Kembang Temple	X	X	X	X	X	X	X
16	Lepek Temple	X	X	X	X	X	X	X
17	Madrin Temple	X	X	X	X	X	X	X
18	Wesi Temple	X	X	X	X	X	X	X
19	Hyang Semar Temple	X	X	X	X	X	X	X
20	Makutarama Temple	X	X	X	X	X	X	X
21	Patung Lesung Temple	X	X	X	X	X	X	X
22	Rancang Kencana Temple	X	X	X	X	X	X	X
23	Rhatawu Temple	X	X	X	X	X	X	X
24	Sepilo Temple	X	X	X	X	X	X	X
25	Watu Ireng Temple	X	X	X	X	X	X	X
b. Indrokilo Group								
26	Laras Temple	X	X	X	X	X	X	X
27	Gua Gambir	X	X	X	X	X	X	X
28	Indrikilo	X	X	X	X	X	X	X
29	Satria Manggung	X	X	X	X	X	X	X

Sources: author analyses from many sources ([http://candi.perpusnas.go.id/temples/deskripsi-jawa\\_timur-candi\\_badut/](http://candi.perpusnas.go.id/temples/deskripsi-jawa_timur-candi_badut/); [http://candi.perpusnas.go.id/temples/deskripsi-jawa\\_timur-candi\\_singasari/](http://candi.perpusnas.go.id/temples/deskripsi-jawa_timur-candi_singasari/); [https://candi.perpusnas.go.id/temples/deskripsi-jawa\\_timur-candi\\_jago/](https://candi.perpusnas.go.id/temples/deskripsi-jawa_timur-candi_jago/); [https://candi.perpusnas.go.id/temples/deskripsi-jawa\\_timur-candi\\_kidal/](https://candi.perpusnas.go.id/temples/deskripsi-jawa_timur-candi_kidal/); <https://www.eastjava.com/tourism/malang/sumberawan-temple.html>; <https://ngalam.co/2016/06/03/candi-jawar-ombo-ampelgading/>; <https://situsbudaya.id/candi-songgoriti-kota-batu-jawa-timur/>)

### 1. Commercial Development

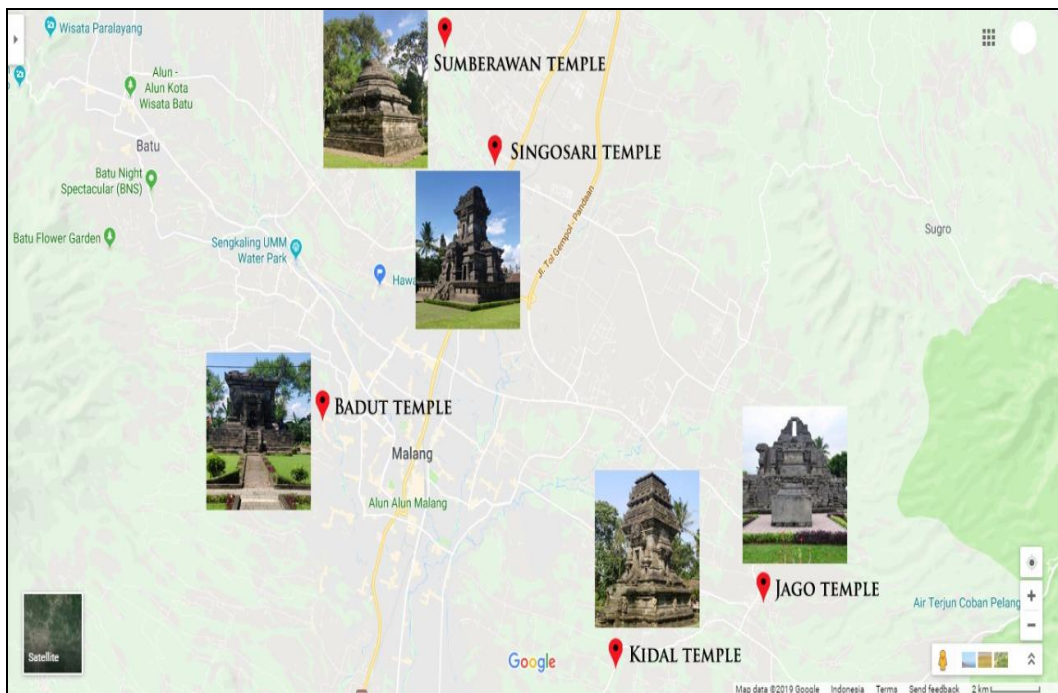
Commercial development of tourism has been well executed in two locations: Songgoriti Temple and Badut Temple, while other 27 locations are rarely provided with hotels, restaurants, and souvenir shops. Unfortunately, this condition has left the economic potential neglected and tourist attractions are decreasing in popularity.

## 2. Tourists' understanding

The tour guides with the knowledge of the history of temples are only available in 7 tourism locations and in Indonesian language only, while other forms of activities such as seminar, short courses, and scientific writing contest have never been conducted due to the shortage of potential human resource and fund.

## 3. Collaboration with Tourism Industry

Partnership in tourism industry is mainly focused on temples that receive attention from the government to be developed further into a main tourist attraction such as Singosari Temple, Sumberawan Temple, and Badut Temple, and Songgoriti Temple. On the other hand, other tourist attractions, with all their limit in infrastructures, have not received any attention.



**Figure 1.** Temples' positions

## 4. Safeguarding the quality of life in the community

The improvement of the quality of life of the locals living in the area of the temples is minimum. There are only 5 temple objects levying entrance fee. The amount imposed is relatively small to about Rp. 10.000. This will not certainly have huge impact on the improvement of the quality of life of the people living in temple areas. Furthermore, only four temples are supported by public transports that bring visitors right to the destination. Therefore, this issue needs more attention from the government.

## 5. Website

Website plays an important role in giving information and supporting promotion of tourist attractions. However, there are only 8 tourist objects that utilise website to market and promote their tourist attractions, indicating a bad tourism management.

## **RE-ACTUALISING THE POTENTIAL OF TEMPLES IN GREATER MALANG AS A NEW TOURIST ATTRACTION**

Based on Strategic plan of the Ministry of Tourism 2015-2019 and Strategic Target of the Ministry of Tourism in Medium-term Development Planning (RPJM) 2015 – 2019, the government is planning to turn the tourism into a core economy in Indonesia, in which the tourism industry in Indonesia is projected to be the biggest source of foreign exchange in the state, the best tourism in ASEAN, increase the rank of Wonderful Indonesia at international level, and Indonesia is also expected to be a Tourism Hub by 2019 (Bureau of Planning and Finance of Ministry Secretariat, 2016).

Recalling that the need for cultural heritage tourism is gaining its importance and the fact that there is an increase in interest of both foreign and local tourists, the tourism requires holistic and integrated handling that involves digitalisation. The concept of cultural heritage tourism integrates aspects required in a research, the development of sites, design, planning, construction, technology, preservation, interpretation, and customer services by putting theories into practices of tourism (Jamieson, 1998). To re-actualise the potential of the temples in Greater Malang as a new tourist attraction, the author suggests that there should be improvement of regulation that provides the following main notions:

### **1. Improvement of regulations covering regional and central areas**

At international level, Indonesia has ratified the 1972 World Heritage Convention by issuing a Presidential Decree Number 26 of 1989. To take the further action regarding this ratification, the government has also put the Law Number 11 of 2011 on Cultural Heritage into effect, which is used as a reference in terms of the application of regional regulations in Indonesia. In addition to applying laws that are aimed to protect, develop, and utilise cultural heritage, the government is expected to consider short-term, medium-term, and long-term plans in order to protect, take care of, and present the objects of cultural heritage. The scope of the cultural heritage should involve two aspects as follows:

i. Material involves (a) zonation; (b) infrastructure development such as road maintenance, public transport improvement, provision of tour guides, development of restaurants and accommodations, and so forth; and (c) strengthening the management of cultural heritage.

### **ii. Non-material takes perception and cohesiveness.**

As to protect the cultural heritage in the long run, regular monitoring and report are required. When monitoring is done regularly, quick response can be gained in case of trouble occurring in cultural heritage management (Liemanto, 2016).

However, several regional regulations of cultural heritage merely serve as the norm that is not easy to implement. Thus, improvement of the regulations is required to make them more effective, where the good characteristics of the formation of the norm regarding cultural heritage should be met as follows (UNESCO, ICCROM, ICOMOS & IUCN, 2013):

a. Clear regulation of inventory, protection, zonation of cultural heritage area, and intervention policy.

b. Clear command and coordination line required in a teamwork and wide access to consultation and participation.

c. Existence of provision that integrates all the local potentials into a sustainable tourism development system.

d. Capacity to utilise other related-regulations either at central level or regional level for the sake of the protection and utilisation of cultural heritage.

e. The need of management in terms of power distribution. This criterion is aimed to give closer access to the objects of cultural heritage and problem solver.



f. The need of provision that allows different systems and the monitoring of the impacts. It is expected that experiments still go on to realise better management of cultural heritage.

2. Revitalising institutional bodies from the central to regional areas

The institution responsible for the protection, development, and utilisation of cultural heritage at national level is under the Directorate General of Culture, the Ministry of Education and Culture. Based on the Law Number 11 of 2011 on Cultural Heritage, the obligation and authority of the central government, provincial government, and the government of the regency/municipality are not clearly elaborated. This hinders the command and coordination line in teamwork. Therefore, amendment of the Law of Cultural Heritage is required, where the local government in the regency and municipality should hold a key role in protection, development, and utilisation of cultural heritage for a quicker decision making and more organised technical staff.

Furthermore, Indonesia has limited human resource in archaeology. This is the responsibility of the government to adequately develop the capacity of the human resource for a more sustainable cultural heritage management and more solid institutions and community of a wider scope. The development of the capacity will be focused more on several aspects (WHC-11/35.COM/9B):

i. Reinforcement of human resource from the aspects of knowledge, skill, and attitude to be directly responsible for protection and cultural heritage management.

ii. Improvement of structure and strategic policy making in an institution

iii. Implementation of more dynamic relationship between cultural heritage objects and their context by means of more inclusive approaches.

3. Development of infrastructure

The development of infrastructure is the key requirement for a sustainable tourism development. Temples located in Greater Malang have not met the standard requirement regarding the infrastructure standard set by UNESCO. For example, Gunung Telih Temple is located in a remote area, and it can only be accessed on foot or by motorbike. This location is 4 km from the nearest Donogragal hamlet, Donowarih village, the district of Karangploso. Some other 16 temples located within the area of enshrinement in Arjuna Mountain are also difficult to access and they are lack of adequate facilities for tourists. Worse still, Bocok Temple located in Bocok hamlet, Pondokagung village, the district of Kasembon, the Regency of Malang has been stolen due to the lack of proper security. The development of infrastructure should be prioritised to realise sustainable tourism development. It is essential that the government provide facilities and effective services to fulfil the need of the tourists, along with the provision of easy access to the temples. The facilities developed for the tourists should involve (a) road access; (b) public transports to the location; (c) signposts, lane, information, and guidelines; (d) availability of museum or exhibition for the temples; (e) the availability of bilingual tour guides; (f) Utilisation of technology and digital services; (g) other accommodations and facilities such as inns/hotels, restaurants, shopping centres, parking lot, toilets, search and rescue team, and so forth.

4. Preservation by means of digital technology

The utilisation of digital technology has made a huge and substantial change regarding the protection, development, and presentation of cultural heritage. The existence of big data has directly impacted data restoration and data/information diversion. Big data “reflects the growing technological ability to capture, aggregate, and process an ever-greater volume, velocity, and variety of data sets” (Supriyadi, 2017). Information on things related to the temples can be accessed on website for all people

around the globe. Moreover, technology can be utilised to present the temples in a more attractive form, especially for young generation.

There are several forms of technology that could be utilised to help tourists enjoy more of the cultural heritage in 3D images, immersive technologies, augmented reality, virtual reality, video reconstructions and simulations. This is a great chance as those technologies could be made at a relatively low cost since it is supported by open source software. Therefore, temples can be presented in a more attractive and interesting way.

The utilisation of technology is also popular when it is presented in the form of games. Games give users education in a fun way, not only restricted to children, but adults could also use this facility. As commonly known, games are varied in their types as follows: (1) a game that is played individually, played in a small group of players, and played by several teams; (2) games are educative and neutral; (3) games that require special devices, high-tech games, games based on simple objects and symbols; (4) games based on certain orders or behaviours; (5) games (not) relying on physical activities; (6) games (not) requiring physical involvement of the players; (7) games requiring special knowledge and skills; (8) simulation or abstract games; (9) games requiring chances and skills; (1) games making the winner or those not; and many more (Ronchi, 2009).

As a result, games can serve as a new alternative approach to attract more people to appreciate cultural heritage of the past presented in a modern way.



**Figure 2.** Example of the Utilisation of Augmented Reality on Presenting Temples

##### 5. Increasing marketing and promotion

There is still lack of promotion of the temples located in Greater Malang, which is due to the absence of official website made by the government or any parties in charge to promote the temples as tourism objects. The government is responsible to encourage the promotion of cultural heritage tourism that can help increase the quality and quantity of tourism. The regulations regarding marketing and promotion strategies for tourism by building image needs to be more developed. Furthermore, Tourism Department, along with private sectors, should provide public information centre and consultation service to give information on tourist attractions, route to the tourist objects, public transportation, weather, accommodation, security, and nearest health clinic in case of emergency.

Since most of the temples in Malang sit in remote areas where the access to the spots is very limited, utilisation of software 'Visit Malang' could be encouraged to give information regarding the tourism in Malang, alternative road that can be taken, hotels, restaurants, and nearest service station that can be reached by tourists.

Besides, reinforcing marketing and promotion strategies needs to be focused more on foreign tourism by providing information on the website in two languages: Indonesian and English. This also needs to be supported with the availability of shops selling souvenirs in varied range and high quality, which should meet the market taste.

#### 6. Participation of community living at the temple areas

The development of tourism industries heavily relies on the participation of communities. The participation can be performed through (a) information; (b) consultation; (c) collaboration; and (d) empowerment (Kuncoro & Zulkaidi, 2015).

In addition, the community living in the area of the temples must be actively involved to protect, maintain, and utilise the tourism objects so that they are expected to have a sense of belonging. The development of the culture of the society taking place around the temples through several continuous efforts by public and private institutions will surely give positive influences in terms of reviving the identity of the communities living in the areas of the temples. It will also help them improve their economic status and positively contribute to the sustainable development of tourism.



**Figure 3.** Example of Visit Malang Software

#### 7. Increasing partnership among stakeholders

The partnership established among government, academics, private sectors, NGO, and communities is highly required. Partnership model for cultural heritage tourism should be explored, involving planning, management, marketing, and funding. The government can work with private sectors to provide initial funds to financially support the tourism.

### CONCLUSION

The area of Greater Malang has a big potential for temple tourism, but the management performed by the government along with private sectors is not optimal yet. The management of 29 temples located in Greater Malang has not met the parameters required in the sustainable development of tourism. Re-actualising the potential of the temples located in Greater Malang as a new tourist attraction is required holistically and in an integrated way. This re-actualisation surely needs improvement of the regulations that consist of several main ideas: (a) More systematic management of regulation ranging from central to local governance; (b) revitalisation of institutional bodies from central to regional governance; (c) development of infrastructure; (d) preservation by means of digital technology; (e) improvement of marketing and promotion; (f) Participation of the communities living near the location of the temples; and (g) Increasing partnership among stakeholders. Recommendation: It is essential that re-management of the existing regulations must be performed to bring temple tourism to a digital-based tourism for a more optimised historical potential with more economic values.

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## **LANDSCAPE AND LIMNOLOGICAL RESEARCH OF LAKE SYSTEMS OF THE PLAIN AREAS OF THE NORTHEASTERN BORDERLANDS OF THE REPUBLIC OF KAZAKHSTAN AND ASSESSMENT OF THEIR RECREATIONAL CAPACITY**

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**Abstract:** The article is concerned with landscape and limnological research of lake systems in the plain areas of the Republic of Kazakhstan. The results obtained present field expeditionary, landscape and limnological research, primarily of the plain areas of the northeastern borderlands of the Republic of Kazakhstan. A genetical classification of lake basins in key areas, as a single natural complex, based on the main features of environmental conditions in the research area is given. The hydrological and hydrochemical data of lake systems (temperature, transparency and color of water, pH value, content of oxygen dissolved in water and BOD<sub>5</sub> of biochemical oxygen demand) are determined. An assessment of the recreational capacity of lakes in the region is given. The created electronic geodatabase is open to replenish it with miscellaneous information (from paleogeographic data to modern results of environmental monitoring) and can serve as the basis for

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creating a multi-purpose cadastre of reservoirs, as well as for justifying balanced nature resource management schemes in the areas covered with lakes.

**Key words:** landscape, lake system, lake classification, recreational capacity.

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## INTRODUCTION

The plain areas of the northeastern borderlands of the Republic of Kazakhstan include the North-Kazakh, Yessil, as well as the Kulyndy plains and the southern borderlands of the Baraba steppe. The study of problems associated with the dynamics of large lakes and lake-flowing systems in the areas of the Republic of Kazakhstan plays a special role in modern geographical science.

One of such areas, whose dynamics depends on the state of lake systems, are the plains of the northeastern borderlands of the Republic of Kazakhstan. The research of lake systems of plain areas of the northeastern borderlands of the Republic of Kazakhstan is of interest primarily because the accumulation of lakes of various sizes with varying composition of water in a fairly compact area with close climatic and geological and geomorphological conditions allows a more reliable assessment of the role of the main factors controlling the diversity of the composition natural waters.

## RESEARCH MATERIALS AND METHODS

Many limnology scientists (Popolzin, 1960, 1965, 1967; Filonets, 1974, Beletskaya, 1976, 1987; Kolomin, 2004) have researched the lakes of Northern Kazakhstan.

The landscape and limnological research algorithm includes three stages: 1) preparatory (pre-field) period (selection and analysis of cartographic, satellite and aerial photographs; selection of representative catchments and preparation of a topographic base of 1:25 000 – 1: 10 000 scale; preliminary interpretation of satellite and aerial photographs; 2) field period (instrumental measurements, water temperature measurement, water sampling, analysis of species diversity of hydrophytes; 3) office period (laboratory analyzes of water and vegetation samples; compilation of information, assessment of the recreational capacity of the lake areas). The conducted landscape research presents the results of the analysis of thematic maps, statistical data, informational analytical material, professional literature, Landsat 8 satellite photographs, field research data (2017-2018), topographic maps of 1 : 200000 scales during which 7 key areas were surveyed. Spatial analysis and synthesis of data were performed using the ArcGIS 10.4.1 geographic information system.

Observations were made at key areas and their physiographic description was given. Samples of water from reservoirs, watercourses were collected using the point method. Water was taken from a depth of 0.15-0.25m into plastic containers with a volume of 5 liters, in accordance with the requirements for sampling, primary processing, and storage of samples of natural waters. Under field conditions, the following organoleptic properties of water were determined: color (color value), transparency (turbidity), smell. Chemical and analytical research of selected samples were performed in certified laboratories of the Branch of the Republican State Enterprise on the Right of Economic Management "National Centre of Expertise" of the Public Health Protection Committee of the Ministry of Healthcare of the Republic of Kazakhstan in the North Kazakhstan region in accordance with approved methods.

To determine the pigment characteristics of phytoplankton, water samples were taken during the period of maximum development of phytoplankton from the surface layer. Samples were concentrated by filtering water from a volume of 300-400 ml through membrane filters "Vladipor" MFAS-OS-3 with a pore diameter of 0.8  $\mu$ m. To assess the content of organic matter in the reservoir by zooplankton and macrophytes, the Pantle-Buck saprobity index (S) in Sladечek's modification was calculated using the formula 1:

$$S = \sum s_i \square h_i / \sum h_i \quad (1)$$

where  $s_i$  – indicator value of species in sample;  $h_i$  – number of species in sample;

**Table 1.** Assessment of Recreational Properties of a Water Body for Mass Recreation

Property of water body	Quantitative characteristic of parameter of water body properties indicator (ki), score					Weight coefficient of indicator (ai)
	1	2	3	4	5	
Bottom of reservoir	Muddy and peaty	Argillaceous	Rocky	Gravelly	Sandy	0,12
Width of shallow water, m	50	40	30	20	10	0,08
Quality of water	Visible pollution	Containing smells	Within normal limits	Within normal limits for drinking water supply	Exceptionally clean spring water reservoirs	0,15
Area of coastal cultural zone, m <sup>2</sup> /person	17	18	19	20	21	0,15
Near-stream vegetation	Swamp and with sparse shrubbery	Low forest and spruce forests	Meadow vegetation	Mixed forest	Light pine forests	0,1
Aesthetics of landscapes	Weak expressiveness of terrain	Monotonous landscape	Expressive landscape	Scenic landscape views	Bright multi-scenic landscape views	0,12
Area of waters, m <sup>2</sup> /person	Less than 50	60	70	80	90	0,08
Aquatic fauna	Poor species and low value ichthyofauna composition	Ichthyoproductivity of 5-15 kg/ha	Commercial species with productivity of 30 kg/ha	Rational composition of ichthyofauna	Valuable fish species	0,1
Historical and cultural monuments	Lack of showplaces	Ordinary monuments	More significant monuments	Monuments of great artistic value	Monuments protected by law	0,05
Improvement level	Minor improvement	Additional improvement of beaches	Additional catering facilities	Overnight accommodation	Capital facilities	0,05

The temperature, transparency and color of water, the pH value, the content of oxygen and BOD<sub>5</sub> (biochemical oxygen demand) dissolved in water were determined by the Winkler method. Hydrochemical analysis was performed on 12 elements (CO<sub>3</sub><sup>2-</sup>, HCO<sub>3</sub><sup>-</sup>, Cl<sup>-</sup>, SO<sub>4</sub><sup>2-</sup>, Ca<sup>2+</sup>, Mg<sup>2+</sup>, Na<sup>+</sup>, pH, NO<sub>2</sub><sup>-</sup>, NO<sub>3</sub><sup>-</sup>, NH<sub>4</sub><sup>+</sup>, P-PO<sub>4</sub><sup>3-</sup>), and also to study hardness and total dissolved solids. Sampling and processing of samples was performed according to the standard method [Abakumov, 1992]. In addition to field research, data



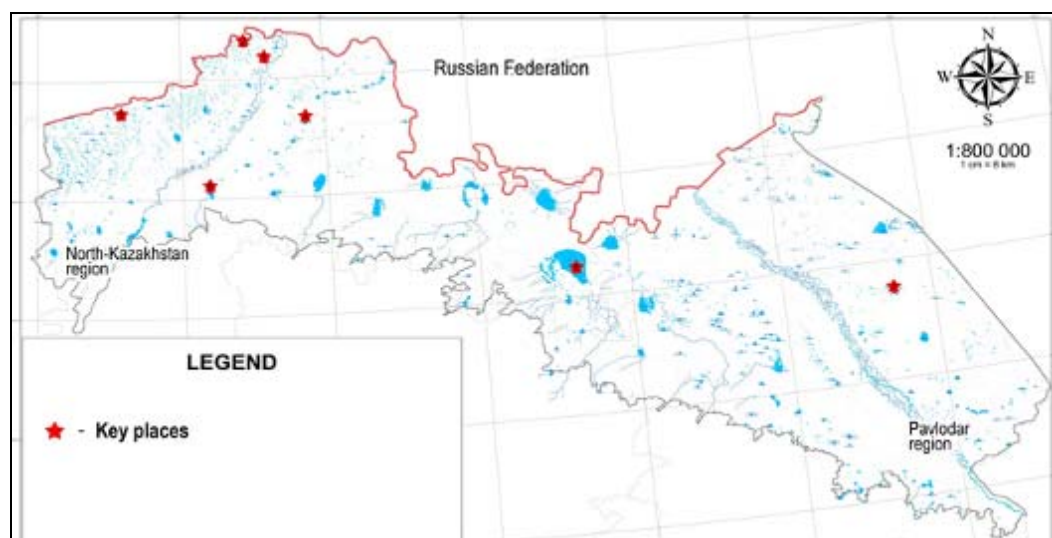
from physical and geographical research of lakes in the region were systematized according to archive and cartographic materials (S 1:25 000). Polish geographers (Kostrowicki, 1970; Warszyńska, 1972; 1974; Wyrzykowski, 1985; Zwoliński, 1992; Rychling, 2010) are responsible for determining the optimal recreational loads on natural landscapes. To assess the level of recreational capacity of water bodies, we used materials (Herman & Wendt, 2011; Ilię et al., 2018) and used a composite quality indicator calculated by the method of weighted average calculation (Gubiy, 2005).

$$k = \sum k_i \sum a_i, \quad (2)$$

where  $k_i$  — indicator of the  $i$  property of water body, scores;  $a_i$  — weight coefficient of the  $k_i$  indicators, unit fraction ( $\sum a_i = 1$ ) (Table 1).

## RESULTS AND DISCUSSION

The essence of the research is described on the example of key areas, the choice of which is due to the different genesis of the lake basins, since the origin of the lake basin determines the main typical features of the lake. Within the region under study, as a result of field research in 2018, seven key areas are highlighted (Figure 1).



**Figure 1.** Diagrammic Map of Key Areas of Summer Field Research in 2018

The size and shape of the lake basins are closely related to the origin (genesis) of the lake basins and, therefore, the regime of the lakes. A number of characteristics can relatively easily establish the origin of the lake basins: the terrain of the surrounding area, the geological structure and the geological history of the basins.

Therefore, although the genesis of the basins is not an exhaustive characteristic for the description of lakes, it is the basis of the lake classifications. The formation of lake basins as an integral part of the general terrain is the result of all processes that form the terrain of the area as a whole; therefore, to understand the morphology, characteristics of location and origin, it is necessary to consider the general conditions of development, to identify the leading mechanisms for the formation of lake basins. It is also necessary to take into account that lake basins are qualitatively specific landforms, morphology, dimensions, the evolution of which depends on the activity of the water that fills them, the

volume and level of which, in turn, is determined by general climatic zoning conditions, the catchment morphology and morphometry. Several factors are involved in the formation of the vast majority of lake basins; therefore, genetic classification is based on identifying the factor that guides the creation of each basin. The generalization of materials on the geological structure, geomorphological characteristics of the area allowed us to propose a genetic classification of lake basins of the research area.

**Table 1.** Genetic classification of Lake Basins and their morphometric data

Origin	Name of lake	Area, km <sup>2</sup>	Depth (max), m	Overgrowth intensity, %
<b>Hypogene type</b>				
Tectonic				
1. depressions-grabens	Siletyteniz	777	3,2	10
	Mengiser	33,6	2,6	8
	Teke	265	6	10
2. depressions-troughs	Shaglyteniz	240	7	12
<b>Exogenous type</b>				
1. Lakes of ancient valleys				
A) Kamyshlovki	Ulkenzharma	12,0	1,9	40
	Balykty	10,7	3,0	80
B) Paleo-Sueri	Alpash	21	2,7	90
C) Paleo-Yemtsa	Uzynkul	1,4	2,9	24
2. Lakes of modern valleys				
A) floodplain	Pestroe	1,3	3,0	15
B) terraces above flood -plain of Yessil River	Alua	6,4	2,5	95
	Polkovnikovo	1,5	1,5	20
3. Residual				
Residual	B. Tarangul	40	3,2	25
4. Lakes between rivers				
basin-hilly-low ridge terrain	Sumnoe	1,73	2,9	30
	Krugloe	0,22	2,1	20
	Pitnoe	2,0	2,6	76
Suffosion- subsidental	Obalykul	1,9	2,2	50
	Gussinoe	1,1	2,5	37

*Tectonic:*

1) depressions-grabens, as a result of discontinuous tectonic movements, which appeared in the side structures of the West Siberian plate at the neotectonic stage of development (Teke, Kishikaroy, Siletyteniz, Ulkenkaroy, Bolshoy Tarangul, Imantau, Shalkar (Chelkar), Lobanovo, Menkisser, Stanovoe, etc.)

2) depressions-troughs formed as a result of slow oscillating movements without breaking the continuity of rocks (Shaglyteniz, Shelegino, etc.);

*Hydrogenic* – a result of the activity of flowing water

1) floodplain (oxbow lakes-meanders, oxbow lakes-anabranches, inter-low ridge, secondary floodplain) – numerous lakes of the floodplain of the Yessil River and Yertis River;

2) terraces above floodplain of the valley of Yessil River – basins of the Gorkoe, Lebyazhye, Polkovnikovo, Nikulskikh, Skopino, Alva (Alua), Kendykty lakes, etc.

3) the valleys of the disappeared rivers Kamyshlovka (Balykty, Zhylandy, Bozaral, Taldyral, Ulkenzharma, Pitnoe, Polovinnoe, Baranovo, Kamyshlovo, Solenoe, etc.), Sueri (Semilovo, Pitnoe, etc.), Kizak, Yemtsa;

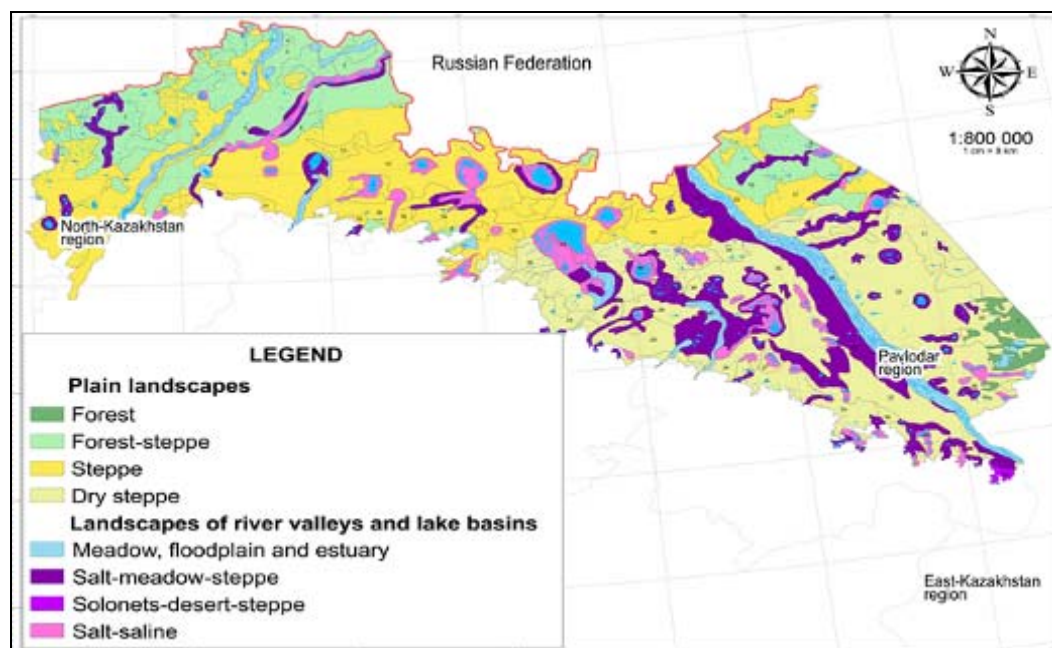
4) the basins of the basin-hilly-low ridge terrain – a numerous group formed in the process of forming the terrain mentioned.

*Residual* – single, preserved ones from the former larger reservoirs.

*Suffosion-subsidental* – the most shallow water "flat-bottom steppe depressions", mostly drying up in summer.

*Aeolian* (theoretically possible) – shallow water produced in sandy and sandy loam substrates.

*Thermokarst* (theoretically possible) – shallow water, might appear during the Ice Age due to melting of frozen soil or ice lenses, strongly transformed by subsequent terrain-forming processes. The basin, appeared under the influence of one factor, can be further modified by the action of others. The depths and sizes of lakes depend on the genesis of the basins, as shown in Table 1 (Beletskaya, 1987). Thus, the origin of the lake basin to a certain extent leaves its imprint on the individual characteristics of the lake, for example, area, depth, characteristics of slopes, etc. The conducted research allowed creating a landscape map, which demonstrates the space-time patterns that operate in lake systems (Figure 2).



**Figure 2.** Landscape map of plain areas of northeastern borderlands of the Republic of Kazakhstan

Specific features of the landscape are: 1) plain terrain which is pronounced in the structure of the terrain, developed on ancient sedimentary and eruptive rocks, which alternates with relatively flat areas, confined to ancient and modern valleys, lake basins, where eluvial, deluvial and other friable deposits; 2) prevalence of loess like deposits (loams and sandy loams); 3) prevalence of ancient weathering crusts enclosing bedding rocks; 4) powerful accumulations of river sandy, sandy and pebble alluvium in the valleys of the rivers of the Yessil and Yertis river basin. The functionality of the program ArcGIS 10.4.1 allowed undertaking spatial analysis and data synthesis. As a result of the analysis of thematic maps, statistical data, information analytical material, professional literature, Landsat 8 satellite photographs, field research data (2017-2018), topographic maps of 1:200 000 scale, morphometric and chemical parameters of the lake systems under research were determined, which are of particular value in fisheries and recreation. In Table 2 and 3, morphometric and chemical information is given on the 7 research reservoirs in key areas and the degree of overgrowth by higher surface vegetation.

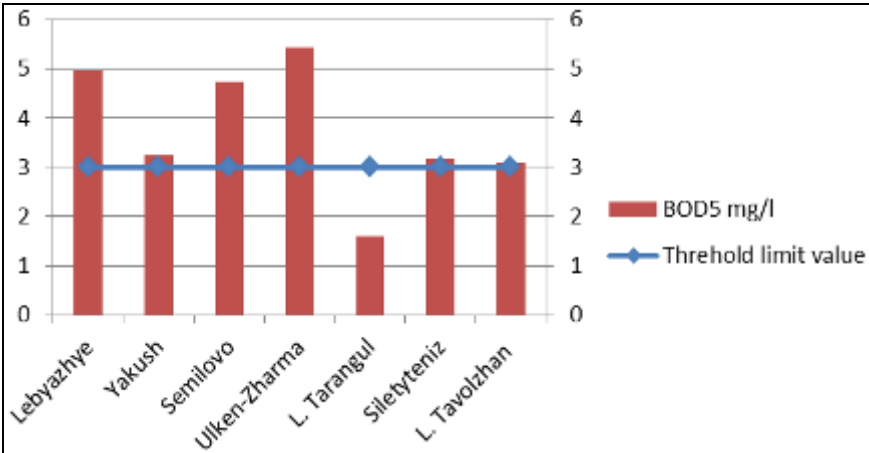
**Table 2.** Morphometric Data of Some Lakes of North Kazakhstan Region and Degree of Overgrowth by Higher Surface Vegetation

Name of lake	Area of lake, f, ha	Depth, m		Volume of water mln. m <sup>3</sup>	Amount of overgrowing, %
		max	mid		
Lebyazhye	600	4	3	18	10-15%
Yakush	680	2	1,6	11	5-10%
Semilovo	940	1,1	0,6	6	10-15%
Ulken-Zharma	968	1,8	1,2	12	15-20%
B. Tarangul	3400	4	2	68	10-15%
Siletyteniz	777750	3,2	0,7	5 444	5-10%
B. Tavalzhan	700	40	20	140	30-35%

**Table 3.** Chemical Composition of Water in Lakes of North Kazakhstan Region

Lake	pH	Oxidizability, mgO/l	BOD <sub>5</sub> , mgO/l	NH <sub>4</sub> <sup>+</sup> , mg/l	Ca <sup>2+</sup> , mg/l	Mg <sup>2+</sup> , mg/l	CL <sup>-</sup> , mg/l	SO <sub>4</sub> <sup>2-</sup> , mg/l	Hardness, mg/equiv	K + Na, mg/l	Total dissolved solids, g/l
1	2	3	4	5	6	7	8	9	10	11	12
<i>Threshold limit value</i>											
	6,5-8,5	10	3	0,5	180	100	300	100	14	170	1.0
Lebyazhye	7,35	8,8	4,96	0,1	66,5	124	228	495	16,6	741,6	2,86
Yakush	8,38	9,6	3,23	0,02	100,4	420	561,4	273,8	40	3244,8	10,3
Semilovo	8,1	9,2	4,74	0,03	123,3	363	347,9	311,2	31	4863,2	11,2
Ulken-Zharma	9,34	10,2	5,44	1,11	76,2	186,1	265,3	157,6	19,1	1370,9	2,9
L. Tarangul	8,73	9,6	1,6	0,08	54,3	46,6	279,3	123	6,54	196,8	1,07
Siletyteniz	8,2	8,7	3,16	0,07	146,8	403	498,3	356,7	36	5423,1	13,8
L. Tavalzhan (brine) g\kg	7,8	10	3,1	-	0,843	5,5	155,2	6,924	44	0,178 +92,58	35-47

Higher BOD<sub>5</sub> rates indicate pollution of natural waters (Figure 3). One of the causes of pollution of water bodies with organic substances is the effect of animal husbandry, which practically exists on all lakes; however, all (even drinking) lakes are used for watering animals without special devices for this purpose, and their catchments are used as pastures (except for areas occupied by arable land).

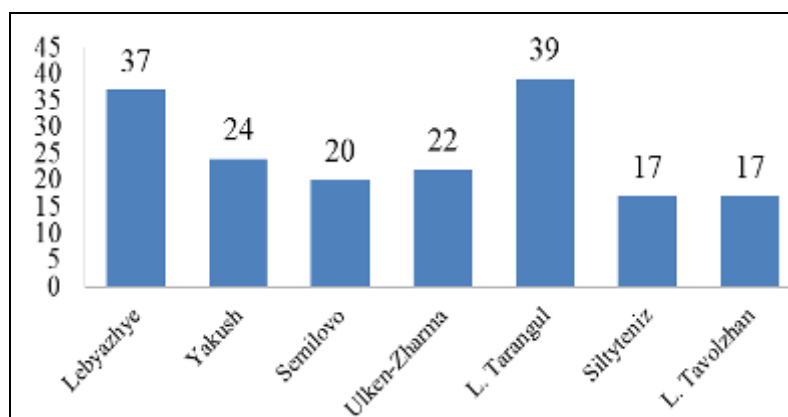


**Figure 3.** Level of Biochemical Oxygen Demand

Exceeding the TLV is observed in almost all the reservoirs researched, which indicates the use of lake systems for watering animals without special devices for this purpose, and their catchments – as pastures. Thus, the basin systems of the lakes of the plain part of Kazakhstan are very sensitive to geo-component environmental changes (especially the hydrological regime) due to land-reclamation nature resource management and global climate change. Therefore, quantitative assessments of the parameters of lake systems make it possible to predict environmental natural and anthropogenic risks and threats. An important aspect of our study was the identification of a recreational assessment of lake 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 (Ilieş & Wendt, 2015; Ilieş et al., 2014, 2017; Gozner, 2016; Gozner & Avram, 2010; Mazhitova et al., 2018). Undoubtedly, forest-steppe landscapes of plains, floodplain and lake landscapes have all the prerequisites for the development of tourism. Assessment of the recreational properties of the selected water bodies showed that the recreational capacity of the lakes is not the same and varies from 10 to 50 scores. In differentiating recreational properties, we used the following scale: 0-10 – little recreational capacity; 11-20 – low recreational capacity; 21-30 – average recreational capacity; more than 31 – high recreational capacity (Table 4, Figure 4).

**Table 4.** Scoring of Recreational Properties of Lakes of Plain Areas of the Republic of Kazakhstan for Mass Recreation

Lakes	Bottom of reservoir	Width of shallow water, m	Quality of water	Area of coastal cultural zone, m <sup>2</sup> /person	Near-stream vegetation	Aesthetics of landscapes	Area of waters, m <sup>3</sup> /person	Aquatic fauna	Historical and cultural monuments	Improvement level	Total, k <sub>i</sub>
Lebyazhye	3	3	4	5	3	5	2	5	2	5	37
Yakush	2	1	3	2	3	4	2	5	1	1	24
Semilovo	1	1	2	3	4	4	2	1	1	1	20
Ulken-Zharma	1	2	2	5	2	3	1	3	1	2	22
L. Tarangul	3	3	4	5	4	5	2	5	3	5	39
Siltyteniz	1	1	2	1	3	1	5	1	1	1	17
L. Tavalzhan	1	1	2	1	3	1	5	1	1	1	17



**Figure 4.** Level of recreational capacity (k)

The combination of aquatic and forest-steppe geosystems allows for organizing a number of types of recreational activities: beach swimming, hiking and sightseeing recreation, boating, water skiing, hunting for wetland game, fishing, picking berries, mushrooms, useful plants, etc. The development of health resorts is possible on the base of salt lakes and deposits of therapeutic mud, similar to the health resort at the Dear Sea (Wendt, 2016). For the researched lakes, the main season of tourist and recreational activities is the summer period of the year, but in winter skiing, sledding, hunting, ice fishing and other types of recreation are possible here. The off-season is the time for hunting waterfowl. Let's consider in details one of the key areas where the lake system of the Large Tarangul is located. Sampling points on the Large Tarangul lake on the eastern shore were located between the Korneyevka and Sovetskoe villages, on the west bank near the confluence of the Kamysakty River. *Physical and chemical properties of water.* The water temperature in the lake ranged from 19.8-24.0°C. The transparency was 0.55-0.60 m, which, according to the complex classification, corresponds to 2b, "quite clean" waters. The reaction environment was neutral, the pH was 7.35-7.45. The specific electrical conductivity corresponded to the TVL<sub>W</sub> and was 1.73-1.74 mS/cm. The concentration of dissolved oxygen satisfied TVL<sub>W</sub> and was 7.68-9.92 mg/dm<sup>3</sup>. The BOD<sub>5</sub> was lower than the TVL<sub>W</sub> and was 1.76-1.92 mgO<sub>2</sub>/dm<sup>3</sup>, which corresponds to 3b, "low polluted" waters.

According to the magnitude of dissolved solids concentration (1430-1480 mg/dm<sup>3</sup>), the lake waters belong to β-mesohaline brackish waters. The salinity of this lake exceeds TVL<sub>W</sub>. According to the ionic composition in the classification of O.A. Alekin, the lake water belongs to II sodium chloride type of waters. Chlorides (491-526 mg/dm<sup>3</sup>) predominate among anions, sodium (376-393 mg/dm<sup>3</sup>) – among cations. The concentration of these ions is 1.5 times higher than the TVL<sub>W</sub>. The lake water hardness is average, exceeded the TVL<sub>W</sub> and amounted to 7.04-7.24°H.

*Phytoplankton.* The concentration of chlorophyll *a* in plankton slightly changed in the coastal area and in the open part – from 6.9 mg/m<sup>3</sup> to 10.8 mg/m<sup>3</sup>, which corresponds to the category of oligo-mesotrophic and mesotrophic waters, the quality of water corresponds to Class II, category a and b – "Clean and completely clean." The ratio of carotenoids and chlorophyll *a* in both sampling points was close to one, which can serve as an indicator of the balance of the biotic balance of the lake ecosystem. The enrichment of the seston with carotenoids is due to the spreading of resuspended dead vegetation residues into the water column. The relative content of the main and auxiliary photosynthetic pigments in their common pool (see Appendix L) is typical of typically limnetic phytoplankton with a predominance of green and diatom algae. The contribution of phaeopigments to the amount with normally functioning chlorophyll did not exceed the most frequently encountered value (30%) during the summer vegetation period of inland water phytoplankton according to the literary data generalized by V.V. Bulyon.

*Phytoperiphyton.* In the composition of the phytoperiphyton, developing on the perfoliate pondweed, 13 types of algae from two sections were noted: diatoms – 61.5%, green – 38.5%. Both in terms of number and biomass, the same species dominate in the phytoperiphyton *Epithemia sorex* Kütz., *Ep. turgida* (Ehr.) Kütz., *Rhopalodia gibba* (Ehrb.), *Cymbella prostrata* (Berk.) Kleve (diatoms), which are indicators of pure water. According to the values of the saprobity index (1.8 by number and 1.5 by biomass), the discharge of water quality varies from completely clean (2b) to enough clean (3a). In the range of algae saprobity, pure water indicators dominate (53.8% of 61.5%). The Shannon index (3.2 bits/spec. and 2.0 bits/g) reflects conditions favorable for algae.

The predominance of oligohalobes in the range of indicators of dissolved solids concentration (53.8% of 61.5%) reflects its low dissolved solids concentration.

**Macrophytes.** 10 species of aquatic and coastal aquatic plants from 6 families were found in the lake. Submerged vegetation is represented by communities of the pondweeds (*Potamogeton perfoliatus*, *P. pectinatus*, *P. lucens*, *P. crispus*) and Siberian water-milfoil (*Miryophyllum sibiricum*), which are widespread in the shallow areas of the lake. It is common to find star duckweed (*Lemna trisulca*) in these communities. Rigid semi-submerged vegetation forms a border from 50 to 250 m wide with a projective cover of about 60% along almost all banks of the reservoir, with the exception of the southern coast, at depths of 1.0-1.5 m. The main cenosis former is common reed (*Phragmites australis*), along reed beds from the waterside, a separate spot is formed by a water knotweed (*Persicaria amphibia* (L.) S.F. Gray) and a water crowfoot (*Batrachium circinatum* (Sibth.)). The area of lake overgrowth is 20-25% in total. The number of reed in communities is 52 spec./m<sup>2</sup>, production 336 g/ m<sup>2</sup> per year, but the value of biomass must be increased by 30%, since only the surface part of the plants was taken during cutting, and, therefore, the biomass formed by reed communities is about 436.8 g/m<sup>2</sup> per year. The saprobity index for macrophytes is 1.66, which corresponds to the beta-mesosaprobic zone.

**Zooplankton.** The number of zooplankton reached 299,500 spec./ m<sup>3</sup>, biomass - 1,787.6 mg/ m<sup>3</sup>, due to the mass development of copepods *Mesocyclops leuckarti* Claus 17% and rotifers *Polyarthra remata* Skorikov 52% and *Brachionus angularis* Gosse 17%. A very low species diversity of cladocerans is noted. The Pantle-Buck saprobity index was 1.69-1.72. Obviously, in winter the lake is dead. In general, the reservoir is described as  $\beta$ -mesosaprobic, moderately polluted. The Shannon-Weaver species diversity index ranges from 1.69 to 1.83 bits, i.e. a transformed biocenosis is observed on this lake with the dominance of two or three  $\beta$ -mesosaprobic species. **Zoobenthos.** Zoobenthos has 9 species from 4 groups: Oligochaeta, Gastropoda, Trichoptera и Chironomidae.

The lake was described by low indices of number and biomass. In the coastal zone, they varied within 571.4-3428.5 spec./m<sup>2</sup>, 0.28-0.71 g/m<sup>2</sup>, which corresponds to the ultra-oligotrophic level of development. Chironomid larvae dominated in numbers: *Tanitarsus* sp. and *Procladius* sp. The Goodnight-Whitley index in the coastal area was 8.3%. Thus, the research lakes are located in a densely populated anthropogenic zone, where the main sources of pollution are agricultural and domestic wastewater. The water quality of the reservoir is an integral indicator of the chemical composition of the wastewater effluent from the catchment basin and the self-cleaning capacity of the ecosystem. Self-cleaning capacity of each reservoir depends on the state of living organisms in it.

## CONCLUSION

The obtained quantitative indicators (landscape and limnometric) reflect the current statistics of parameters of the state of lake systems and can serve as the basis of limnological monitoring. In its implementation, it is necessary to widely use modern technologies of geoinformation modeling, ERS data and field research. Further researches include the classification and typification of data and the development of models of balanced nature resource management (water and fisheries, urban and agricultural, recreational, forestry, environmental, etc.) and recommendations for ensuring optimum performance. When analyzing the data obtained, it was found that there are no lakes with a little recreational capacity among the research water bodies, and only such lakes as Siletyteniz, B. Tavolzhan have low recreational capacity. The remaining water bodies have medium and high recreational capacity. The conducted research is important for water management (regional water farms, basin and hydro-amelioration departments), fisheries, recreational institutions. The results can be used to create cadastral (or environmental) passports by regional departments of ecology and natural resources.

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## **THE POTENTIAL IMPACT OF CLIMATE CHANGE ON HURGHADA CITY, EGYPT, USING TOURISM CLIMATE INDEX**

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**Abstract:** Tourism is one of the leading sources of income, crucial to Egypt's economy where it contributes more than 7.2% of GDP and 14.4% of foreign currency revenues. The objective of the research is to investigate the impacts of climate change on tourism sector and expecting the future tourism performance of cities. The research has chosen Hurghada, the leading attracting coastal city on the Red Sea for foreign tourist as a case study. The mean monthly data of temperature, rainfall, moisture, wind speed and sun radiation derived by the regional climate model developed by the Swedish Meteorological and Hydrological Institute (SMHI-RCA35) for the two climate change scenarios of the Intergovernmental Panel on Climate Change (IPCC) RCP4.5 and RCP8.5 used to achieve this objective. These data used for Hurghada climate zone for the future time period of 2005-2050. The impacts of the RCP4.5 and RCP8.5 scenarios on Hurghada tourism sector will be estimated based on the application of the Tourism Climatic Index (TCI) that is widely used for the adaptation measure of the climatic suitability for tourism, which examines potential changes in climatic attractiveness of destinations, through the statistical analysis of existing and forecasting meteorological parameters. The research methodology on Hurghada shows a major change expectation in tourism seasons behavior and that climate change will play a major role in changing the climatic seasonal Hurghada tourism performance. The research recommends proactive adaptation strategies rather than reactive policy towards climate change to achieve sustainability and climate change resilience of Hurghada city.

**Keywords:** climate change, tourism, Tourism Climate Index, regional climate model, Hurghada

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## INTRODUCTION

Tourism is one of the main economic sectors in Egypt; it contributes to increasing Gross domestic product (GDP) and raising economic growth rates (CAPMAS, 2017). The total contribution of tourism and travel to GDP was 194.8 billion Egyptian pound (EGP), 7.2% of GDP in 2016 and is forecast to rise by 6.1% pa to 355.6 billion EGP, 8.9% of GDP in 2027 (WTTC, 2017). The total number of tourists coming from all over the world was 8.3 million in 2017 (CAPMAS et al., 2018). Egypt has long been known throughout its history as a popular tourist destination, with different types of tourism, its geographical location and mild climate during the summer and winter. It has many important tourist cities such as Sharm el-Sheikh, Hurghada and Luxor (Egyptian Ministry of Foreign Affairs, 2019). The general climate of Egypt is a desert climate, a hot climate in the summer and mild in the winter. During the summer season (June-August), the climate is hot and dry all over Egypt. While in the winter season (December–February), in northern Egypt climate is mild with some rainfall, mainly on coastal areas, while the climate in the south is practically rainless with warm sunny days and cool nights (Tolba et al., 2016).

Tourism is strongly influenced by climate and weather (Hosseini et al., 2015), both of which have a significant impact on the tourism industry, affecting the timing and length of the tourism seasons and the selection of destinations by tourists (Scott et al., 2004) as climatic conditions impact tourism activities such as sight-seeing (Gomez Martin, 2005). With global warming changes are occurring at an unprecedented rate in the earth's climate variables such as temperatures and precipitation (Solomon et al., 2007). The global temperature change at the end of the 21<sup>st</sup> century is expected to exceed 1.5 - 2°C of the period (1850-1900) in Representative concentration pathways (RCP) scenarios (Stocker et al., 2013). The expected rise in temperature will lead to a shift in the attractive areas of tourism towards the areas with the most suitable temperature. In terms of Egypt, a decline in the number of tourists visiting the country is projected at about 20% by the year 2060, which negatively affects tourism revenues by 13-17 billion EGP per year (Smith et al., 2013). Coral reefs in the Red Sea are already declining because of higher temperatures of water and are estimated to stop growing by 2070 (Cantin et al., 2010).

Tourism destinations must adapt to the direct effects of climate change, such as rising temperatures and secondary effects such as sea level rise and the decrease of snow cover (Rossello-Nadal, 2014). As the relationship between tourism and climate is very complex this has led to the need to assess the suitability of the climate for tourism (Bakhtiari et al., 2013). It is argued that an index approach is useful for understanding this complexity because of the overlapping nature of weather, and the difficult ways in which weather variables combine to reflect the results that benefit tourism by determining the appropriate climate for tourism (De Freitas et al., 2008). Tourism Climate Index (TCI) has a world-wide application in numerous geographical locations for example in Ethiopia (Behaylu & Teshome, 2018), China (Fang & Yin, 2015), Lake Balaton region in Hungary (Németh, 2013) also for Iran (Gandomkar et al., 2011; Farajzadeh & Matzarakis, 2009; Gourabi & Palic, 2012). The Tourism Climate Index includes several climatic variables that are combined in a mathematical formula to provide human comfort levels; the impacts of climate change on the tourism industry can be predicted by linking climate change scenarios and changes in human comfort levels (Bakhtiari et al., 2018; Roshan et al., 2016; Kubokawa et al., 2014; Rossello-Nadal, 2014). Climate indices help tourism planners and marketing agents to plan and manage tourism by anticipating off-peak periods to develop tourism promotion programs for that period and expect the busy peak times to determine the development programs required to meet them. Tourists can take advantage of climate indicators to choose the best tourist destinations and the timing of their vacation (Bakhtiari et al.,

2013). The main objective of this paper is assessing the influences of climate change on the tourism sector in the Egyptian environment to guide the adaptation and mitigation strategies to plan and develop the tourism industry in Egypt to face these effects by using one of the climate indexes. A tourism climate index is applied for the first time to the city of Hurghada, one of the most popular tourism cities in Egypt in order to determine the suitable months for tourism in the city. This analysis helps towards taking appropriate adaptation and mitigation strategies for the specificity of the situation in order to correct planning, attract tourists, and develop the local tourism industry to face future climate changes and expected increase temperatures.

## MATERIALS AND METHODS

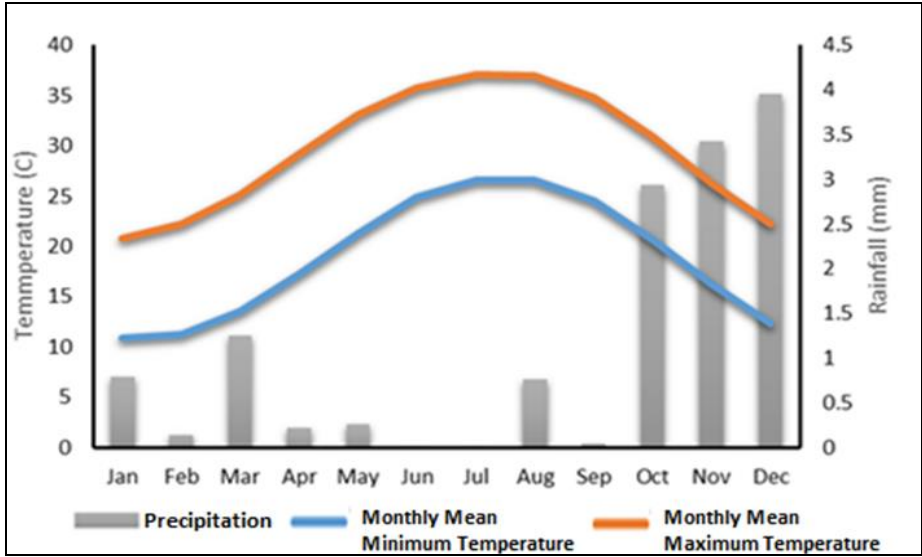
### Target Area

Hurghada is the administrative capital of the Red Sea Governorate (Figure 1). The city is located on the western shore of the Red Sea on a longitude  $48^{\circ}33' E$  and latitude  $15^{\circ}27' N$ . It is bordered from the north by Ras Gharib city, from the south by Safaga, from the east by the coast of the Red Sea and from the west by the mountains of the Red Sea.



**Figure 1.** Location of Hurghada city (Source: Google Earth 2018)

Hurghada has a mild climate throughout the year (Figure 2); its dry desert climate leads to differences in temperature between day and night, which is hot in the day and cold at night especially during the winter months. Temperature can reach highs of  $42^{\circ}C$  and lows of  $18^{\circ}C$  (Egypt's Tourism Authority, 2019). Hurghada offers all possibilities for fishing, underwater fishing and snorkelling because of the clarity of its water and the worldwide fame of its coral reefs and rare marine life (Figure 1) (Egypt's State Information Service, 2019). Although it is rated one of the three best diving areas in the world, it is a popular destination also for non-divers. Leisure on the beach, water sports, clubbing and golfing are just a few of the options to choose from it in addition to Hurghada's health resorts (Egyptian Tourism Authority, 2019).



**Figure 2.** Mean climate of Hurghada for the period (1952-2005)  
(Source: Egyptian Meteorological Authority, 2019 edited by Author)

### Data

To progress suitable adaptation strategies at global, regional and local scale, the information about probable future influences of climate change under global warming is becoming essential. The main source of such info is state-of-the-art Atmosphere – Ocean Global Climate Models (AOGCMs), which simulate possible climate change under a variety of future greenhouse gas emission or concentration scenarios. During the last few years 20 climate modelling groups using more than 50 GCM models have contributed in the Coupled Model Intercomparison Project phase 5 (CMIP5), creating a great multi-model ensemble of climate change simulations (Taylor et al., 2012).

While the difficulty and resolution of AOGCMs are both growing, computational difficulties still limit the use of high-resolution AOGCMs for producing large ensembles of long multi-century climate simulations. The horizontal resolution in CMIP5 is vary between 100–250 km, which is not enough to make available climate change information on the regional to local scale. Also long-term predictions, till the end of this century, AOGCMs are progressively being used for estimates on more near-future, decadal time scales (Meehl et al., 2014; Gonzalez & Goddard, 2016). The Coordinated Regional Climate Downscaling Experiment (CORDEX) (Giorgi et al., 2009; Jones et al., 2011), recognized in 2009 and reinforced by the World Climate Research Programme (WCRP), goals to fill such gaps by handling international efforts in regional climate downscaling giving predefined grids, experiment procedures, output setups, and variables. One of the core purposes of CORDEX is to make regional climate simulations simply and flexibly accessible for end-user groups at regional and local levels.

Representative Concentration Pathways (RCPs) Scenarios that include time series of emissions and concentrations of the full suite of greenhouse gases (GHGs) and aerosols and chemically active gases, as well as land use/land cover (Moss et al., 2008). The word representative signifies that each RCP provides only one of many possible scenarios that would lead to the specific radiative forcing characteristics. The term pathway emphasizes that not only the long-term concentration levels are of interest, but also the trajectory taken over time to reach that outcome (Moss et al., 2010). Four RCPs produced from

Integrated Assessment Models and are used in the present IPCC Assessment as a basis for the climate predictions and projections presented in WGI AR5 Chapters 11 to 14 (IPCC, 2013); which are RCP2.6, RCP4.5, RCP6.0 and RCP8.5. only two scenarios used in this study, RCP4.5 which is the intermediate stabilization pathways in which radiative forcing is stabilized at approximately 4.5 W/m<sup>2</sup> and 6.0 W/m<sup>2</sup> after 2100, and RCP8.5 scenario is the high pathway for which radiative forcing reaches >8.5 W/m<sup>2</sup> by 2100 and continues to rise for some amount of time (Van Vuuren et al., 2011; Pachauri et al., 2014).

**Table 1.** Monthly value of each indicator in Hurghada for the different three periods  
(Source: Egyptian Meteorological data and CORDEX data)

Variables	Periods	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
Maximum Temperature (°C)	1952-1975	21	21.6	23.8	26.7	30	32.2	33	33.3	31.2	29.1	25.9	22.5
	1976-2005	21.5	22.5	25.1	29.1	33	35.3	36.4	36.3	34.3	31.1	26.9	23
	2021-2050												
	RCP4.5	21.9	23.4	27.1	31.5	34.9	37.9	40.1	39.7	36.9	32.5	27.0	23.0
	RCP8.5	21.97	23.7	27.1	31.1	35.3	38.7	40.2	40.1	37.4	32.8	27.1	22.8
Average Temperature (°C)	1952-1975	15.7	16.6	19	22.5	25.8	28.7	29.6	30	27.9	25	20.9	17
	1976-2005	16	17	19.8	23.7	27.8	30.5	31.8	31.6	29.5	26.1	21.6	17.6
	2021-2050												
	RCP4.5	17.11	18.0	21.1	24.9	28.6	32.0	34.3	34.0	31.7	27.4	22.2	18.5
	RCP8.5	17.31	18.3	21.1	24.8	29.0	32.6	34.5	34.4	32.2	27.7	22.7	18.4
Average Relative Humidity (%)	1952-1975	51	49	49	47	44	43	47	47	51	55	54	54
	1976-2005	48.3	44.2	42.2	37.7	32.8	31.8	34.5	36.7	40.7	47	49.2	49.9
	2021-2050												
	RCP4.5	55.8	54.9	49.4	43.9	35.6	31.1	30.6	33.5	39.9	51.4	56.8	56.7
	RCP8.5	55.88	54.1	50.1	44.1	33.9	29.9	30.6	33.9	39.8	51.4	55.8	55.6
Minimum Relative Humidity (%)	1952-1975	34.35	31.0	28.1	24.5	18.9	16.4	18.4	21.8	23.8	31.1	35.4	35.7
	1976-2005	33.36	31.1	28.3	25.1	20.0	16.3	17.7	20.1	23.1	31.0	36.4	36.3
	2021-2050												
	RCP4.5	33.71	31.4	26.4	23.9	19.0	16.7	17.2	19.1	23.5	30.0	34.0	35.5
	RCP8.5	34.43	30.8	27.0	24.3	17.9	15.9	17.3	19.5	23.6	30.3	34.7	34.9
Sunshine (hrs/day)	1952-1975	8.92	9.61	10.5	11.2	11.8	12.0	11.9	11.4	10.7	9.90	9.11	8.71
	1976-2005	8.92	9.60	10.4	11.2	11.8	12.0	11.9	11.4	10.7	9.88	9.11	8.68
	2021-2050												
	RCP4.5	8.93	9.59	10.5	11.2	11.8	12.0	11.9	11.4	10.7	9.88	9.14	8.70
	RCP8.5	8.93	9.62	10.5	11.2	11.8	12	11.9	11.4	10.7	9.88	9.12	8.72
Precipitation (mms)	1952-1975	0.2	0.4	0.4	0.2	0.4	0	0	0	0	0.2	0.3	1.5
	1976-2005	1.4	0.2	2	0	0.3	0	0	0	0	4.9	3.21	7.2
	2021-2050												
	RCP4.5	0.18	0.24	0.21	1.57	0.21	0	0	0	1.05	1.55	0.46	0.96
	RCP8.5	0.33	0.05	0.28	1.03	0.28	0.01	0.01	0	0.89	1.79	1.22	0.58
Wind (km/h)	1952-1975	20.93	22.6	23.5	22.9	24.6	26.5	23.9	23.9	25.2	20.93	19.08	19.82
	1976-2005	21.30	22.0	22.4	22.4	23.3	27.8	25.2	25.9	26.3	22.41	20.93	20.93
	2021-2050												
	RCP4.5	14.90	15.2	15.6	14.9	16.6	22.2	24.1	22.5	20.1	14.9	14.1	14.9
	RCP8.5	15.34	15.5	15.3	15.2	18.0	22.2	23.9	22.7	20.6	14.9	14.8	14.8

To investigate the annual variation and projected changes in TCI scores for Hurghada city, monthly mean climate data were obtained from the Egyptian Meteorological Authority for the historical period (1952 – 2005).

The future climate conditions are analyzed using the regional climate model developed by the Swedish Meteorological and Hydrological Institute (SMHI-RCA35) (Samuelsson et al., 2011), with grid size  $0.5^{\circ} \times 0.5^{\circ}$ ; approximately  $50 \text{ km} \times 50 \text{ km}$  downloaded using the Earth System Grid Federation (ESGF) nodes such as <http://esgf-node.dkrz.de/>, after then; the climate data operator (Schuzweida, 2019), used to process the monthly data and downscaled it for the specific latitude and longitude of Hurgada city. These data include the monthly minimum and average relative humidity, maximum and average temperature, sunshine duration, rainfall and wind speed, which essential based on previous TCI research work (Mieczkowski, 1985; Perch-Nielsen et al., 2010). All datasets used to calculate TCI for the different three periods (1952-1975), (1976-2005) and the near future period (2021-2050) are listed in Table 1.

### Tourism Climate Index:

As listed in Bakhtiari et al., (2013) several indicators have been developed to determine the suitability of climatic conditions for the practice of tourism activities over the past 40 years (Mieczkowski, 1985; Freitas, 1990; Becker, 1998; Morgan et al., 2000; Maddison, 2001; Lise & Tol, 2002; Hamilton & Lau, 2005; Bigano et al., 2006). The most widely used is the tourism climate index (TCI). Mieczkowski (1985) devised the initial tourism climate index. In total 12 climate variables were identified but because of limitations of meteorological data, the number of climate variables was decreased to seven and put together in five sub-indices (Mieczkowski, 1985).

Tourism Climate Index (TCI) contains seven variables based on mean monthly data (maximum daily temperature, mean daily temperature, minimum daily relative humidity, mean daily relative humidity, total precipitation, total hours of sunshine, and average wind speed). These climate variables were grouped into five sub-indices (three of which are separate and two in a bioclimatic composition). Mieczkowski then weighted the seven variables according to their relative effect on tourist comfort (Table 2).

The highest weight is given to the daytime comfort index to confirm that tourists are more active in general during the day; the next highest weight is given to sunshine and precipitation followed by daily comfort and wind speed.

**Table 2.** Components of Mieczkowski's (1985) tourism climate index (TCI)  
(Source: Mieczkowski, 1985)

Abbrev	Sub-index	Monthly climate variables	Influence on TCI	Weight (%)
CID	Daytime comfort	Max. daily temperature and min. daily relative humidity	thermal comfort when tourists have the maximum activity	40
CIA	Daily comfort	Mean daily temperature and mean daily relative humidity	thermal comfort during a day in addition to sleeping time	10
P	precipitation	Total precipitation	Negative impact of precipitation	20
S	sunshine	Total hours of sunshine	For Tourism is assessed positive and in the hot days has negative influences	20
W	wind	Average wind speed	Its effect depends on the temperature element (positive in hot climates and negative in cold climates)	10

The final score of tourism climate is produced from the sum of the coefficients for the five sub-indices and it is between 0 and 100 (Table 3) (Hosseini et al., 2015). Because of a weighting factor (a value for TCI of 100), A classification rating system, ranging among 0 (very unfavorable) to 5 (ideal), was designed to supply a common basis of

measurement for each of the sub-indices (Abegg, 1996; Mieczkowski, 1985). The given mathematical equation by Mieczkowski estimates the TCI after the determination of the five previous sub-indices values:  $TCI = 8 * CID + 2 * CIA + 4 * P + 4 * S + 2 * W$  (1)

where CID: Comfort Index Daytime, CIA: Comfort Index dAily, P: Precipitation (mm), S: daily Sunshine duration (hours), and W: mean Wind speed (km/s).

In order to calculate the daytime comfort index (CID) and daily comfort index (CIA) we used thermal comfort assessment charts (Mieczkowski, 1985).

**Table 3.** Rating categories in the Mieczkowski (1985) Tourism Climate Index (TCI) (Source: Mieczkowski, 1985)

TCI score	Descriptive category
90-100	ideal
80-89	excellent
70-79	Very good
60-69	Good
50-59	Acceptable
40-49	Marginal
30-39	unfavorable
20-29	Very unfavorable
10-19	Extremely unfavorable
0-9	impossible

Precipitation (P): To calculate precipitation we use Table 4 to determine its coefficient. Rainfall is a negative factor in the tourism climate so the coefficient 5 is ideals and toward zero is extremely unfavorable (Table 4).

Sunshine (S): To calculate the coefficient of sunshine, we use Table 4. Sunshine in the tourism climate is a positive factor, but it must take into account the seriousness of the hot days that is unsuitable for tourism (Table 4).

**Table 4.** Ranking of Precipitation and Sunshine duration Indicators (Source: Mieczkowski, 1985)

Total monthly precipitation	Rating of precipitation	Daily Sunshine	Rating of Sunshine
14.9 to 0	5	10 hour or more	5
29.9 to 15	4.5	9.95 to 9	4.5
44.9 to 30	4	8.95 to 8	4
59.9 to 45	3.5	7.95 to 7	3.5
74.9 to 60	3	6.95 to 6	3
89.9 to 75	2.5	5.95 to 5	2.5
104.9 to 90	2	4.95 to 4	2
119.9 to 105	1.5	3.95 to 3	1.5
134.9 to 120	1	2.95 to 2	1
149.9 to 135	0.5	1.95 to 1	0.5
150 or more	0	Less than one hour	0

Wind (W): Wind is a positive factor for tourism climate. To calculate coefficient of wind Climate type must be determined based on the maximum air temperature level.

For normal system, the maximum temperature must be between 15 and 24°C, Elyse system (between 24 and 33°C) and the warm climate system is above 33°C. After determining, we apply Table 5 to determine the final coefficient.

At last, after Determination the coefficient for each indicator, the last indicator (TCI) is calculated from equation (1), which is already mentioned above.

**Table 5.** Ranking the wind speed indicator (Source: Mieczkowski, 1985)

Wind speed in km /h	Normal system	Elyse system	Warm climate system
Less than 2.88	5	2	2
5.75 to 2.88	4.5	2.5	1.5
9.03 to 5.76	4	3	0.5
12.23 to 9.04	3.5	4	0
19.79 to 12.24	3	5	0
24.29 to 19.80	2.5	4	0
28.79 to 24.30	2	3	0
38.52 to 28.80	1	2	0
More than 38.52	0	0	0

## RESULTS AND DISCUSSIONS

### Results

The nature of the climate in the city of Hurghada allows tourists to visit and enjoy leisure activities throughout the year as the climate is moderate in most months of the year. The best times to visit the city of Hurghada are the spring and autumn seasons when the peak tourist period is; this is confirmed by the calculation of the Tourism Climate Index for the period 1952-1975 (Table 6). This reveals that the seasons of spring (March, April, May) and autumn (September, October, and November) have high priority for the comfortable climate of tourism followed by the winter season then the summer season.

While climate change and temperatures increase have changed the climatic seasons of tourism as demonstrated by the application of the Tourism Climate Index for the period 1976-2005 and future periods (2021-2050) according to climate change scenarios RCP4.5, RCP8.5 (Figure 3). This is illustrated by the detailed results of the implementation of the Tourism Climate Index for the specified periods as follows.

**Table 6.** Scores and descriptive values for TCI

Month	TCI Scores and Descriptive Values							
	1952-1975		1976-2005		2021-2050 (RCP45)		2021-2050 (RCP85)	
Jan	87	Excellent	87	Excellent	88	Excellent	90	Ideal
Feb	89	Excellent	89	Excellent	92	Ideal	92	Ideal
Mar	93	Ideal	96	Ideal	100	Ideal	100	Ideal
Apr	98	Ideal	90	Ideal	92	Ideal	92	Ideal
May	88	Excellent	74	very good	64	Good	64	Good
Jun	86	Excellent	64	Good	62	Good	54	acceptable
Jul	70	very good	62	Good	52	acceptable	52	acceptable
Aug	70	very good	62	Good	52	acceptable	44	Margin
Sep	86	Excellent	72	very good	62	Good	52	acceptable
Oct	88	Excellent	80	Excellent	80	Excellent	80	Excellent
Nov	98	Ideal	96	Ideal	98	Ideal	98	Ideal
Dec	89	Excellent	89	Excellent	90	Ideal	90	Ideal

### 1. TCI scores for the period 1952-1975

The results of the tourism climate index for this period can be classified into three categories, which are ideal, excellent and very good. The very best conditions for tourism occurred in April, November and March months, which have 'ideal' rating in TCI descriptive category (TCI: 98, 98, 96) respectively. These are followed by the months of February, December October, May, January, September, and June ('excellent,' TCI: 89,89,88,88.87,86) respectively, then July and August months had the least favorable climate classification for tourism ('very good,' TCI:70).



## 2. TCI scores for the period 1976-2005

The results of the TCI index for that period have expanded to include a lower rating category than the previous period ('good' rating). November, March, and April months had a TCI scores above 90, ratings that describe an 'ideal' tourism climate. These are followed by the excellent rating category ( $90 < \text{TCI} < 80$ ), which its number of months declined two months to take the classification of the following category compared to the previous period to include the months of December, February, January, and October. The climate of May and September was rated 'very good' ( $\text{TCI}: 74, 72$ ) according to the suitability of tourism. The lowest category ('good' rating) in this period was for the summer months (June, July, and August), which is the new category that has emerged, indicating the impact of increases in temperatures as compared to the previous period.

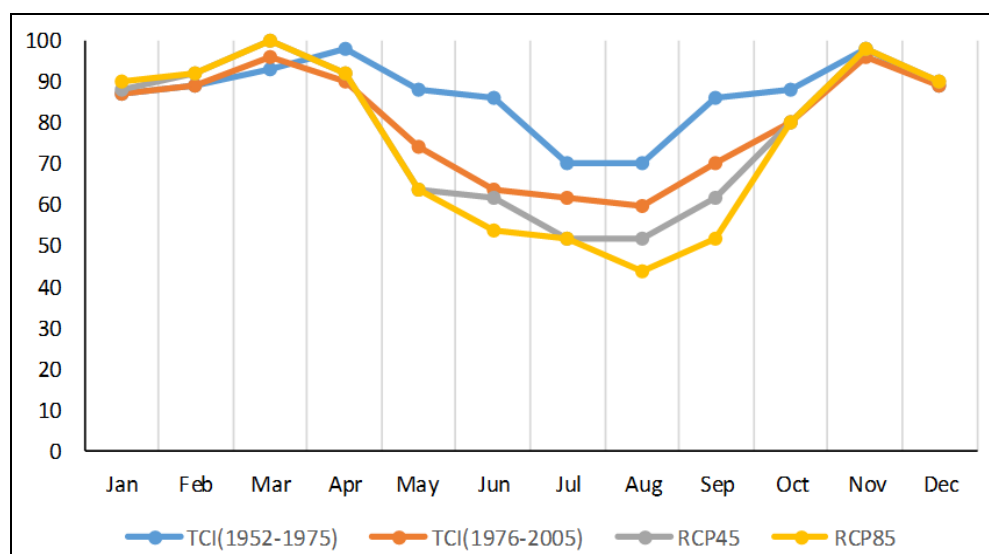


Figure 3. Monthly tourism comfort climate of Hurghada

## 3. TCI scores for the period 2021-2050 (RCP4.5)

In this period the data is calculated according to Representative Concentration Pathway 4.5 (RCP4.5); TCI refers to the increase in the climatic discomfort for tourism in the summer months, when the rating is reduced to accept a new category ('acceptable' rating) for the month of August and July ( $\text{TCI}: 52$ ). The months of June, September, and May had a 'good' rating, while the values of the climate index for the rest of the months increased. January and October had 'excellent' rating and the months of March, November, April, February, and December had the highest rating category ('ideal'). It should be noted that March has the highest rating for suitability to tourism ( $\text{TCI}: 100$ ).

## 4. TCI scores for the period 2021-2050 (RCP8.5)

The RCP 8.5 pathway was followed in calculation the required data to apply the tourist climate index for this period. The results showed that the lowest month according to the tourist attraction index is August, which was rated 'marginal' ( $\text{TCI}: 44$ ), followed by September, July, and June which had 'acceptable' in rating ( $\text{TCI}: 52, 52, 54$ ). This indicates that the summer period is the least attractive for tourism in the year. The month of October still has an 'excellent' rating ( $\text{TCI}: 80$ ), while the remaining months have the highest rating ('ideal,'  $\text{TCI} > 90$ ), indicating the attractiveness of the winter season for the entire tourism and spring (March and April).

Discussion

As a result of climate change and the impacts of increased temperatures the city of Hurghada as a tourism destination is expected to face changes in its climatic suitability for tourism in particular during peak periods. This is confirmed by study of the historical situation for the values of the tourist climate index for the periods (1952 to 1975) and (1976-2005), where it was the best months to visit in Spring season (March, April and May) and autumn (September, October, and November). This was confirmed by TCI calculations for the period (1952-1975). By comparison with TCI calculations for the period (1976-2005), it was found that the attractiveness of the climate for tourism for the months of the spring season was reduced according to TCI results, with May moving from the excellent category (TCI 88) to very good (TCI: 74). Also for the months of autumn season, September has moved from the category of excellent (TCI: 86) to the category very good (TCI: 72). As for the summer, the climatic suitability for July, and August were reduced from the very good category (TCI: 70) to the good category (TCI: 62). Winter season kept the same categories of TCI ratings, even though the values have been reduced in some months but retain their category (ideal, excellent).

As shown in (Figure 4) which describes TCI values and tourism season patterns for Hurghada, In the future, according to TCI calculations based on Representative Concentration Pathway 4.5,8.5 climate change and high temperatures are expected to play a major role in increasing the period of unsuitable climatic for tourism at the expense of the traditional peak periods for Hurghada tourism. The climatic suitability for tourism has decreased for certain months (September, June, and May) to join the summer months (July and August) as the least attractive for tourism throughout the year.

While it was noted that the positive effects of the expected future climate change according to TCI calculations based on Representative Concentration Pathway 4.5,8.5 were observed in the rest of the months, which increased the attractiveness of their tourism climate, where March had the highest rating (ideal TCI: 100). The months of December, January, and February (the winter season) took on an ‘ideal’ category (TCI> 90) and April (spring season) was rated ‘ideal’ (TCI: 92), as well as November had ‘ideal’ category (TCI: 98). While it was noted that the rest of the months increased the attractiveness of its climate of tourism, where March had the highest rating (ideal TCI: 100). The months of December, January, and February (the winter season) took on an ‘ideal’ category (TCI> 90) and April (spring season) was rated ‘ideal’ (TCI: 92), as well as November had ‘ideal’ category (TCI: 98).

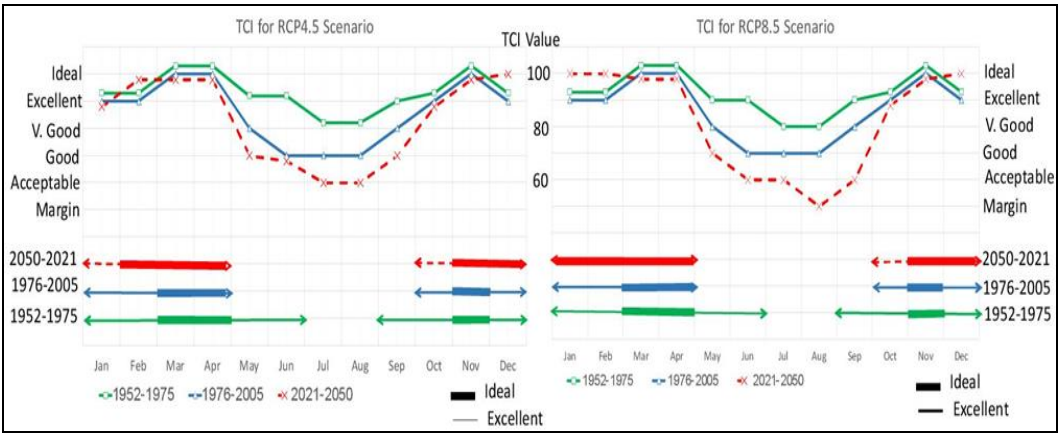
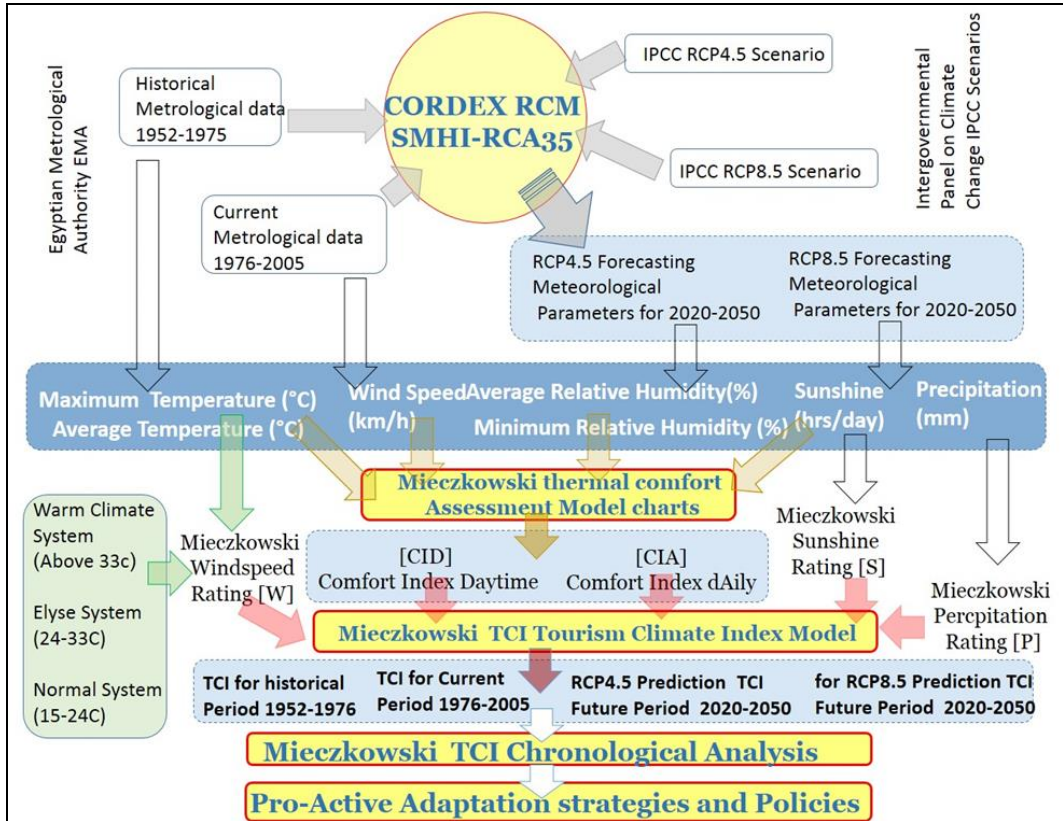


Figure 4. Hurghada TCI tourism seasons pattern analysis

## CONCLUSION

Prediction and study of the expected impacts of climate change, whether positive or negative, using mean and maximum values, is important in the planning and management of tourism areas in order to absorb the negative effects and take advantage of the positive opportunities resulting from those effects. The research highlights the resreach methodology, which can be summarized in (Figure 5), for the asesment of the effects of climate change phenomena on the future of tourism sector.



**Figure 5.** Research methodology for climate change impacts on tourism

The Tourism Climate Index (TCI) is a useful indicator that combines several variables and presents them in the form of an indicator that facilitates tourism planners and marketing agents to plan and manage tourism by anticipating off-peak periods to develop tourism promotion programs for that period, and expect busy peak times to identify the development programs required to meet them. In addition tourists can take advantage of climate indicators to select the best tourist destinations and the timing of their vacation. The city of Hurghada is dependent on tourism activity in its economy; therefore, considering climatic changes and high temperatures, prediction and study of the expected impacts of climate change is important for the planning and management of the tourism sector in it. According to the results of the application of the TCI index on its climate, it is expected that the seasons of tourism will be changed according to both RCP4.5 (stability scenario) and RCP8.5 (Scenario with very high greenhouse gas emissions). Overall, it was found that the period from May to September is the least

suitable period for tourism according to both of them and the lowest estimate is the month of August (TCI:44). Arguably, it is necessary to plan and develop infrastructure and architectural design to facilitate activities that are appropriate for the climate of that period as well as promoting them to maintain the local economy. Correspondingly, as March becomes the most attractive climate for tourism (TCI: 100) followed by November (TCI: 98), April, February (TCI:92), December and January (TCI :90), it is essential to promote this period through the development of appropriate entertainment programs. In addition, planning and infrastructure development of the city is essential to accommodate this period which becomes the peak tourism season. These are local responses required to address the challenges as well as opportunities resulting from climate change.

### Aknowlegments

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## **THE IMPACT OF SITE ATTRACTION AND SERVICE QUALITY ON LOYALTY THROUGH SATISFACTION: A CASE STUDY IN GUNUNG SEWU UNESCO GLOBAL GEOPARK, INDONESIA**

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**Abstract:** This study aims to provide information for management to increase the number of tourist visits of Nglanggeran in Gunung Sewu UNESCO Global Geopark, Indonesia. Questionnaire using a Likert scale is the research instrument. The respondents are visitors of Nglanggeran tourist destination. The analysis technique is path analysis implemented on SmartPLS 3.0. This study examined the impact of site attraction and service quality on loyalty through satisfaction. The results found that site attraction has direct effect on satisfaction and loyalty but not significant, meanwhile service quality has direct and significant effect on satisfaction and loyalty, and satisfaction has direct effect on loyalty but not significant. Hence, increasing site attraction will provide opportunities for management to affects satisfaction and loyalty which can ultimately increase the number of tourist visits.

**Keywords:** Site attraction, Service quality, Loyalty, Satisfaction, Geopark, Path analysis, Nglanggeran

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### **INTRODUCTION**

The tourism sector plays an important role in supporting the economy of a region. This sector has a multiplier effect on industries that run and support the tourism sector, including hotels, restaurants, crafts, and transportation. Tourism is the world's largest

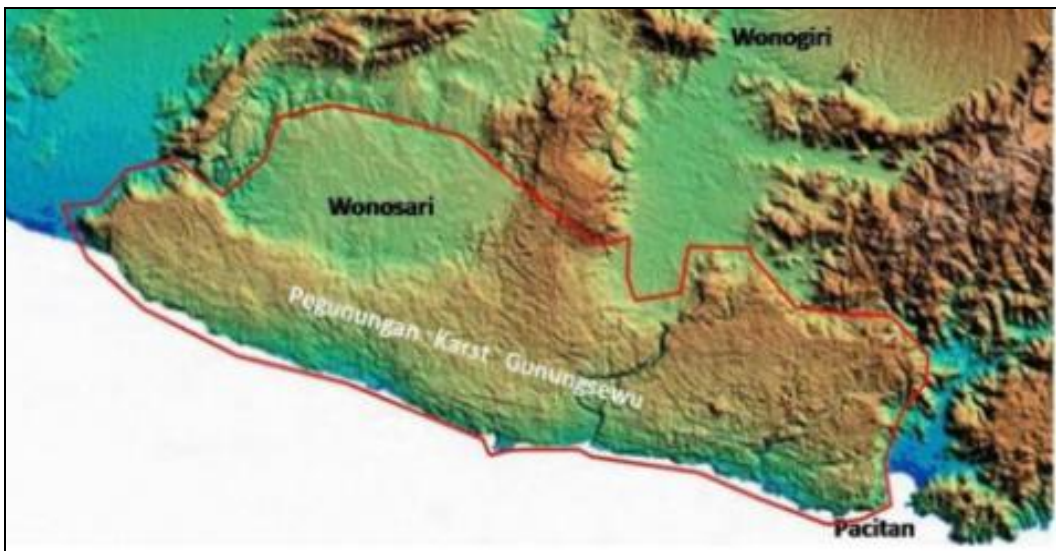
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\* Corresponding author



and fastest-growing industry and is a major economic, environmental and sociocultural dynamic force (Haarhoff & De Klerk, 2019). Global Geoparks Network (GGN) is a network under the auspices of UNESCO which was formed in 2001 with the purpose of finding and promoting the conservation of geological heritage and encouraging sustainable research and development in the community (Nikolova & Sinnyovsky, 2019). According to the European Geoparks Network (EGN) charter and Global Geopark Network regulations in 2000, all geoparks have to be established in rural areas (Zouros & Martini, 2003). Geoparks, as an innovation for the protection of natural and geological heritages, play an important role in the development of geotourism. Hence, geoparks and geotourism are opportunities for rural development, and they reduce the rate of unemployment and migration in rural areas (Farsani et al., 2010).

In 2004, UNESCO determined that geopark is an area that has prominent geological elements including archaeological, ecological and cultural values where local people are invited to play a role in protecting and improving the function of natural heritage (Nikolova & Sinnyovsky, 2019). Nglanggeran tourist destination is one of the sites of Gunung Sewu UNESCO Global Geopark in Gunungkidul district. It is an ancient volcano which was an active volcano around 60 million years ago, originating from the seabed volcano which has been lifted and has very distinctive rocks because it is dominated by agglomerates and volcanic breccias (MualMaul, 2009). Nglanggeran is located 25 km east of Yogyakarta city Indonesia, in Gunung Sewu UNESCO Global Geopark area (Figure 1).



**Figure 1.** Gunung Sewu UNESCO Global Geopark area (Source: Pawonsari, 2013)

The height of Nglanggeran as depicted in Figure 2 is 700 meters above of sea level, the mountainous area reaches 48 hectares with interesting natural scenery. At an altitude of 500 m above sea level there is an Embung, that is a 5000 m<sup>3</sup> rainwater storage pond that serves to irrigate the surrounding plants (Tourist Services of Gunungkidul District, 2018). Nglanggeran tourist area is managed by youth communities in the village of Nglanggeran, to help improve the economy of the surrounding area.

Nglanggeran tourist destination is one of the leading sites among 13 sites Gunung Sewu UNESCO Global Geopark in Gunungkidul district (Table 1).

In 2010, Gunung Sewu Geopark was designated as the National Geopark (Martono, 2016). In 2015 it was crowned as a Global Geopark by UNESCO in the 4<sup>th</sup> Asia-Pacific Geoparks Network San'in Kaigan Symposium, Tottori city Japan. Since it was established as the National Geopark, the number of tourist visits in Gunung Sewu Geopark has increased, and since it was named the Global Geopark by UNESCO the number of tourist visits has increased and has begun to be visited by foreigners.



**Figure 2.** Nglanggeran Tourist Destination (Source: Samsudin, 2014)

**Table 1.** 13 sites of Gunung Sewu UNESCO Global Geopark in Gunungkidul District  
(Data source: Pawonsari, 2013)

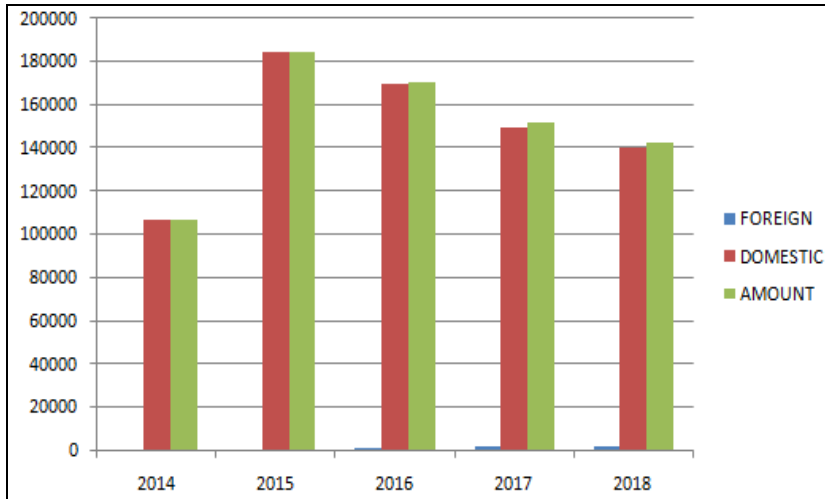
No	Site	Information
1	Nglanggeran	Volcanic breccias
2	Sambipitu	Sedimentary structure
3	GuaPindul	Endokarst phenomenon
4	Kali Suci	Endokarst&exokarst phenomenon
5	Jomblang	Endokarst phenomenon
6	Siung-Weddiombo	Rocks, geological and geomorphological structures
7	Sadeng	Karst geomorphological
8	Bleberan	Geological structure
9	Jlamprong	Endokarst phenomenon
10	Cokro	Endokarst phenomenon
11	Ngingrong	Endokarst phenomenon
12	Wanagama	Flora and fauna
13	Turunan	Flora and fauna

In 2015, the number of tourist visits in Nglanggeran has sharply increased from 2014, which amounted to 72.52%. However, it decreased, in 2016 is 7.64%, 2017 is 11.15%, and in 2018 is 6.15%. Although in 2017 the number of foreign tourist arrivals increased by 133% from 2016, it decreased in 2018 by 3.29% (Tourist Services of Gunungkidul District, 2019). The number of tourists visited in Nglanggeran in 2014 – 2018 as depicted in Figure 3.

From Figure 3, in year 2014, there are no foreign tourists, meanwhile for domestic tourists are 107,000 (Tourist Services of Gunungkidul District, 2015); in 2015 there are no foreign tourists, meanwhile for domestic tourists are 184,600 (Tourist



Services of Gunungkidul District, 2016); in 2016 there are 771 foreign tourists and 169,729 domestic tourists (Tourist Services of Gunungkidul District, 2017); in 2017 there are 1,794 foreign tourists and 149,703 domestic tourists (Tourist Services of Gunungkidul District, 2018); and in 2018 there are 1,735 foreign tourists and 140,444 domestic tourists (Tourist Services of Gunungkidul District, 2019).



**Figure 3.** Tourist Visits in Nglanggeran

(Sources: Tourist Services of Gunungkidul District, 2015, 2016, 2017, 2018, 2019)

Motivated from above explanation, this study aims to provide information for management to increase the number of tourist visits of Nglanggeran in Gunung Sewu UNESCO Global Geopark Gunungkidul district, Yogyakarta, Indonesia. We discuss the impact of site attraction and service quality on loyalty through satisfaction to find out the relationships and the appropriate strategies to increase the number of tourist visits.

The primary data is obtained from respondents who are visitors of Nglanggeran tourist destination, through a research conducted in February 2019. Questionnaire is developed in the form of a checklist using a Likert scale as the research instrument, by investigating the following matters:

- What is the relationship between site attraction variable and service quality variable on satisfaction and loyalty variables?
- How does the site attraction variable, service quality variable, and satisfaction variable influence on loyalty variable?

Further analysis is needed to determine the impact of site attraction and service quality on loyalty through satisfaction, as an effort to increase the number of tourist visits in Nglanggeran. The analysis used is quantitative approach using path analysis techniques. A relationship model of variables is formed by using intervening variable or moderating variable cannot be solved by multiple regressions. Path analysis can be used to estimate the direct effect, indirect influence, and total influence between variables in the model (Wright, 1934). Thus, the analysis technique used to solve the variable relationship model that uses intervening variable is with path analysis. This study estimates and explains causally related the impact of site attraction and service quality on loyalty through satisfaction, thus, the appropriate analysis technique used is path analysis. The results will be valuable inputs for the management of Nglanggeran tourist destination.

## **RELATED WORKS AND PROPOSED HYPOTHESES**

This section presents review on existing works related to this research and our proposed hypotheses.

### **Site Attraction**

Site attraction is an individual's perception of the characteristics of a destination that can be influenced by promotional information, mass media and many other factors (Tasci & Kozak, 2006). Site attraction is an important factor that influences the demand for increased tourist visits because it greatly determines tourists in choosing their destinations. Tourist facilities are supporting facilities that can create a pleasant feeling accompanied by the ease and fulfillment of the needs of tourists in enjoying tourism products offered. Tourist facilities are divided into two parts, namely primary facilities with functions as the main tourist attraction, and supporting facilities (Burton, 1995). Dimensions and indicators include attractions, accessibility, facilities, management of site attractions (Saboo et al., 2014).

### **Service Quality**

Service is all activities or basically intangible benefits that can be given to others but do not cause any ownership (Chaffey, 2009). Service is any action or performance that can be offered to other parties, which is basically intangible and does not result in ownership (Scheidt & Chung, 2019). Service is all activities, actions, performance, or basically intangible benefits that can be given to other parties without causing any ownership. The quality is a dynamic condition that relates to products, services, people, processes, and environments that meet or exceed expectations. Quality is the overall characteristics and characteristics of a product or service that affects its ability to satisfy expressed or implied needs. Quality is a dynamic condition or overall characteristics related to products, services, people, processes, and environment, which affect their ability to meet or exceed expectations for implied needs. Service quality is an attitude from the results of the comparison of the quality of customer service with the company's performance perceived by consumers (Usmara, 2008). Roderick & Gregory (2008) stated that service quality is the level of performance measure assumed to be related to the price development. Service quality is the feeling that the customers have after purchasing service and implies whether or not they are satisfied with the service (Belber & Erdogan, 2019). Service quality is a measure of the expected level of superiority in the performance of a product or service associated with price developments.

Service quality is one of the most important means of generating customer satisfaction and customer loyalty (Kesari & Atulkar, 2016). Service quality dimension consist of tangible, empathetic, reliability, responsiveness, and assurance (Meesala & Paul, 2016). Indicators of service quality include cleanliness of facilities, neatness of appearance of employees, personal attention by employees, pay attention to customer needs, *provide service as promised*, provide fast service, ability of employees in the field of services provided, friendliness of employees in providing services.

### **Loyalty**

According to Mowen and Minor (1998), loyalty is a condition where the customer has a positive attitude towards a brand, has a commitment to the brand, and intends to continue its purchase in the future. Loyalty shows the tendency of customers to use a brand with a high level of consistency (Fang, 2019). Guchait et al., (2019) mention the reasons an institution needs to gain customer loyalty. Firstly, existing customers are more prospective, the cost of getting new customers is greater than retaining existing customers, customers who already believe will believe in other things, operating costs will be efficient if you have lots of loyal customers, you can reduce psychological and

social costs because old customers have had positive experiences together, and loyal customers will be loyal and try to attract other people to become customers. Loyalty dimension consist of making regular repeat purchases, purchases across product and service lines, refers others, and demonstrates immunity to the pull of the competition (Griffin & Moorhead, 2010). Loyalty indicators include saying positive things, recommending other parties, encouraging friends and relatives, considering the first choice to buy services, and doing more business (Gremmler & Brown, 1996).

### **Satisfaction**

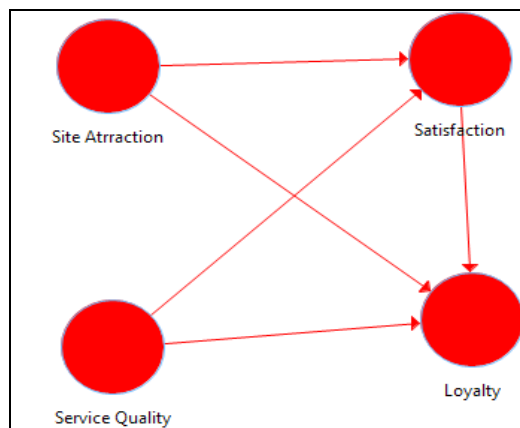
Satisfaction is the feeling of likes or dislikes of a product after comparing the performance of the product with expectations (Iglesias et al., 2019). Satisfaction is a positive emotional response to the evaluation of experience using a product or service (Wilkie, 1994). Martinaityte, et al. (2019) stated that satisfaction is an evaluation of product purchases that have the same or more value than expected. Satisfaction has an understanding of the difference between expectations and perceived values. Satisfaction is the main factor that can attract loyalty. Customer's satisfaction leads to customer's loyalty, recommendation and repeat purchase (Wilson et al., 2008). Satisfaction can be seen from the pride of the product, the fulfillment of customer desires, and the pleasure of the product provider. Satisfaction dimension consist of product quality, relationship marketing, loyalty promotion, best customers, complaint services, unconditional guarantees, and pay for performance. Satisfaction indicators include pleasure, suitability of expectations, satisfying, experience, and trust (Taylor & Baker, 1994).

### **Hypotheses**

This study examines the impact of site attraction and service quality on loyalty through satisfaction. The following hypotheses were elaborated:

- H1: Site attraction has a significant influence on loyalty.
- H2: Service quality has a significant influence on loyalty.
- H3: Site attraction has a significant influence on satisfaction.
- H4: Service quality has a significant influence on satisfaction.
- H5: Satisfaction has a significant influence on loyalty.

According to the proposed hypotheses, the following Figure 4 depicts the variable relationship which shows the relationship between the independent variable on the mediator variable and the dependent variable, as well as the relationship between the mediator variable and the dependent variable.



**Figure 4.** Variable Relationship

Where independent variables are Site Attraction and Service Quality; mediator variable is Satisfaction; and dependent variable is Loyalty. The mathematical equation model proposed for the influence received by the satisfaction variable and loyalty variable is given as (Ghozali & Latan, 2015):

$$\text{Satisfaction} = \beta_{\text{Site\_Attraction}} + \beta_{\text{Service\_Quality}} + \varepsilon$$

$$\text{Loyalty} = \beta_{\text{Site\_Attraction}} + \beta_{\text{Service\_Quality}} + \beta_{\text{Satisfaction}} + \varepsilon$$

$\beta$  = path coefficient

$$\varepsilon = \sqrt{1 - R^2}$$

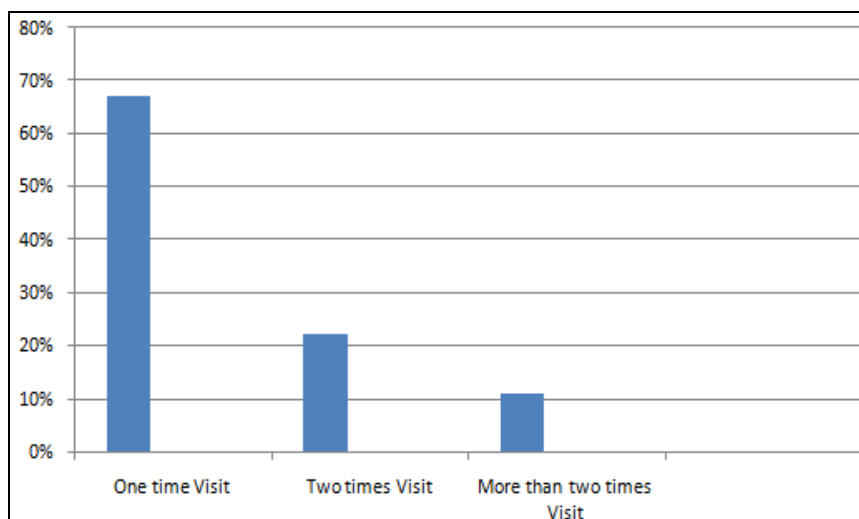
## DATA AND PROPOSED METHOD

This section presents the data obtained and the proposed method.

### Data

Tourists visited Nglanggeran tourist destination from years 2014 to 2018 is the population in this study. Primary data is directly obtained from the respondents of tourists visiting Nglanggeran tourist destination. Questionnaire in the form of a checklist using a Likert scale is the research instrument. Data collection is carried out in February 2019. From 50 respondents involved; 41% of them are males, and the other 59% are females. The classification of age is as follows: up to 30 years old are 74%, and above 31 years old are 26%. The education level of respondent is up to Diploma's degree are 70%, Bachelor's degree are 22%, and master's degree are 8%.

The visitors are 70% personal, and 30% group. The frequency of respondents' visits: one-time visit are 67%, two times visit are 22%, and more than two times visit are 11%. The frequency of tourists visit is depicted in Figure 5.



**Figure 5.** The Frequency of Respondents' Visit

### Research Methods

Data analysis in this study includes data processing, data organizing, and finding results. A model that is formed as in Figure 4 using intervening or moderating variables cannot be solved by multiple regression, thus the appropriate analysis technique used to solve is path analysis. Path analysis can be used to estimate the direct effect, indirect influence, and total influence between variables in the model (Wright, 1934). The

structural equation described by the path diagram is considered as a representation of the theory; hence the relationship between latent variables is a manifestation of the theory. The analysis technique in this research is the path analysis implemented on SmartPLS 3.0.

## RESULTS AND DISCUSSION

There are four variables in this study with respective ten questions. They are site attraction A1-A10, service quality Q1-Q10, satisfaction S1-S10, and loyalty L1-L10.

### Measurement (Outer) Model Test

The measurement model test is needed for path analysis with an unobserved variable. The outer model defines how each indicator relates to its latent variables. The outer model test is done to ensure that the measurements used are feasible to be used as measurements, which are valid and reliable. The outer model test is seen from several indicators, namely, convergent validity, discriminant validity, and undimensionality.

#### a. Convergent validity

Convergent validity with a reflection indicator can be seen from the correlation between indicator score and its variable score, namely, the value of the loading factor in the latent variable with the indicators. Indicators are considered reliable if they have a value of loading factor  $> 0.70$ . The output estimation I is depicted in Figure 6 and the outer loadings I is described in Table 2 of path analysis using SmartPLS 3.0.

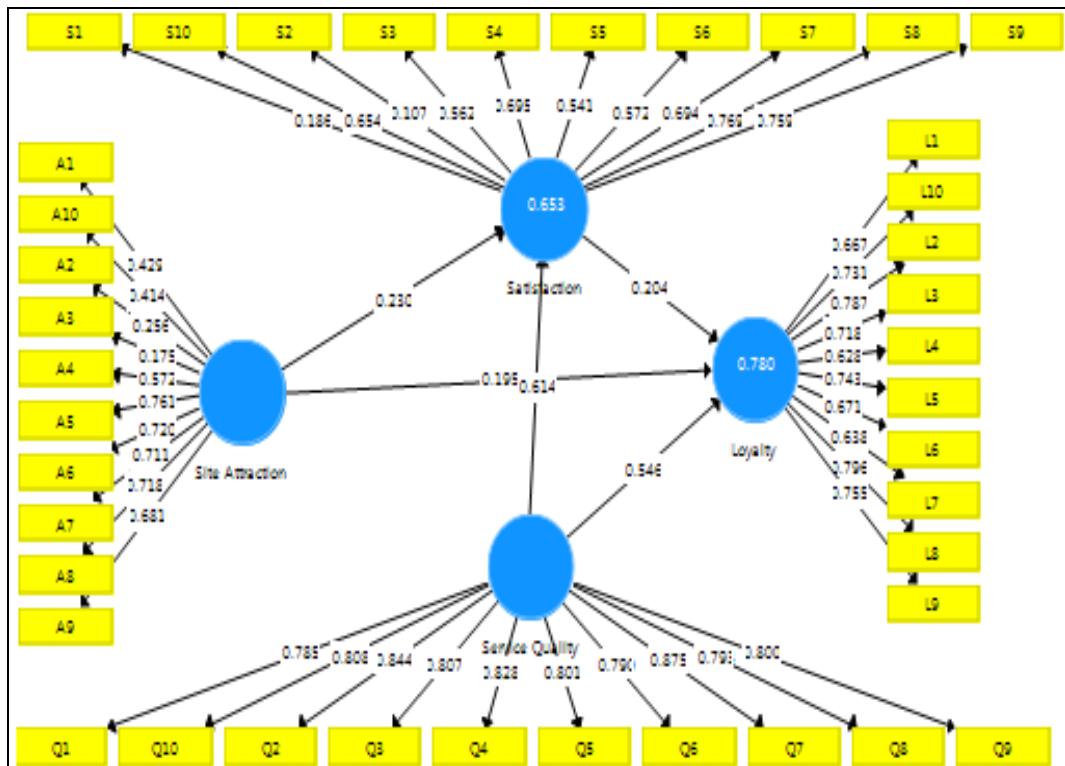


Figure 6. Output Estimate I

Based on Figure 6 and Table 2, the indicator of A1, A10, A2, A3, A4, A9, L1, L4, L6, L7, S1, S10, S2, S3, S4, S5, S6, and S7 has a loading factor value of  $< 0.70$  in each,

therefore the model is re-estimated by eliminating indicators that have a value of  $< 0.70$ . The output estimation II is depicted in Figure 7 and the outer loadings II is described in Table 3 of path analysis using SmartPLS 3.0.

**Table 2.** Outer Loadings I

Indicator	Loyalty	Satisfaction	Service Quality	Site Attraction
A1				0.429
A10				0.414
A2				0.256
A3				0.175
A4				0.572
A5				0.761
A6				0.720
A7				0.711
A8				0.718
A9				0.681
L1	0.667			
L10	0.731			
L2	0.787			
L3	0.718			
L4	0.628			
L5	0.743			
L6	0.671			
L7	0.638			
L8	0.796			
L9	0.755			
Q1			0.785	
Q10			0.808	
Q2			0.844	
Q3			0.807	
Q4			0.828	
Q5			0.801	
Q6			0.790	
Q7			0.875	
Q8			0.793	
Q9			0.800	
S1		0.186		
S10		0.654		
S2		0.107		
S3		0.562		
S4		0.695		
S5		0.541		
S6		0.572		
S7		0.694		
S8		0.769		
S9		0.759		

Based on Figure 7 and Table 3, the indicator A8 and L3 has a loading factor value of  $< 0.70$  in each, therefore the model is re-estimated by eliminating indicators A8 and L3. The output estimation finalis depicted in Figure 8 and the outer loadings final is described in Table 4 of path analysis using SmartPLS 3.0.

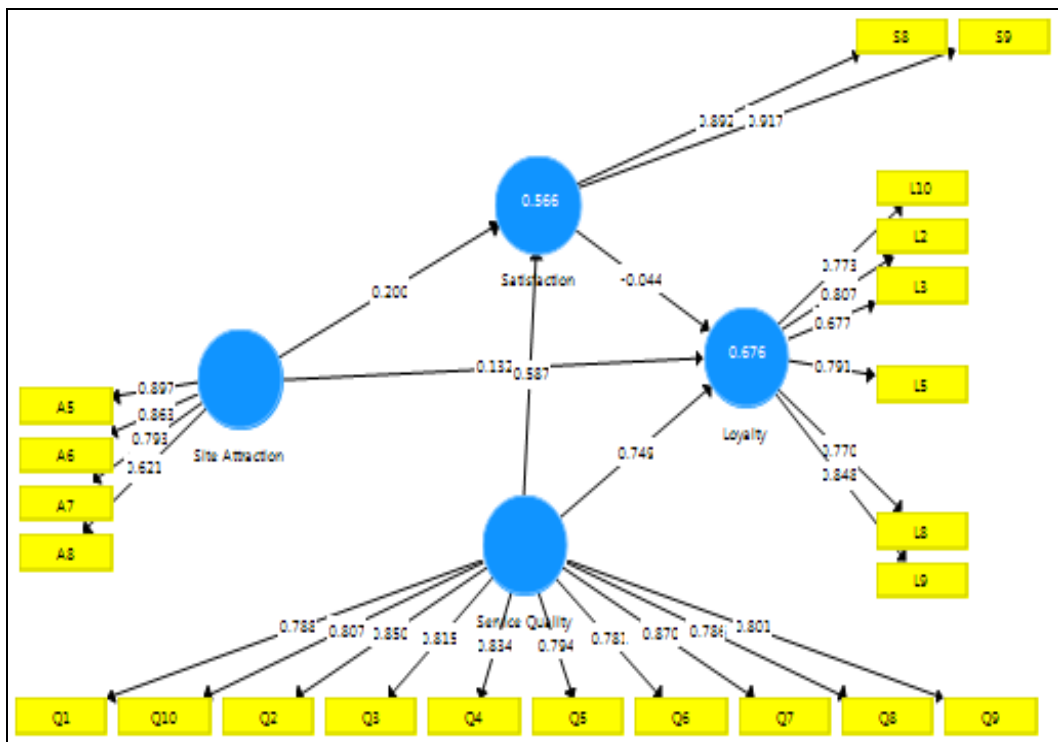
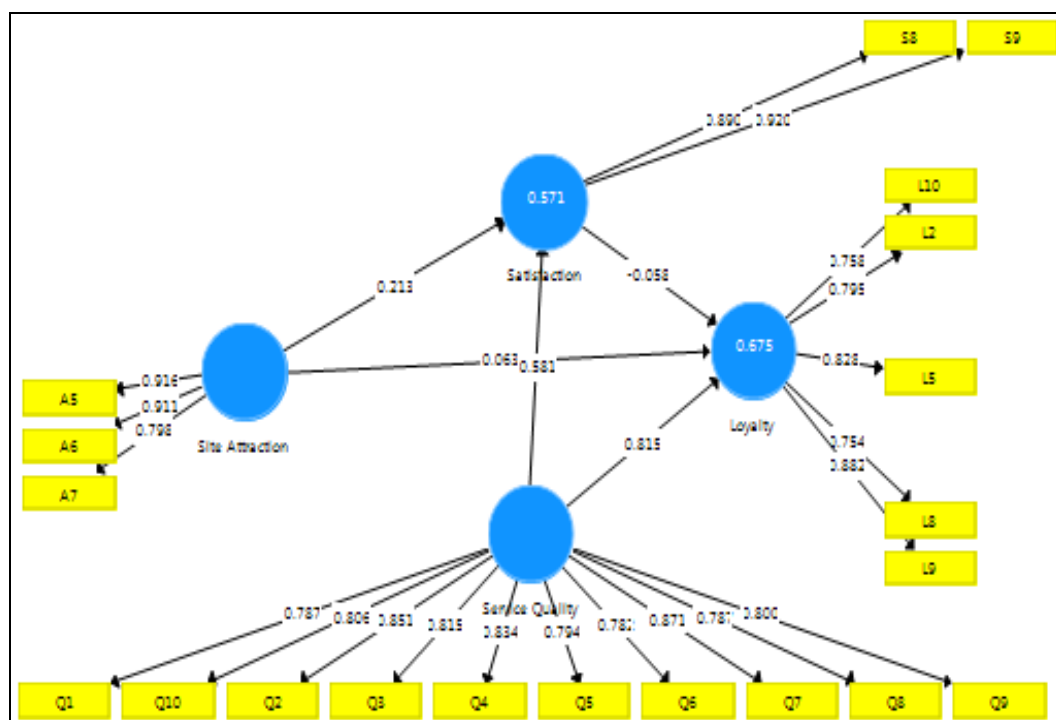


Figure 7. Output Estimate II

Table 3. Outer Loadings II

Indicator	Loyalty	Satisfaction	Service Quality	Site Attraction
A5				0.897
A6				0.861
A7				0.793
A8				0.621
L10	0.773			
L2	0.807			
L3	0.677			
L5	0.791			
L8	0.770			
L9	0.848			
Q1			0.788	
Q10			0.807	
Q2			0.850	
Q3			0.815	
Q4			0.814	
Q5			0.794	
Q6			0.781	
Q7			0.870	
Q8			0.786	
Q9			0.801	
S8		0.892		
S9		0.917		

Based on Figure 8 and Table 4, the indicator has a loading factor value of  $> 0.70$  in each, then it is stated that all variables in the estimated model meet the criteria.



**Figure 8.** Output Estimate Final

**Table 4.** Outer Loadings Final

Indicator	Loyalty	Satisfaction	Service Quality	Site Attraction
A5				0.916
A6				0.911
A7				0.798
L10	0.758			
L2	0.795			
L5	0.828			
L8	0.754			
L9	0.882			
Q1			0.787	
Q10			0.806	
Q2			0.851	
Q3			0.815	
Q4			0.834	
Q5			0.794	
Q6			0.782	
Q7			0.871	
Q8			0.787	
Q9			0.800	
S8		0.890		
S9		0.920		



## b. Discriminant validity

Discriminant validity is the value of the cross-loading factor to determine whether the variable has adequate discriminant, that is, if the value of the loading factor in the destination variable is greater than the value of the other loading factor variables.

**Table 5.** Cross loadings

Indicator	Loyalty	Satisfaction	Service Quality	Site Attraction
A5	0.683	0.587	0.699	<b>0.961</b>
A6	0.560	0.543	0.692	<b>0.911</b>
A7	0.427	0.595	0.601	<b>0.798</b>
L10	<b>0.758</b>	0.331	0.600	0.316
L2	<b>0.795</b>	0.481	0.538	0.396
L5	<b>0.828</b>	0.561	0.739	0.622
L8	<b>0.754</b>	0.373	0.665	0.428
L9	<b>0.882</b>	0.592	0.719	0.755
Q1	0.673	0.567	<b>0.787</b>	0.580
Q10	0.670	0.533	<b>0.806</b>	0.614
Q2	0.720	0.760	<b>0.851</b>	0.651
Q3	0.698	0.774	<b>0.815</b>	0.602
Q4	0.715	0.648	<b>0.834</b>	0.723
Q5	0.627	0.468	<b>0.794</b>	0.590
Q6	0.631	0.520	<b>0.782</b>	0.603
Q7	0.692	0.619	<b>0.871</b>	0.653
Q8	0.611	0.514	<b>0.787</b>	0.569
Q9	0.606	0.547	<b>0.800</b>	0.574
S8	0.502	<b>0.890</b>	0.610	0.539
S9	0.560	<b>0.920</b>	0.727	0.639

From Table 5 it can be seen that the site attraction variable correlation with the indicator is greater than the indicator correlation with other variables; as well as loyalty, service quality, and satisfaction variables. This shows that latent variables predict indicators on their blocks are better than indicators in other blocks, so it is stated that all variables in the estimated model meet the criteria. Test to assess variable validity is done by looking at the value of Average Variance Extracted (AVE). Variables are valid if the AVE value of each variable is greater than 0.50. Output results show that AVE value for loyalty variable is  $0.647 > 0.50$ , satisfaction variable is  $0.818 > 0.50$ , service quality variable is  $0.661 > 0.50$ , and site attraction variable is  $0.768 > 0.50$ . From Table 6, the AVE of each variable is greater than 0.50, then variables are declared valid.

## c. Undimensionality Test

To ensure that there are no problems related to measurement, the testing of the model's undimensionality is done by testing the outer model. The undimensionality test is a variable reliability test that is measured using two criteria, namely, Composite Reliability and Cronbachs Alpha from indicator blocks that measure variables.

Variables are declared reliable if the Composite Reliability value and the Cronbachs Alpha value of each variable is greater than 0.70. Output results show that Composite Reliability value for loyalty variable is  $0.901 > 0.70$ , satisfaction variable is  $0.900 > 0.70$ , service quality variable is  $0.951 > 0.70$ , and site attraction variable is  $0.908 > 0.70$ . Output results show that Cronbachs Alpha value for loyalty variable is  $0.864 > 0.70$ , satisfaction variable is  $0.779 > 0.70$ , service quality variable is  $0.943 > 0.70$ , and site attraction variable is  $0.848 > 0.70$ .

**Table 6.** Average Variance Extracted

AVE/Variables	Loyalty	Satisfaction	Service Quality	Site Attraction
AVE	0.647	0.818	0.661	0.768

From Table 7, the output results show that the Composite Reliability value and the Cronbachs Alpha value of each variable is greater than 0.70, then variables are declared reliable.

**Table 7.** Undimensionality Test

Test/Variables	Loyalty	Satisfaction	Service Quality	Site Attraction
Composite Reliability	0.901	0.900	0.951	0.908
Cronbachs Alpha	0.864	0.779	0.943	0.848

### Structural (Inner) Model Test

The first test of the structural model is done by considering the R-square value which is a goodness-fit model test. Based on the model, the effect of site attraction and service quality on satisfaction shows an R-square value of 0.571. It is interpreted that satisfaction variable can be explained by site attraction variable and service quality variable of 57.1% while the remaining  $100\% - 57.1\% = 42.9\%$  is explained by other variables outside the model. The effect of site attraction, service quality, and satisfaction on loyalty shows an R-square value of 0.675. From Table 8, it is interpreted that loyalty variable can be explained by site attraction variable, service quality variable, and satisfaction variable of 67.5% while the remaining  $100\% - 67.5\% = 32.5\%$  is explained by other variables outside the model.

**Table 8.** R-square

R-square/Variables	Satisfaction	Loyalty
R-square	0.571	0.675

The second test is done by considering the significance of the influence between the variables on the parameter coefficient value, and it is significant, if the significance value of t statistic is greater than the significance value of t table 5% of 1.96. Based on Table 9, it can be concluded that satisfaction directly affects loyalty with a coefficient of - 0.058 but not significant with a statistical t value of  $0.426 < 1.96$  (answer hypothesis H5).

**Table 9.** Path Coefficients

Variables	Coefficient	t Statistic
Satisfaction -> Loyalty	-0.058	0.426
Service Quality -> Loyalty	0.815	5.741
Service Quality -> Satisfaction	0.581	4.039
Site Attraction -> Loyalty	0.063	0.456
Site Attraction -> Satisfaction	0.213	1.197

Service quality has a direct effect on loyalty with a coefficient of 0.815 and significant with a statistical t value of  $5.741 > 1.96$  (answer the H2 hypothesis), and service quality also has a direct effect on satisfaction with a coefficient of 0.581 and significant with a statistical t value of  $4.039 > 1.96$  (answer the H4 hypothesis). Site attraction has a direct effect on loyalty with a coefficient of 0.063 but not significant with a statistical t value of  $0.456 < 1.96$  (answer the H1 hypothesis), and site attraction also has

a direct effect on satisfaction with a coefficient of 0.213 but not significant with a statistical t value of  $1.197 < 1.96$  (answer the H3 hypothesis).

## CONCLUSIONS AND FUTURE WORK

After it was designated as a National Geopark in 2010, the number of tourist visit of Gunung Sewu Geopark with its 13 sites in Gunungkidul district has increased. The number of tourist visits then has increased more when Geopark was crowned as Global Geopark by UNESCO in 2015. However, the data shows that the number of tourist visits in the Nglangeran tourist destination has experienced a decrease. This study has presented to provide information for management to increase the number of tourist visits of Nglangeran. The analysis technique in this study is path analysis used on SmartPLS 3.0. We have examined the impact of site attraction and service quality on loyalty through satisfaction as an intervening variable. The results showed that site attraction has direct effect on satisfaction and loyalty but not significant, meanwhile service quality has direct effect and a significant effect on satisfaction and loyalty, and satisfaction has direct effect on loyalty but not significant. Increasing site attraction will provide opportunities for management to affect satisfaction and loyalty which can ultimately increase the number of tourist visits. The value of R-square 67.5%, which means 32.5% is explained by other causes beyond the research model.

For further research, it is recommended to add other independent variables to support more the research model. The limitation of this study is that the data was not taken during the holiday season. Hence, the variation of respondents was limited.

## Acknowledgement

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## **THE CHANGES RESULTING FROM GLOBALIZATION IN TOURISM INDUSTRY AND THEIR IMPACT IN THE DEVELOPMENT OF TOURISM ACTIVITY IN JORDAN**

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**Abstract:** This study aimed to identify the change resulting from globalization in tourism industry and their impact in the development of tourism activity. The study followed the descriptive style, to achieve this purpose, a questionnaire was developed to measure the effect of political, economical and cultural globalization on tourism Activity. The sample of study consisted of (255) employees from higher departments of the Jordanian tourism industry. The results of the present study showed that the changes resulting from globalization (political, economical and cultural) in tourism industry showed a high level in the development of activity tourism. The results also indicated the presence of significant differences in the fields of cultural globalization on tourism activity and the effects of political globalization on Tourism Activity due to gender is in favor of males, However, there were no differences in the field of economic globalization on Activity Tourism, there were significant differences attributed to qualification in the field of political globalization on Tourism Activity and the study tool as a whole in favor of bachelor degree, there were no differences due to the variables of experience and type of job in the fields of economic, cultural, political and there were significant differences in sector variable in the field of political globalization on Tourism Activity in favor of public sector. Whereas, there were differences due to public sector in the study tool as a whole in favor of private sector.

**Key words:** globalization, Economic globalization, Political globalization, Cultural globalization, development of tourism activity

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## INTRODUCTION

The most important features that characterize this era is the aspect of information explosion, and the great flood, which spreads everywhere and every moment without borders, communication and mixing of the globalization phenomenon, whether cultural, economic and political globalization, which were characterized by the approach of openness and mixing features within it (Al-Mutairi& Saud, 2013). Such geological features are numerous and diverse including mountains , volcanic and water features, mud volcanoes, salt domes, caves, sinkholes, kavirs and deserts, and erosion columns (Amrikazemi & Mehrpooya, 2006). In addition, Sadry (2009) eluded tow sites of intrest that are result of human intervention, such as mines.

Over the past decades, the literature of border studies emerged a rang of changes which informed by academic displines. These changes have shaped new features such as “globalization”. Current global economic system improve the values and standards of performance, efficiency and productivity; at present, the performance determines the new location of the global themes that must flourish when fulfilling their cost responsibilities on all aspects of economic, political, economic and cultural life.

Globalization is not merely a competition for market shares and well-timed economic growth initiatives; neither is it just a matter of trade opportunities and liberalization. To all States which attempt to political, economic and cultural progress and globalization must become a necessity (Al-Atai et al., 2009).

Tourist activity can have various effects. These change people, but also they change other people encountered along the way. Tourism represents a goal, but it can also serve as an instrument of educational activity. Therefore, tourism is considered a leisure activity with economic, social and cultural dimensions, which is characterized by beauty, climate, customs, traditions and civilizations of the people (Hamidato, 2015). Tourism has experienced continued growth and deepening on one of the fastest growing economic sectors in the world diversification to become linked todevelopment and encompasses a growing number of new destinations (Aldbur, 2016).

Globalization exists not only in the supply side of tourism, but it also defines the increasingly interconnected tourism demand around the world. Countries are bound by strong economic ties through tourism activities, such as tourism demand exhibits co-movements across countries because the importance of the industry for dependence on labor intensive and the interrelationship of the tourism sector with other economic sectors without resorting to large capital or advanced technical equipment required by services or industries (Lanfranchi et al., 2014).

## THE STUDY PROBLEM

Globalization brings new potentials for development and wealth creation. But there are divergent views on the economic impact of globalization. Few argue that the present model of globalization has increased the problems of unemployment, inequality and poverty, while others contend that globalization helped to reduce these aspects. Resulting from the tremendous developments in various fields, especially the telecommunications sector, and the rapid transfer of information and the intermingling of civilizations and cultures. Therefore, countries were keen to preserve their borders and nationalities by adopting a national policy capable of facing the challenges of political globalization. To solve this problem, the researcher formulated the problem in the following two questions:

**The First question:** What are the changes resulting from (economic, cultural, political) globalization in tourism industry and their impact in the development of Tourism Activity ? This question is divided in to the following sub-questions:

What are the changes resulting from (economic) globalization in tourism industry and their impact in the development of tourism activity? What are the changes resulting from (cultural) globalization in tourism industry and their impact in the development of tourism activity? The changes resulting from globalization in tourism industry and their impact in the development of Tourism Activity.

What are the changes resulting from (political) globalization in tourism industry and their impact in the development of Tourism activity?

**The second question:** Are there statistically significant differences at the level of significance ( $\alpha = 0.05$ ) in the impact of economic, cultural and political globalization changes on Tourism Activity according to the study variables (gender, qualification, experience, type of job and sector)?

### **Hypotheses of the study**

Based on the questions in the study problem, the hypotheses of the study are:

- There is no statistically significant effect on ( $\alpha \leq 0.05$ ) for the changes resulting from (economic, cultural, political) globalization in tourism industry on the development of tourism activity.
- There is no statistically significant effect on ( $\alpha \leq 0.05$ ) for the changes resulting from (economic) globalization in tourism industry on the development of Tourism Activity.
- There is no statistically significant effect on ( $\alpha \leq 0.05$ ) for the changes resulting from (cultural) globalization in tourism industry on the development of Tourism Activity.
- There is no statistically significant effect on ( $\alpha \leq 0.05$ ) for the changes resulting from (political) globalization in tourism industry on the development of Tourism Activity.
- There are no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) in the impact of economic, cultural and political globalization changes on Tourism Activity according to the study variables (gender, qualification, experience, type of job and sector).

### **THE IMPACT OF THE STUDY**

The importance of tourism on economic growth, most international organizations have begun to argue that tourism growth can influence, as well, the economic and sociocultural development of society. However, recently, a new approach that criticizes the relationship between both dimensions has begun to be developed, suggesting that this is not an automatic relationship. The phenomenon of globalization has opened the way to the recovery of world tourism markets in addition to the rapid technological development of the media and communication. The success of tourism will in future be based on connection and compatibility with other branches, and from the aspect of dynamics of process and causality of impact, that parallel is monitored in the segment that corresponds to the changes in demographic features of demand.

### **PROCEDURAL TERMS**

**Globalization:** is considered by some as a form of capitalist expansion which entails the integration of local and national economies into a global, unregulated market economy through the movement of goods, capital, production techniques, people and information (Hajunia & Fisherman, 2004).

**Economic globalization:** refers to the interdependence of economic interests and the increasing interdependence of world economies as a result of the growing scale of cross-border trade of commodities and services, flow of international capital and wide and rapid spread of technologies (Zinedine, 2009).

**Political globalization:** refers to the state is not the only actor on the global

political scene and the growth of the worldwide political system, both in size and complexity. That system includes national governments (Shabayeki, 2003).

**Cultural globalization:** The transformation of cultural identity from its national and private framework to integration, interaction and integration with other cultural identities under the monotheistic cultural identity (Zagho, 2010).

**Activity tourism:** Is public and private organizations that participate in development and production, which cover a range of areas from “active” holidays involving canoeing, climbing, horse-riding and mountaineering (Kaffee & Youssef, 2018).

**Development of Tourism Activity:** Is the phenomenon of the lawful movement of individuals to places other than their permanent residence for a period of twenty-four hours and not exceeding one year and for any purpose and the consequent economic, social, cultural, cultural and media effects (Pechlaner et al., 2015).

### **THEORITICAL FRAMEWORK**

Globalization represents the global integration of international trade, investment, information technology and cultures. Government policies designed to open economies domestically and internationally to boost development in poorer countries and raise standards of living for their people are what drive globalization. It is a political interference of a sovereign State or belonging to a specific country (Fatalawi, 2009).

The broad effects of globalization on different aspects of life dominate a great deal of attention over the past three decades. As countries, especially developing countries are speeding up their openness in recent years the concern about globalization and its different effects on economic growth, poverty, inequality, environment and cultural dominance are increased, the tourism sector has become an effective contribution to the increase of income and the formation of the tourism engine to develop a policy of continuity and communication for this sector, as it depends on natural resources and cultural values for its preservation and tourism as in other sectors that produce economic, social and environmental impacts on the level of Tourism area (Islam, 2014). Globalization emerged in the 1990s after the fall of the Soviet Union. When America demanded the world's countries to sign the World Trade Agreement with a view to controlling transnational corporations on global markets, the basic idea of globalization is to increase mutual relations among nations. It consists of 3 stages (Al-Jabri, 2009; Ragab, 2009):

The embryonic stage:

This phase is consider as negotiation, persuasion and conviction. Term birth stage: This phase is the beginning of the work of the International Trade Organization and its activities in removing all barriers and restrictions between countries. Expansion stage: Is the stage of overlap and the obvious interlink age of the economic, political, cultural and social issues and that globalization becomes open without the existence of political borders between countries and without time intervals and geography.

Types of globalization

Globalization is the universalization of its application, but through the realistic application of globalization policies there are many types: Political globalization: refers to the amount of political co-operation that exists between different countries (Mansour, 2009). Economic globalization refers to the interconnectedness of economies through trade and the exchange of resources. Effectively, therefore, no national economy really operates in isolation, which means national economies influence each other. Cultural globalization is the set of the spiritual, material, intellectual and emotional characteristics that characterize a specific society or social group. They include arts, literature, life styles, economic production, basic human rights, values systems, traditions and beliefs.



### **Dimensions of globalization**

There are several dimensions of globalization (Al-athamneh, 2002):

Economic is the intensification and stretching of economic interrelations around the globe. It encompasses such things as the emergence of a new global economic order, the internationalization of trade and finance. Military is defined as the intensification and stretching of military power across the globe through various means of military power (nuclear military weapons, radiation weapons simply weapons of mass destruction). The changes resulting from globalization in tourism industry and their impact in the development of Tourism Activity. Cultural is the intensification and expansion of cultural flows across the globe. Culture is a very broad concept and has many facets, but in the discussion on globalization, Steger means it to refer to “the symbolic construction, articulation, and dissemination of meaning.

### **The causes of globalization**

Globalization is no longer just an academic concept, it has become the title of a new global reality that surrounds society and enhances its manifestations and effects in all directions. The traditional logic of acceptance or rejection is not a weapon to confront the logic of dealing with globalization in some form.

### **The positive and negative effects of globalization**

There are pros and cons of globalization (Al-Mutairi, 2013). One of the advantages of globalization is to learn about the culture of peoples, to benefit from the experiences of developed countries, to keep abreast of civilization and technology and to open up to the civilizations of other countries and to demonstrate the importance of technological progress as a justification for accepting globalization; In order to change the political concepts of the peoples of the world, replacing the global culture rather than globalization of national culture, interference in the internal affairs of the state through the World Bank and human rights organizations.

### **The economic and social effects of tourism activity**

By the end of the twentieth century, tourism has become one of the first export industries because tourism depends on human labor in its success, which provides great job opportunities directly and indirectly, so it is a great source for bringing in hard currency and we do not forget the social impacts and environment of tourism activity which works to achieve social and cultural communication, under the shadow of globalization that led to the creation of intense competition among tourist countries and thus attract the largest possible number of tourists from different countries of the world (Bouakriv, 2012).

### **Types of tourism**

Tourism is one of the most flourishing industries in the world, making a significant contribution to the world; there are several types according to the criteria that are taken in classification of tourists and most important (Aldbur, 2016):

Types of tourism based on location and borders: There are types of first tourism (international or foreign tourism) and (domestic or domestic tourism) and there is also regional tourism (such as the region of America and East Asia). Types of tourism based on the period of residence of the tourist and characteristics of the tourist area: There is permanent tourism, which is all year round (cultural and religious tourism) and there is seasonal tourism during the period of the year such as summer or winter tourism. Types of tourism based on tourist attractions: There are three types of cultural tourism, including the visit of historical places and archaeological and religious sites, museums and social tourism: social relations and tourism, entertainment and natural tourism (including climatic, vegetative, natural and general) and a variety of purposes (recreational and scientific).

### **The development of tourism at the global level in the light of globalization**

There are points that have seen global tourism for globalization (Boukarev, 2012; Shbayeki, 2003):

**Border crossing procedures:** The phenomenon of globalization has led to the emergence of economic blocs that have not eliminated the procedures and complexities of border crossing, both for individuals and for goods and services. **Expansion and development of transport:** The developments in the field of air transport resulted from the emergence of a new generation of aircraft with large numbers of people. **Reduction of working hours:** work in the early twentieth century became six days and 10 hours of work a day without weekly or annual wage holidays until the working hours decreased by approximately 45%. **The development of technology and its implications and expected results tourism:** The modern technologies began to use the Internet as a type of tourist destination and use the e-mail in the expansion of the reservation and then use the wireless application protocol, which has become a new means of tourism and then use the WEB to take information and mobile booking, which enabled the electronic tourism to make a revolution in the world of tourism, which affected the buyer or tourist and the seller and opened the way for the tourist to choose between many choices.

**Elderly tourism as a new and growing phenomenon:** the increase in the average age and improve health care are factors that lead to early retirement and increase the number of elderly retirees and this will reflect the congestion of cities and promote and stimulate the development of tourism industry significantly. **Safety, security and optimal utilization of the best time:** the peace ladder of tourism does not meet the conditions specific to the environment and then peace, stability and safety are necessary and essential conditions for development in the tourism sector in the shadow of globalization.

### **PREVIOUS STUDIES**

The researcher referred to previous studies related to the subject of the study:

(Ajlouni, 2013). "Tourism Development in Jordan: a study of Tourism Awareness among Students of Private Jordanian Universities". Case Study Irbid and Jadra University. The study aimed to identify tourism awareness among students of private universities in Jordan, the case study of Irbid National University and Jadra University. This study was based on the field approach through the use of the questionnaire designed for this purpose. The sample of the study consisted of (312) questionnaire was randomly distributed. Therefore, the results of the study indicate that there is a high degree of tourism awareness about the importance of tourism and the positive effects of development in Jordan. Eashy (2013) aimed to clarify the relationship between the phenomenon of globalization and the tourism industry, and the extent of the impact of this phenomenon in various tools and mechanisms on tourism at the global level. In his study Eashy (2013) concluded that tourism is one of the manifestations of globalization in the history of the nature of its activities, at the same time, globalization represents a fertile environment for the growth of the activities of the industry through the facilities provided by various means of communication, the use of the World Wide Web, At the global level.

Hołowiecka et al., 2011, stated that tourism development can be considered in every dimension of these processes: economic, social, cultural and even political. The high importance of tourism in the present global economy makes it a very popular research field, especially in the scope of economic dependence between tourism and globalization at the global or regional levels. Fully appreciating the achievements of research in this domain, the authors of this paper wish to refer to the scale of the unit and indicate how globalization impacts the individual purchasing decisions. The

analysis is based on empirical studies within Polish tourist activity preferences, on the basis of these results the authors attempt to answer the following questions: (1) which tourists' attitudes may reveal the impact of globalization on their preferences and purchasing behaviors; (2). The resulting changes from tourism industry globalization, and their impact in the development of Tourism Activity are visible in the attitude of Polish tourists; (3) there are differences in the model of tourist activity with reference to the socio-demographic features; (4) what is the spatial scope of preferred tourist destinations (i.e. is the compression of space as readily absorbed in the consciousness of the older population as in the younger?). Elsyed (2008) "The impact of strategic planning on the tourism industry". The study aimed to identify the impact of strategic planning on the tourism industry in Sudan. The study relied on the descriptive, analytical and historical method. The study adopted the questionnaire as a tool for collecting data and proving the hypotheses. The most important results are that tourism in Sudan can become an extension of the economy and contribute to social development. Tanahashi (2008) aimed at demonstrating the role of globalization and emerging roles in cultural tourism. Globalization today is a reality and a controversial one. The debate is over whether globalization is exacerbating or alleviating economic disparities in the world.

The adoption of global capitalism has certainly exacerbated disparities in economic activities and opportunities between a few urban centers and many secondary regions. Tourism in general, cultural tourism in particular, have the ability to alleviate this imbalance, by bringing economic activities and opportunities to the peripheral areas.

Okaka (2007) conducted a study to highlight the theoretical or conceptual implications of: the new media communication technologies, globalization, and cultural contestations on Africa's tourism industry; and to discuss appropriate media communications technology options for promoting sustainable tourism, peace and conflict resolution, cultural competence and inter-cultural communications in Africa.

The presentation of the paper is informed by the relevant theoretical and conceptual framework, reviews of national service statistics, relevant national ICT policy documents and media communication technology data. The author argues that new media communication technologies are vital players in catalyzing local, national and global tourism business development and inter-cultural dependency between Africa and the western world. Africa is a potential major market source of revenues for local and foreign tourism industry products and services. The loss of Africa's market shares in the global tourism arena is attributable to its lack of competitiveness. Helmy (2005) wrote about tourism development in the Egyptian Northwest Coast: a sustainable development approach. The study aimed to identify the available tourism components by identifying the most important strategies and plans that can reflect the economic ability of this sector.

The study used a set of strategic tools for the importance of the Northwest Egyptian coast and revenues. Thus, this study reached results, which impact on the national economy and the unification and compatibility of the tourism sector to the economy (Brown, 2006). This annotated bibliography summarizes studies on rural tourism. Primary emphasis is on studies dealing with the United States, but some international studies are also included. Topics covered include tourism planning and development, tourism marketing, tourism and rural development, tourism and sustainable development, economic and other effects of tourism, heritage tourism, nature-based tourism/ecotourism, and agritourism.

This paper is being hosted by the Rural Information Center. The researchers benefited from the previous studies in building the idea of the study and then determining the title of the study, and building the tool used in the study, which is the questionnaire and determine its areas. The study examined the changes resulting from globalization in

tourism manufacturing and its impact on the development of tourism activity. The study agrees with some previous studies in determining the variables related to tourism activity, such as. Some previous studies focoused on tht tourism industry, Alsyed (2003) and Okaka (2007). This study relies on a questionnaire to collect the data and answer the research questions. The result of this study agrees with some previous studies in determining the variables related to tourism activity, such as Ajlouni (2013) and Brown (2006).

## METHODS AND PROCEDURES

### Research Method

This study utilized the descriptive correlation design to achieve the objectives of this study to identify the impact of the change resulting from globalization in tourism industry and their impact in the development of Tourism Activity.

### Study Society

The society of study consisted of employees from higher departments of the Jordanian tourism industry.

### The sample of study

The sample of study consisted of (255) employees from higher departments of the Jordanian tourism industry. Table 1 shows the distribution of sample members on the study variables.

**Table 1.** Distribution of sample members on the study variables

Variables	Category	Frequency	Percentage
Gender	Male	150	58.8
	Female	105	41.2
	Total	255	100.0
Qualification	Applied Diploma	61	23.9
	Bachelor	145	56.9
	Postgraduate	49	19.2
	Total	255	100.0
Experience	from 1-5 years	85	33.3
	from 5-10	97	38.0
	10 years and above	73	28.6
	Total	255	100.0
Occupation type	Tourist offices	92	36.1
	Hotels	87	34.1
	Ministry of Tourism	54	21.2
	Others	22	8.6
	Total	255	100.0
Sector	Private	101	39.6
	Public	154	60.4
	Total	255	100.0

Table 1 shows the following:

- According to gender variable, the number of males (150) and percentage (58.8%), while the number of females (105) and a percentage of (41.2%).
- According to the highest frequency of the bachelor degree and above was (145) and a percentage (56.9%), followed by applied diploma (61) percentage (23.9%), Postgraduate studies (49%) and percentage (19.2%).
- According to the rate of the experience variable, the highest frequency was (5 to 10 years) at 97 recurrence rate (38.0%), followed by (85%) and (33.3%) respectively. Repetition of category (10 years and above) with frequency (73) and percentage (28.6%).

- According to Occupation type, The highest frequency was (92%) with percentage (36.1%), followed by the frequency (87), the percentage (34.1) and the Ministry of Tourism category (54 recurrences) and 21.2%), While the lowest frequency was (22) and (8.6%).

- According to the sector variable, the highest frequency was for a general category (154) and a percentage of (60.4%), while the frequency for a special category (101) was 39.6%.

The changes resulting from globalization in tourism industry and their impact in the development of Tourism Activity.

### **Instruments of the study**

A questionnaire was constructed to collect the data from the study sample members. The final form was composed of two parts as follows:

Part 1: Includes the demographic variables of the study sample members (gender, qualification, experience, type of job, sector).

Part2: Includes three areas: The changes of economic globalization on tourism activity and included (8) paragraphs to measure the impact of economic globalization changes on tourism activity. The changes of cultural globalization to tourism activity and included (8) paragraphs to measure the impact of cultural globalization changes on tourism activity. The changes of political globalization on tourism activity and included (8) paragraphs to measure the impact of the changes of political globalization on tourism activity.

### **The questionnaire Scale**

The questionnaire was used in the final form of (24) paragraphs. Five-Dimensional Likert Scale was used to measure the opinions of the study sample members and to give grades (1-5) according to the degree of approval for all the paragraphs of the questionnaire. Less than (2.34) takes a low grade. From (2.34-3.66) takes a middle grade.

More than (3.66) takes a high grade.

### **Instruments validity**

The main purpose of a researcher by exploring construct validity is to determine whether the inferences made about the results of the assessment are meaningful and serve the purpose of questionnaire, it was presented to a group of arbitrators (8) with experience and competence from the field of tourism, in order to judge the degree of integrity of the wording and clarity of the paragraphs, the extent to which each paragraph is relevant to the field to which it belongs, in addition to any action necessary to delete, modify or add to the paragraphs of the resolution or suggestions that they deem appropriate. The observations and proposals of the arbitrators were adopted and the paragraphs of the resolution were amended according to the consensus of the majority of the arbitrators. The resolution is in final form.

### **Instrument Reliability**

The reliability of the questionnaire was confirmed by applying it to a sample, Cronbach's alphato (Sekaran & Bougie, 2016) was applied to all study axes and the tool as a whole Table 2 shows.

**Table 2.** Reliability coefficients of the study instrument in the Cranach's alpha method for all study axes

No.	Domain	No. of item	Cronbach's alpha
1	Changes of economic globalization on tourism activity	8	0.88
2	Changes of cultural globalization on tourism activity	8	0.91
3	Changes of Political globalization on tourism activity	8	0.92
Instrument as whole		24	0.94

Table 2 shows that Cranach's alpha coefficients ranged between 0.92\_0.88, the highest was the field of "changes of political globalization on tourism activity" and the

lowest was changes of economic globalization on tourism activity. All reliability coefficients are high and acceptable in (0.70) and the scale as a whole was (0.87) and the coefficient of Cranach's alpha for the fields as a whole (0.94).

### **STUDY VARIABLES**

#### **Independent variables:**

Changes resulting from economic globalization in tourism manufacturing.

Changes resulting from cultural globalization in tourism manufacturing.

Changes resulting from political globalization in tourism manufacturing.

#### **Dependent Variable:**

The development of tourism activity.

### **STATESTICAL PROCESSING**

To answer the study questions, the following statistical treatments were used Statistical Package for the Social Sciences (IBM-SPSS – V.22) (Pallant, 2013). The frequency and percentages of the personal variables of the study sample were calculated and Cronbach's alpha equation was applied to obtain the reliability of the internal reliability, averages and standard deviations were calculated for all fields of study and paragraphs Dimensional and general mean. To detect differences in the fields of study according to the variables of gender experience and qualified type of job (MANOVA) programme was used; also ANOVA used to analys the total score of the tool.

### **RESULTS OF THE STUDY AND DISCUSSION**

This section includes the results of the study aimed at identifying "the changes of economic, cultural and political globalization on tourism activity" from the perspective of the employees of the senior departments of the Jordanian tourism industry. The First question is: "What is the effect of the changes resulting from globalization (economic, cultural and political) in tourism industry and their impact in the development of Tourism Activity?" To answer this question, calculation averages and standard deviations were calculated for all fields of study and the field as a whole.

**Table 3.** Means and standard deviations for all fields of study, (n = 255)

No.	Domain	Means	Std. deviation	Rank	Degree
1	The effects of economic globalization on tourism activity	4.12	0.42	1	High
2	The effects of cultural globalization on tourism activity	4.00	0.54	2	High
3	The effects of political globalization on tourism activity	3.70	0.54	3	High
The general average of all fields of study		3.94	0.41		High

Table 3 shows that means for the fields of the "Effects of economic, cultural and political globalization on tourism activity" ranged from (4.12-3.70). The most important of these were the effects of economic globalization on tourism activity with an average of (4.12), And the lowest mean of field (3) was "the effects of political globalization on tourism activity", with an average of (3.70) high. The overall average of the areas as a whole (3.94) is high, due to the fact that economic globalization contributes more than cultural and political globalization to the construction of public and private organizations that jointly develop the production and marketing of goods and services to serve the needs and welfare of tourists. This question is divided to the following sub-questions:

Question (1): What are the effects of changes resulting from (economic) globalization in tourism industry and their impact in the development of Tourism

Activity? The changes resulting from globalization in tourism industry and their impact in the development of Tourism Activity. Table 4 shows that means of the paragraphs that measure the effects of economic globalization changes on tourism activity ranged from (4.42\_3.93), most notably to paragraph (1), which states: "Economic globalization is the basis of mutual growth between countries", with an average of 4.42 and high.

**Table 4.** Means and standard deviations of all paragraphs of the effects of economic globalization on tourism activity (N = 255)

No.	Domain paragraphs	Mean	Std. Dev	Rank	Degree
1	Economic globalization is essentially the mutual growth of nations which develops tourism activity	4.42	0.80	1	High
2	Economic globalization led to economic openness between countries without customs and the development of tourism activity	3.99	0.84	6	High
3	Tourism activity is growing as a result of the changes imposed by economic globalization	4.18	0.66	3	High
4	Economic globalization has reduced the challenges facing tourism activity	4.19	0.61	2	High
5	Economic globalization has increased opportunities to identify countries and increasing tourism activity	4.18	0.68	4	High
6	Economic globalization has shown that there are new types of tourism such as travel for cultural and sports tourism and trips that lead to the development of tourism activity	3.93	0.76	8	High
7	Economic globalization affects in tourism activity through the flow of capital during the movement of tourists positively	3.96	0.77	7	high
8	Economic globalization has made tourist activity suffer from direct competition with other world tourism regions	4.10	0.70	5	High
General mean		4.12	0.42		High

The lowest mean of paragraph (6), which states that "economic globalization has shown the existence of new types of tourism such as travel for cultural and sports tourism and trips leading to the development of tourist activity" with an average of (3.93). The general average of the whole area (4.12) and the researcher attributed the reason to the fact that tourism companies benefited from the phenomenon of globalization, which opened the border between countries, and raised by the love of the United Nations to identify each other, and spread the sense of unity of the world, and helped globalization of the flow of capital during the movement of tourists, to the development of the economy of the country and the development of tourism activity, which has encouraged the opening of economic relations between countries. This finding agree with the outcome of the Cerovic et al. (2015) study, which showed that globalization processes that caused changes in the world economy, particularly in tourism-related industries, which a severe impact on the development of tourism, particularly mass tourism.

The development and progress of tourism are also producing some changes that have a strong impact on related industries. In this sense, the view of tourism as a result of economic development has evolved into a new view of tourism as a factor of economic development. The second sub-question: What are the effects of changes resulting from (cultural) globalization in tourism industry and their impact in the development of Tourism Activity? To answer this question, means and standard deviations of each of the areas of the effects of cultural globalization changes were calculated on tourism activity and the area as a whole Table 5.

Table 5 shows that means of the paragraphs that measure the effects of cultural globalization changes on tourism activity ranged from 4.10 to 3.89, most notably in

paragraph 3, which states: "Cultural globalization leads to differences in the cultural, ethnic and linguistic activity of local communities With a difference in the number of tourists during the tourist activity "with an average of (4.10) and high level and then paragraph (7) with an average of (4.07) and high degree, which states that" I suffer from diseases that hinder me from get rid my body west "The lowest averages of paragraph (6) , Which states that "cultural globalization has brought the distances between them closer together to know the habits and behavior of visitors during the period of tourist activity "with an average of (3.89) high. The general mean of paragraphs (4.00) was high.

**Table 5.** Means and standard deviations of all the fields  
of the effects of cultural globalization changes on tourism activity (n = 255)

No.	Domain paragraphs	Mean	Std. Dev	Rank	Degree
1	Cultural globalization has led to cultural advancement through constant attention to cultural values and tourist attractions that lead to the development of tourist activity	4.04	0.77	3	High
2	Cultural globalization leads to the loss of identity and social values	3.98	0.74	5	High
3	Cultural globalization leads to differences in the cultural, ethnic and linguistic activity of local communities with different types of tourists during tourist activity	4.10	0.75	1	High
4	Cultural globalization has reduced religious traditions and local customs in images consistent with the expectations and tendencies of tourists to satisfy their desires during the period of tourist activity	3.95	0.83	6	High
5	Cultural globalization has brought social classes closer together as a result of increased incomes of those engaged in tourism activity	3.94	0.87	7	High
6	Cultural globalization has brought closer to each other and familiarized with the habits and behavior of visitors during the period of tourist activity	3.89	0.85	8	High
7	Cultural globalization has served to support the human heritage and the expansion of the cultural circle around the world to develop tourism activity	4.07	0.79	2	High
8	Cultural globalization has led to mutual respect, cooperation and knowledge sharing in tourism activity	4.02	0.82	4	High
General mean		4.00	0.54		High

This is because cultural globalization takes an accelerated course through the influence and spread of culture, which is the heart of globalization and its driving force. Cultural globalization has enabled it to attract tourists and introduce them to the culture of countries, customs and heritage, and the constant attention to cultural values and tourist attractions, Cultural globalization contributes to the success of dealing with tourists expected to come to the development of tourism and its reflection on the tourism industry. This finding agreed with the result of Tanahashi (2008), which emphasized that globalization requires potential for a qualitative leap in the tourism industry. The tourism industry must nurture cultural heritage as a viable economic resource for the people, and with the people who have retained it for generations. The exploitation of cultural heritage must be as a tourist attraction. The changes resulting from globalization in tourism industry stopped as their impact in the development of the Tourism Activity, also the tourism industry must lead efforts to develop the social compact among all local stakeholders. It agreed with the result of the study (Brown, 2006), which showed great



importance in the tourist attractions of rural areas, in addition to emphasizing the variety of tourist attractions areas such as cultural tourism and tourism of natural areas. Third sub-question: What are the effects of changes resulting from (political) globalization in tourism industry and their impact in the development of Tourism Activity? To answer this question, the means and standard deviations were extracted of each paragraph of the effects of political globalization changes on tourism activity, table 6 shows that.

Table 6 shows that means of the items that measure the effects of the changes of political globalization on tourism activity range from (4.11-3.18), the most prominent of which is paragraph (1) which states: "Political globalization brought the laws and regulations that control tourism activities in different countries". (4.11) high, and then paragraph (6), which states that "political globalization increases the problems and security risks in tourism activity" with an average of 3.93 and the lowest arithmetic mean of paragraph (4), which states that "To the development of tourism activity through a reduction in domestic and foreign investment in the field of tourism infrastructure "with an average of 3.18. The general average of the items (3.70) was high. The researcher attributed the reason to the fact that political globalization has pushed the political wheel towards the formation of mergers and alliances among the international economies to unify and abolish customs and laws, including tariffs, and to facilitate the mobility of managers, businessmen and manpower, and also facilitate the transfer of goods, services and capital, And the abolition of restrictions on travel and travel between countries, which is reflected on the support and development of tourism activity through increased investment and the establishment of multinational companies, which affects the movement of tourism and tourism activities. Through increased investment and the establishment of multinational companies, which affects the movement of tourism and tourism activities.

**Table 6.** Means and the standard deviations of all fields of the effects of the changes of political globalization on tourism activity and the field as a whole (n = 255)

No.	Domain paragraphs	Mean	Std.Dev	Rank	degree
1	Political globalization has led to the convergence and unification of laws and regulations that control tourism activity in different countries.	4.11	0.76	1	high
2	Political globalization has led to the emergence of multinational corporations to regulate tourism activity	3.79	0.91	4	high
3	Political globalization has led to the elimination of restrictions on travel and movement between countries, which is reflected in the support and development of tourism activity	3.69	0.79	6	high
4	Political globalization leads to the development of tourism activity through a reduction in domestic and foreign investment in tourism infrastructure	3.18	0.90	8	Medium
5	Political globalization has given a vital role to countries at the expense of power through tourism	3.89	0.83	3	high
6	Political globalization increases security problems and risks in tourism activity	3.93	0.79	2	high
7	Political globalization invited for the international community, through its various bodies and organizations, to resolve international, regional and local conflicts and problems with a view to developing tourism activity	3.70	0.90	5	high
8	Political globalization seeks to develop media policies aimed at raising awareness among all segments of society to recognize the importance of tourism activity	3.33	0.92	7	Medium
<b>General mean</b>		3.70	0.54		high

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**Table 7.** Means and standard deviations for all fields of study according to the study variables (n = 255)

Fields	Variable	Category	No.	Mean	Std.Dev
The effects of economic globalization	Gender	Male	150	4.15	0.42
		Female	105	4.08	0.42
	Qualification	Applied Diploma	61	4.04	0.42
		Bachelor	145	4.18	0.39
		Postgraduate	49	4.05	0.47
	Experience	from1-5 years	85	4.15	0.37
		from 5-10	97	4.12	0.40
		10 years and above	73	4.08	0.49
	Occupation type	Tourist offices	92	4.09	0.43
		Hotels	87	4.09	0.44
		Ministry of Tourism	54	4.22	0.33
		Other	22	4.12	0.47
	Sector	private	101	4.09	0.43
		Public	154	4.14	0.41
The effects of cultural globalization	Gender	male	150	4.15	0.42
		female	105	3.86	0.61
	Qualification	Applied Diploma	61	3.89	0.60
		Bachelor	145	4.05	0.49
		Postgraduate	49	3.98	0.57
	Experience	from1-5 years	85	3.99	0.52
		from 5-10	97	4.03	0.54
		10 years and above	73	3.98	0.55
	Occupation type	Tourist offices	92	3.96	0.56
		Hotels	87	4.02	0.53
		Ministry of Tourism	54	4.02	0.50
		other	22	4.03	0.54
	Sector	private	101	4.00	0.53
		Public	154	4.00	0.54
The effects of political globalization	gender	male	150	3.81	0.49
		female	105	3.54	0.58
	Qualification	Applied Diploma	61	3.58	0.58
		Bachelor	145	3.79	0.51
		Postgraduate	49	3.61	0.54
	Experience	from1-5 years	85	3.75	0.54
		from 5-10	97	3.67	0.54
		10 years and above	73	3.69	0.55
	Occupation type	Tourist offices	92	3.69	0.61
		Hotels	87	3.74	0.51
		Ministry of Tourism	54	3.73	0.45
		other	22	3.57	0.57
	Sector	private	101	3.59	0.54
		Public	154	3.78	0.53
The scale as a whole	Gender	male	150	4.02	0.37
		female	105	3.83	0.44
	Qualification	Applied Diploma	61	3.84	0.45
		Bachelor	145	4.00	0.37
		Postgraduate	49	3.88	0.44
	Experience	from1-5 years	85	3.96	0.39
		from 5-10	97	3.94	0.39
		10 years and above	73	3.92	0.46

	Occupation type	Tourist offices	92	3.91	0.43
		Hotels	87	3.95	0.43
		Ministry of Tourism	54	3.99	0.35
		other	22	3.91	0.43
	Sector	private	101	3.89	0.39
		Public	154	3.97	0.42

**Table 8.** The results of (MANOVA) for the detection of differences according to the gender, qualification, experience, occupation type and sector variables (n = 255)

Source. V	Domain	Sum of squares	D.F	Mean square	F.	Std.Dev
Gender	The effects of economic globalization on tourism activity	0.387	1	0.387	2.264	0.134
	The effects of cultural globalization on tourism activity	3.263	1	3.263	11.734	0.001
	The effects of political globalization on tourism activity	4.314	1	4.314	16.366	0.000
Qualification	The effects of economic globalization on tourism activity	0.728	2	0.364	2.130	0.121
	The effects of cultural globalization on tourism activity	0.763	2	0.381	1.372	0.256
	The effects of political globalization on tourism activity	1.674	2	0.837	3.176	0.043
Experience	The effects of economic globalization on tourism activity	0.018	2	0.009	0.053	0.949
	The effects of cultural globalization on tourism activity	0.113	2	0.056	0.203	0.816
	The effects of political globalization on tourism activity	0.196	2	0.098	0.372	0.690
The function type	The effects of economic globalization on tourism activity	0.685	3	0.228	1.336	0.263
	The effects of cultural globalization on tourism activity	0.127	3	0.042	0.152	0.928
	The effects of political globalization on tourism activity	0.269	3	0.090	0.340	0.797
Sector	The effects of economic globalization on tourism activity	0.253	1	0.253	1.482	0.225
	The effects of cultural globalization on tourism activity	0.044	1	0.044	0.160	0.690
	The effects of political globalization on tourism activity	2.819	1	2.819	10.695	0.001
The error	The effects of economic globalization on tourism activity	41.876	245	0.171		
	The effects of cultural globalization on tourism activity	68.127	245	0.278		
	The effects of political globalization on tourism activity	64.586	245	0.264		
Corrected Total	The effects of economic globalization on tourism activity	44.10	254	44.102		
	The effects of cultural globalization on tourism activity	72.90	254	72.90		
	The effects of political globalization on tourism activity	74.27	254	74.27		

The second question: Are there statistically significant differences at the level of significance ( $\alpha = 0.05$ ) in the impact of economic, cultural and political globalization changes on Tourism Activity according to the study variables (gender, qualification, experience, occupation type, sector)?

To answer the second question, the means and standard deviations for all domains of the effects of economic, cultural and political globalization changes have been extracted according to different gender variables, years of experience and scientific qualification, occupation type, sector by (MANOVA) and (ANOVA) analysis. The changes resulting from globalization in tourism industry and their impact in the development of Tourism Activity.

Table 7 shows that there are differences between the means of the study fields and the scale as a whole is presented according to the different variables of gender, qualification, experience, occupation type and sector. To detect the statistical significance, (MANOVA) was applied on the fields of study according to gender, qualification, experience, occupation type and sector, and ANOVA for the total score Table 7 shows that.

Table 8 shows that: There were statistically significant differences at the level of significance ( $\alpha 0.05$ ) in the field of the effects of cultural globalization on tourist activity, where the value of (F) and statistical significance (0.001) and in the field (effects of political globalization on tourism activity) (0.000) and the differences were in favor of males. The changes resulting from globalization in tourism industry and their impact in the development of Tourism Activity. There were no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) in the field of the effects of economic globalization on tourism activity according to gender variable, where the value of (F) was (2.264) and statistical significance was (0.134). which indicates the consensus of the study sample that economic globalization affected tourism and made it an economic activity beyond the borders of the country Tourism arises from the movement of people in the search for new stations to give them opportunities to identify the other; whether the other person or a place or a landmark in blending them between reception and farewell, they work to exchange benefits and develop resources in an arena that no longer recognizes geographical boundaries. There were statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) in the field of (effects of political globalization on tourism activity). The value of (F) was (3.176) and statistical significance was (0.043). To detect the differences, the "Scheffe" test was applied, table 8 shows that.

There were no statistically significant differences of experience at the level of significance ( $\alpha \leq 0.05$ ) in all fields of study (the three fields) where the value of (F) for the field of effects of economic globalization is (0.053) and statistical significance is (0.949) Cultural globalization is (0.203) and statistical significance is (0.816) and the field of the effects of political globalization is (0.372) in statistical terms is (0.690). This may be due to the consensus of the study sample, regardless of their functional experience, that globalization, whether political, economic or cultural is based on four fundamental processes: the great competition between the superpowers, the globalization of production and the exchange of goods, innovation and technological innovation, which in turn increase the investment and tourism movement, which leads to the manufacture of tourism by developing activities and facilities that increase the demand of tourists.

There were no statistically significant differences in occupation type variable at the significance level ( $\alpha \leq 0.05$ ) in the study fields. The effects of economic, cultural and political globalization, where the values of (F) was (1.336) (0.152) (0.340) respectively, and the statistical significance level was (0.263) (0.928) (0.797), respectively. This indicates that the function type did not affect the views of the study sample members on the importance of economic, cultural and political globalization that increases the flow of

capital between countries and the spread of technology worldwide, penetrating the geography of the countries and their fields, which opens the way for trade and tourism movement and development activate tourism to attract tourists and to maintain the survival of the state. There were differences of statistical significance for the sector variable at the level of significance ( $\alpha \leq 0.05$ ) in the field of the effects of political globalization on tourism activity where the value of (F) was (10.695) and statistical significance was (0.001). The differences were in favor of the public sector with an average of (3.78) and the private sector average (3.59).

**Table 9.** The results of "Scheffe" test to detect the differences in the effects of political globalization attributed to variable (scientific qualification)

Qualification Category	Mean	Applied Diploma	Bachelor	Postgraduate
Applied Diploma	3.58	-	0.21	0.03
Bachelor	3.79	-	-	0.18
Postgraduate	3.61	-	-	-

Table 9 shows that there were differences between the applied diploma and bachelor categories, with an average of (3.79), while the average for the applied diploma category was (3.58) and postgraduate level was 3.61. which shows that the scientific qualifications carried by the study sample have an impact on the understanding of the principles of political globalization and its effects, where the manifestations of political globalization appear in the fall of dictatorships and the trend towards democratic systems, which emphasizes the preservation and maintenance of human rights, including the the development in the tourism sector and the opening up of travel and tourism between countries to develop tourism activity.

**Table 10.** He results of ANOVA as a whole depending on gender variables, qualification, experience, occupation type and sector (n = 255)

Source Variance	Sum of squares	D.F	Square mean	F.	Sig.
Gender	2.256	1	2.256	14.281	0.000
Qualification	0.974	2	0.487	3.083	0.048
Experience	0.001	2	0.001	0.004	0.996
Occupation type	0.244	3	0.081	0.515	0.672
Sector	0.636	1	0.636	4.028	0.046
Error	38.696	245	0.158		
Total corrected	43.034	254			

Table 10 shows that there were statistically significant differences at the level of ( $\alpha 00.05$ ) in the tool as a whole according to gender variables and for males with an average of (4.02) and sector variable for the private sector with an average of (3.98) and (F) was (14.281) (3.083) (4.028) and statistically significant (0.000) (0.048) (0.046), respectively. To detect the differences according to the variable of the scientific qualification, the test was applied (Pallant, 2013) (Table 10) shows that. This indicates that members of the male sample are more familiar with the economic, cultural and political globalization and its impact on the tourism industry and the development in tourist activities. This is due to the preoccupation of the female with housework, work, raising children and lack of research on this subject and deep knowledge to enable to judge the impact of economic. In addition, the researcher finds that the reason for the

existence of statistical significant differences at the level of ( $\alpha 00.05$ ) in the instrument as a whole according to the variable of the sector and in favor of an average (3.98) is due to the interest of the private sector in investment and tourism movement which increase their profits and revenues due to tourism movement active in the light of political, economic and cultural globalization. To detect the different positions, the "Scheffe" test was applied in the tool as a whole according to the scientific qualification variable.

**Table 11.** Results of 'Scheffe" test to detect the differences  
in the instrument as a whole due to qualification variable

Qualification Category	Mean	Applied Diploma	Bachelor	Postgraduate
Applied Diploma	3.84	-	*0.16	-0.04
Bachelor	4.00	-	-	*0.12
Postgraduate	3.88	-	-	-

The table shows that there were statistical significant differences according to the variable of the academic qualification.

The differences between the diploma and postgraduate categories on the one hand and the bachelor degree on the other and for the category BA with an average of (4.00), while the mean for diploma and postgraduate were (3.84) (3.88).

The researcher attributed the reason to the fact that economic, political and cultural globalization requires scientific qualifications capable of dealing with the latest developments and techniques that have been strongly imposed in societies. The regional environments have opened to the outside world, creating interference in political, economic and social and cultural rights without mention the geographical boundaries between countries, making the tourism movement increasing because globalization has made the world a small village that enables tourists to travel and move more freely, which in turn leads to the development of tourist activity.

The changes resulting from globalization in tourism industry and their impact in the development of Tourism Activity.

### CONCLUSIONS:

In the light of the results concluded to, the researchers recommend the following:

The need to encourage domestic and foreign investment in the field of tourism infrastructure. The need to develop media awareness plans to familiarize all segments of society with the importance of tourism activities.

The need to comply with international laws and regulations governing tourism activity. Focus on international tourism marketing.

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## **GEOARCHAEOSITES FOR GEOTOURISM: A SPATIAL ANALYSIS FOR RARH BENGAL IN INDIA**

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**Abstract:** Rarh Bengal in India is a well known lateritic landscape endowed with a number of geoarchaeological sites. Research gaps have been identified in the systematic mapping and location analysis on the nature of distributional pattern of such geoarchaeosites from the perspective of planning a number of geotourism circuits. With application of nearest neighbour analysis and GIS based digital cartography, this paper is an attempt to analyze space-time dimensions of geosites bearing the traces of past lives with special concentration on our predecessors. With the application of network analysis, shortest route planning is obtained for sustainable tourist movement.

**Key words:** Location, cartography, nearest neighbour, network, sustainable

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### **INTRODUCTION**

Cemented deposits like pebble or cobble conglomerates in many places of Indian subcontinent bears the imprint of past lives of trees, animals and human being with their artifacts. Such fossils are useful for the classification and cataloguing of the entire roster of life with discernable evolution phases along with recognition of the divisions of geologic time (Dietz et al., 1987). Fossil forests have been found on all continents which are representative of early plant lives, even sometimes with traces and remnants of animals present in past geological ages (Császár et al., 2009). Fossils are considered as data sources on early human subsistence patterns as well as the animal species related to paleoenvironmental history. Numerous stone tools ranging from the Lower Paleolithic to Neolithic have been yielded from such sedimentary deposits in both surface and stratified contexts occur with the vertebrate fossils (Chauhan, 2008). With a scope of better interpretation of the people-resources relationship in different sub-phases of hunting

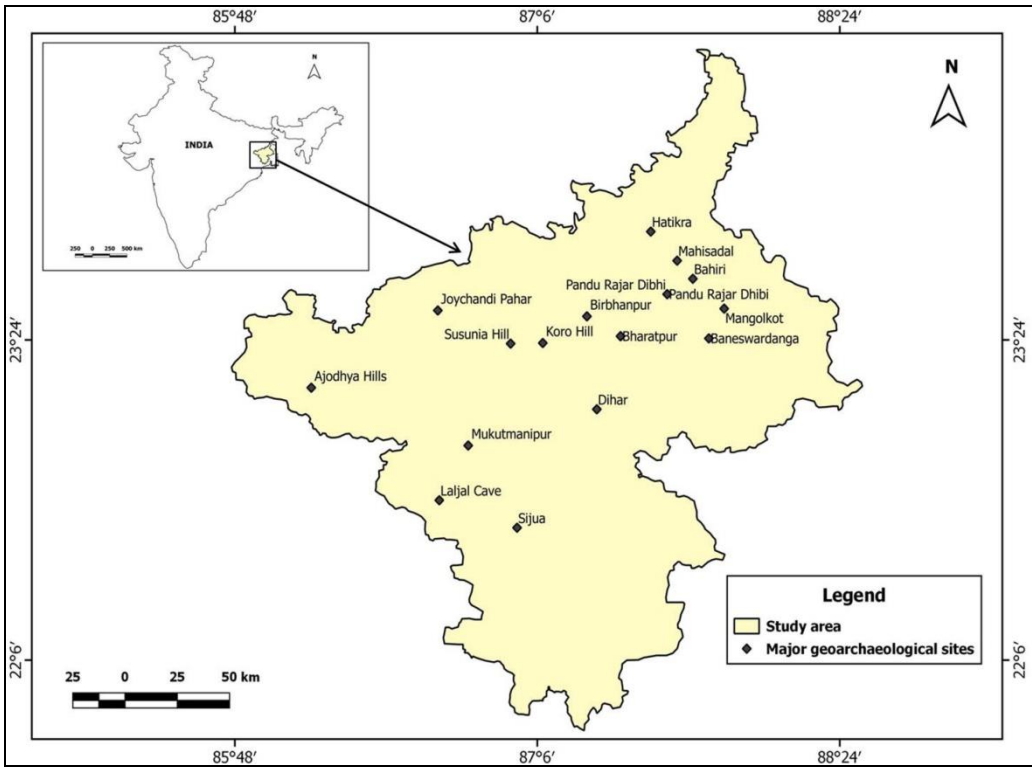
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gathering landuse from Pleistocene to recent, such geosites are subjected to geoconservation nourishing the concept of open-air museum. The existence of such geosites with geoarchaeological remains worldwide sustain the cultural-historical and geodidactic tourism (Pralong & Reynard, 2005; Pralong, 2009).

The paleoenvironmental histories and visualization of past ecological pyramids are among the motivations that draw the geotourists to the fossil sites. The past environment while scientifically interpreted not only includes its physical and biological characteristics but also the social and cultural factors relating to the impact of man on environment (Badam, 2013). Geoarchaeological interests boost the natural history of the concerned area from geological and archaeological perspectives emphasising on the interaction between human and environment since pre-historic times (Rapidah et al., 2018). The restoration of geoarchaeological landscape helps to elucidate a part of geological history and can facilitate to build the cultural heritage and identity of a place (Iorgulescu et al., 2010). The study of geoarchaeological sites thus focuses on the history of landscapes inhabited by our predecessors and utilize them for educative purposes, involving the local community by creating new jobs and opportunities in tourism sector (Vijulie et al., 2014). The open air museums that exhibit the relationships of our predecessors with the environment are the principal attraction of the geoarchaeosites (Comşa, 1987). Geotourism development in such geoarchaeosites may raise the fund for geoconservation as well as assure the involvement of the members of host community, who get benefitted economically from archaeotourism. The scientific interest, recreational and aesthetic significance, accessibility and level of exposure of the landscape for geotourists are among the crucial pull factors in this context (Bentivenga et al., 2017; Palladino et al., 2013).



**Figure 1.** Location map of the study area with major geoarchaeosites

Rarh (24°35' N to 21 °47' N latitude and 85°49' E and 88°25' E longitude) is a geographical region, situated in the south-western part of West Bengal state of India (Figure 1), which comprises Birbhum, Paschim Bardhaman, Purba Bardhaman, Bankura, Purulia, Jhargram and Paschim Medinipur districts. It is endowed with continuity of geoarchaeological sites from Paleolithic to early historical.

The lateritic landscape of this region is not conducive for agriculture development and also not suitable for promoting any capital intensive industries, which required adequate water. However, this region has great potential for tourism promotion because it consists of many hills, river valleys, caves, badland area etc which is yet to be promoted for geotourism (Chakrabarty & Mandal, 2018).

The imprints of past civilizations underneath the soil discovered during last few decades manifest as a symbiosis between geomorphosites and geoarchaeosites in the context of geotourism. It may be promoted rather a form of educative tourism retaining the hidden recreational agenda that have been fulfilled simultaneously within its natural milieu. The study has been undertaken with the following objectives:

1. To identify and map the Paleolithic, Mesolithic, Neolithic and Chalcolithic sites of Rarh Bengal.
2. To analyse the nature of spatial distribution of these sites (Clustered, Random or Uniform) for designing geoarchaeotourism circuits.
3. To obtain the shortest path of the network from major urbanized transportation nodes of the region for suitability analysis on becoming accommodation and amenity hubs to cater geoarchaeotourists.

Geomorphosites of the study region are subjected to a more specialized investigation for geoarchaeotourism with a focus on the study of stratigraphic sequences. There are a number of river basins namely the Mayurakshi, Ajoy, Damodar, Dwarakeswar, Silabati, Kansabati and Subarnarekha constituted by rocks of various formations among which laterites are most conspicuous.

The word Rarh has its origin in Sanskrit word *roorha* meaning rough and uneven, that is representative of the topography of the surface. The river basins in the region accommodate a number of hills, which are mostly typical monadnocks considered to be geotourism paradise. The scope of geoarchaeotourism further expands the horizon of tourism industry and contribute towards economic sustainabilities of the host population.

## **MATERIALS AND METHODS**

As a multidisciplinary field of research, geoarchaeology uses the methods and techniques of earth sciences (Melelli et al., 2016). Geoarchaeological sites with abundance of archaeological vestiges ranging from Paleolithic stone tools to early historic artifacts of Rarh Bengal have been subjected to a qualitative research.

It involves prolonged engagement and persistent observation during field study with triangulation of available literary contributions and field collection exhibited by the archaeologists and geologists. Community interest level in the arena of conservation has been a subject of our study and the collection of Late Shyamsundar Sukul and his son Chandan Sukul (Figure 2) is very much noteworthy in this context.

Despite of institutional affiliations, they involved themselves in geoconservation and a few people like them assembled together to form a non-governmental research organization named *Paschim Rarh Itihas O Sanskriti Charcha Kendra* (Centre for history and culture of Rarh region) in the year 2001 for this purpose. Apart from hills like Ajodhya, Susunia, Laljal or Joychandi, there are a number of riverine sites of Rarh Bengal from where a huge number of artifacts have been discovered. In order to fulfill the first objective of chronological mapping of geoarchaeosites, GIS is opted.



1. Ajothya Hills



Artifacts



2. Susunia Hills



Artifacts



3. Laljal Cave



Artifacts



4. Joychandi Pahar



Artifacts

**Figure 2.** Hill sites as the treasure house of archaeological remains  
(Source: Photos from field and museum collections, 2018)

Non spatial data on each of such geoarchaeosites have been integrated with spatial data in GIS domain for preparing geo-archaeo-tourist maps, which is nothing but the thematic map combining geological, geomorphological and archaeological aspects with basic tourist informations (Levratti et al., 2011). There has been use of QGIS 2.14 ESSEN for map making of Paleolithic, Mesolithic, Neolithic and Chalcolithic sites. Concerning each and every of such distributions, Nearest Neighbour Analysis (NNA) is applied to fulfill the objective to understand their distributional pattern, pre-requisite for a sustainable geotourism circuit planning. It is noteworthy to mention that the distance from an individual to its nearest neighbour, irrespective of direction is considered during analysis. In NNA, the ratio between observed mean distance and expected mean distance serves as the measure of departure from randomness (Clark & Evans, 1954). To identify appropriate urban hubs offering adequate amenities for an appreciable geoarchaeotourism network, the Shortest Path Matrix is applied using the network analysis module of QGIS software. For satisfaction of tourists who want to visit all the sightseeing destinations but have only limited time as well as economic constraints, this particular module could be successfully applicable (Gill & Bharath, 2013). It not only provides information and visual representation of the places of tourists interest but also determine the shortest and best route to travel the destinations depending on the value of impedances like time and travel cost. For planning and development of circuit tourism, GIS enabled network analysis has been used as tool to find out optimal routes connecting places of interest. The spatial database has been created in QGIS 2.14.22 Essen for network analysis along with spatial search operations for suitable urban amenity hubs in order to cater the geotourists travelling Rarh Bengal.

## RESULTS AND DISCUSSIONS

Geoarchaeotourism is a form of educative tourism that focuses on changing human adaptation with materialistic evidences. Apart from intrinsic values, geomorphosites possess economic, cultural, scientific and aesthetic values attracting visitors (Grey, 2004). Geoarchaeosites are none but the geomorphosites possessing cultural values associated with human ecology. The study region is endowed with a number of outstanding hills from where a number of artifacts have been discovered ( Table 1).

**Table 1.** Hill sites of Rarh Bengal bearing the imprints of early mankind  
(Data source: Information and guidance obtained from Museums visited during field survey, 2018)

Site	Type of Artefact	Age	Utility
Ajodhya Hills 23°12'N, 86°07'E	Hand Axe Side Scraper	Palaeolithic and Mesolithic	Hunting and dressing of animal meat
Susunia Hills 23°23'N, 86°59'E	Hand Axe Side Scraper	Palaeolithic	Hunting, dressing and processing meat
Laljal Hill and Cave 22°44'N, 86°40'E	Iron Slags	Chalcolithic – Iron	Molding
Joychandi Pahar 23°31'N, 86°40'E	Ring Stone Pestle	Neolithic	Agriculture

Among the hills (Table 1), Ajodhya hill complex characterized by subdued pediment is very extensive with dominance of granitic and gneissic rocks. The alignment of the range resembles to English word L, which acts as a watershed between two river basins, namely Kasai and Subarnarekha. Gorgaburu (677 m), the height peak of this hill complex, is the vantage point for the geographical region.

The microliths are found at the base of Ajodhya hills within accumulated hill-wash materials. This is why the colluvial sites of Ajodhya hill complex attract the professional

archaeologists (Basak et al., 2015). The Susunia hill situated in the north-east of Chhatna, Bankura district is another geosites with enormous geoarchaeological significance. The geo-physical appearances of Susunia (437 m) is quite similar to world famous Mt. Monadnock (965 m) of USA (Sinha, 2016). It is one of the renowned geo-archaeosites of Bankura district, famous for discovery of Stone Age tools considered to be the evidence of high level development of Acheulian technology (Sen et al., 1963).

**Table 2.** River basin sites of Rarh Bengal bearing the imprints of early mankind  
(Data source: Literature review and field study, 2018)

Sites	Geoarchaeological heritages
Pandu rajar Dibhi (23° 35' N; 87° 39' E)	Excavated in various phases since 1954 at the village Panduk on the southern bank of river Ajay varied stone tools (microliths), animal skeletal remains, human burials, copper and even iron implements representing continuity of civilization along with painted potteries (Dasgupta, 1967) have been discovered.
Mangalkot (23° 32' N; 87° 54' E)	Excavation reveals six phases of Black and red ware culture from the old alluvium at the right bank of Kunur river, a tributary of the river Ajay (Ray & Mukherjee, 1992).
Dihar 23°07'N, 87°21'E	Numerous microlith have been discovered from the older alluvium tract on the bank of river Dwarakeswar.
Hatikra (23°50' N; 87° 35' E)	Situated on the right bank of Bakreswar river in Birbhum district, this site characteristically represents the evidence of two subsequent cultural phases, namely Chalcolithic and Iron Age. The bone remains of domestic animals, black-and-red ware, plain and painted pottery, mud floors, reed huts with mud plaster, pounders, stone mullers, sharpners, semi - precious stones etc have been discovered from this excavated Black-and-Red ware sites (Nandy and Pal, 2014).
Birbhanpur (23° 29'N, 87° 18'E)	Situated on the right bank of the Damodar near Durgapur, this was once a place for manufacturing microliths (Lal, 1958). Quartz, quartzite, basalt, rock crystals, fossil wood were among the raw material used as evident from the microlith discovered.
Mahisdal (23° 43' N; 87° 42' E)	The area was home of our early age predecessors of the past stone ages (Chakraborty, 2007). This site situated on the bank of river Kopai near Santiniketan bears Chalcolithic and Iron age evidences consisting of microlithic tools, copper and iron tools.
Bharatpur (23° 24'; 87° 27')	Situated on the left bank of Damodar near Panagarh, this site is famous for a brick made Buddhist stupa in the upper most layer followed by Neolithic and Chalcolithic evidences in the substratums.
Gopiballabpur 22°12'N, 86°53'E	A number of pebble tools have been discovered in laterites from the bank of river Subarnarekha (Dasgupta, 2007)
Sijua (22°38' N, 87°00' E)	In the older alluvial terrace named Sijua formation developed in Kansabati basin, numerous mammalian fossil bones, human skeletal fossils of early Holocene (10000 years B.P. approximately) and microlithic objects have been discovered. (Ghosh & Majumder, 1981)
Mukutmanipur ( 22°57'N, 86°47'E)	At the Kansabati-Kumari interflaves, Mukutmanipur is a famous recreational tourism site with its dam and reservoir. Most of the evidences of early civilization have been submerged under water of the reservoir except a few Paleolithic and Mesolithic evidences survived in the rocky islands within it. At Tulsipur area nearby, the discovery of the evidences on overlap between copper and iron age is noteworthy (Dasgupta, 1981).
Tarafeni reservior bridge (22°40'N, 86°47'E)	Tarafeni is a tributary of Kansabati river. Paleolithic and Mesolithic tools have been discovered while constructing the reservoir bridge, which is a popular tourist destination of the region.

Vertebrate fossils of Lion, Spotted Hyaena, Leopard, Horse, Giraffe, Indian buffalo, Spotted deer, Siwalic elephant (already extinct), Indian bison, Nilgai, Barking deer etc

have also been discovered from this bornhardt-type residual hill made of quartzites (Nandy & Pal, 2014) Laljal is another hill site comparatively of smaller dimensions formed by granite and gneiss rocks. It is famous for its caves located mostly on its south facing slopes, once the habitation of our predecessors in early age bearing the traces cave painting of Mesolithic and Neolithic era. This is however a place of extensive physical weathering that challenges the in situ conservation of the geoarchaeosite (Bhowmick, 1992). Joychandi on the other hand is a peculiar hill formed of a single massive igneous rock as representative of volcanic eruption in the past geological period.

The steep freeface of Joychandi hill attracts the rock climbers from different parts of the world and it is a famous place for the training of rock climbing in Rarh Bengal. This place was also inhabited by the early settlers and therefore significant from geoarchaeological point of view. The following are the major riverine geotourism sites (Table 2) with enormous geotourism potentials. In order to investigate the nature of distribution of such geoarchaeosites Nearest Neighbour Analysis (NNA) is adopted. It is actually a method developed by Plant Biologist Clark and Evans in the year 1954 by ratioing mean observed and mean expected distances of the objects concerned. Nearest Neighbour Index (NNI) is computed by using following formula:

$$NNI = d_o/d_e \quad \text{and} \quad d_e = \frac{1}{\sqrt{2N/A}}$$

Where,

$d_o$  = mean observed distance of nearest neighbor settlements,

$d_e$  = mean expected distance of settlements,

$N$  = total number of settlements,

$A$  = total area of the concerned region.

The result ranges between 0 (clustered pattern) and 2.15 (uniform/regular pattern) representing various categories of distributional status as manifested in table 3 for the geoarchaeosites of Rarh Bengal. When the computed value is 1.0, the nature of distribution is interpreted as random. If the distribution of geoarchaeosites are found clustered, it appears readily conducive for promoting circuit tourism.

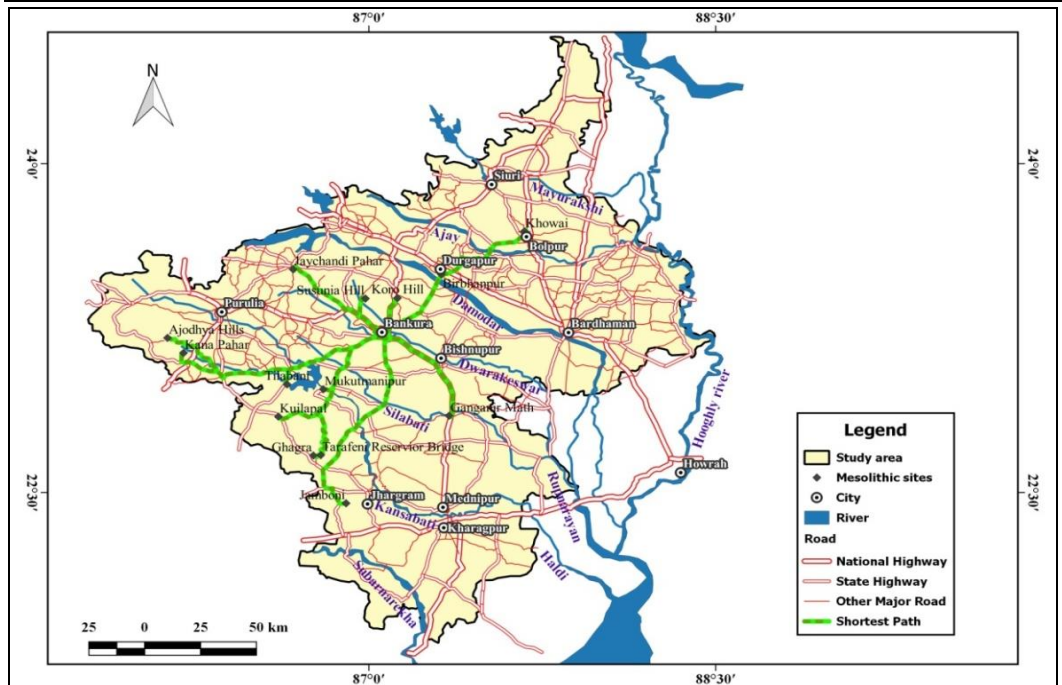
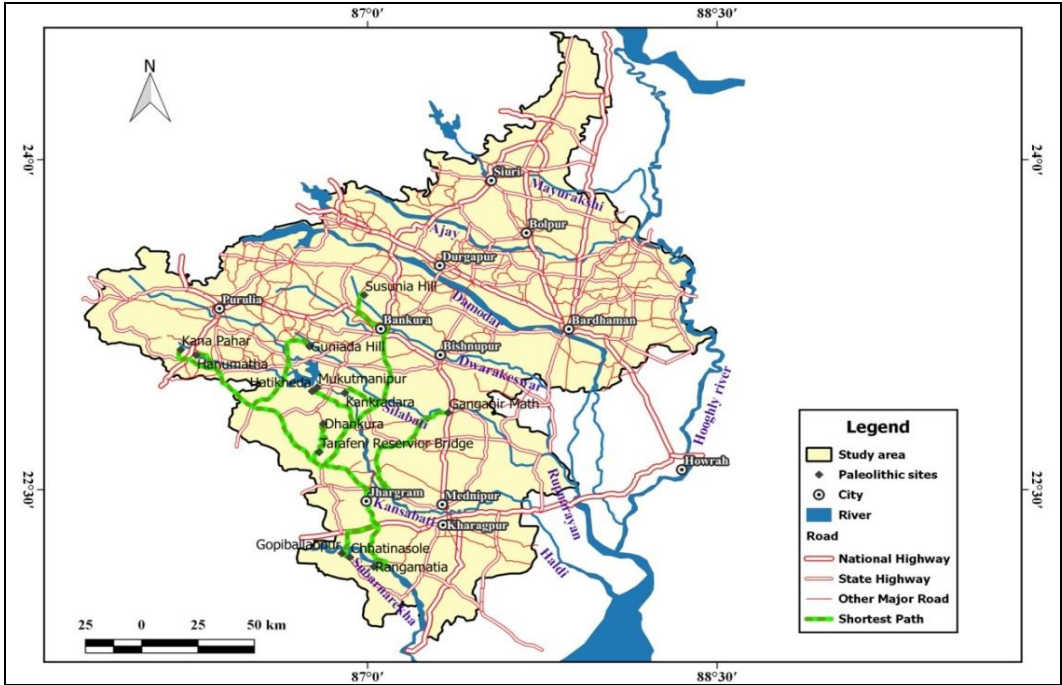
The NNA values computed (Table 3) for Paleolithic, Mesolithic, Neolithic and Chalcolithic sites suggest that experimenting on geoarchaeotourism in the region may begin with marketing the Paleolithic sites at the initial phase of development. The success of this venture may exert snowball effects in the promotion of circuit tourism based on Mesolithic, Neolithic and Chalcolithic sites in near future.

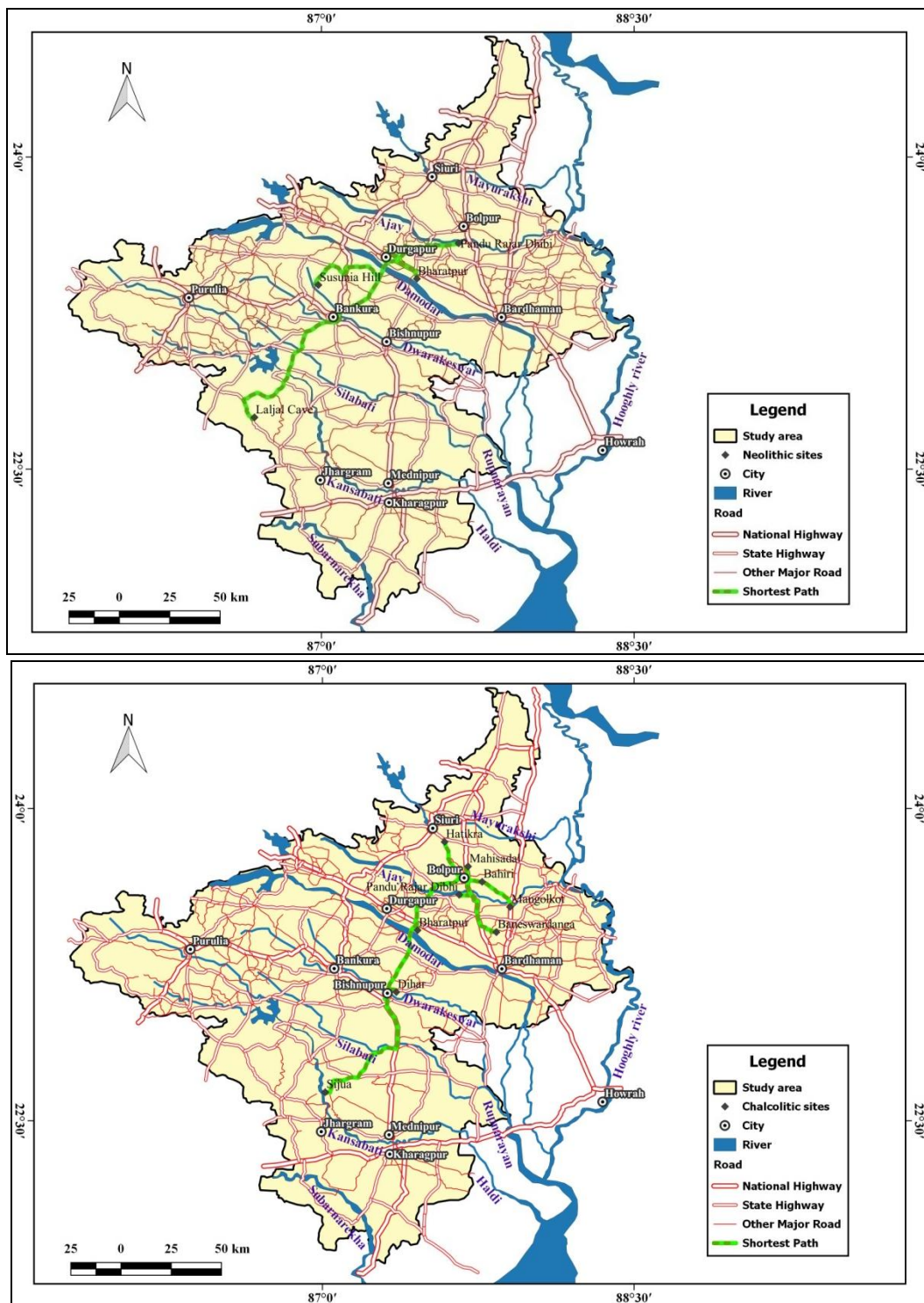
**Table 3.** Nearest Neighbour Analysis of geoarchaeological sites in Rarh Bengal

Sites Category	Name of the Major sites	NNI	Distributional status
Palaeolithic sites	Susunia hill and surrounding area, Guniada hill, Ganganir Math, Mukutmanipur, Kankradara, Hatikheda, Kana Pahar, Hanumatha Tarafeni river bridge, Gopiballabpur, Chhatinasole, Rangamatia.	0.85	More Random than Clustered
Mesolithic sites	Khowai, Birbhanpur, Koro hill, Susunia hill and surrounding area, Ganganir Math, Mukutmanipur, Ajodhya hills, Kana Pahar, Tilabani, Kuilapal Tarafeni river bridge, Gagra, Jambani.	1.07	More Random than Regular
Neolithic sites	Pandu Rajar Dhibi, Bharatpur, Susunia hill and surrounding area, Laljal cave.	1.88	More Regular than Random
Chalcolithic sites	Hatikra, Mahisadal, Pandu Rajar Dhibi, Mangolkot, Bahiri, Baneswardanga, Bharatpur, Dihor, Sijua.	1.23	More Random Than Regular



For spatial database management in geotourism, a basin oriented mapping is prescribed with extensive use of GIS (Chakrabarty & Mandal, 2018). Decision making enhanced by GIS technology provides a tool box of technique to deal with the spatial database useful for sustainable tourism promotion (Efflong et al., 2013).





**Figure 3.** Shortest path operation for Paleolithic, Mesolithic, Neolithic and Chalcolithic Sites



The urge to complete sightseeing in a limited time period available leads to determine the optimum path for the movement of visitors. This arises the scope of using network analysis to facilitate decision making in this context. Considering the geoarchaeosites as the network analysis objects, the network dataset of the region has been taken under GIS design and applications. As four categories of geoarchaeosites are available in the region for visit, four network layers have been developed for convenience of analysis in the network window. Figure 3 represents Shortest path map of each site categories to facilitate visitors interested in specific (e.g. Paleolithic/Mesolithic/Neolithic/Chalcolithic) attractions. With such enormous resources base, there arises the scope of developing another type of circuit tourism. Scope of selection of destinations among the circuits by individual tourist is vital in this context because it bears intimate relationship with the availability of leisure time for travel and economic constraints.

In stead of specific geoarchaeosite categories such circuits possess representative of various categories together in its fold to serve the educative purposes of geotourism. Such ventures involve both host and guest, who may not have enough technical background to disreminate between the significance of Paleolithic, Mesolithic, Neolithic or Chalcolithic sites but have interest in geoarchaeology while travelling as geotourists.

To cater them, various amenities are essential, which are usually unavailable in excavation sites. This is why a number of base settlement (Table 4) have been selected through search operation using the software in order to strengthen the viability of circuit tourism. The carrying capacity issues could not arise for most of the excavation sites because the visitors would be accommodated in the urban hubs, namely Bolpur, Bankura, Purulia, Mukutmanipur and Jhargram.

**Table 4.** Viability of circuit tourism

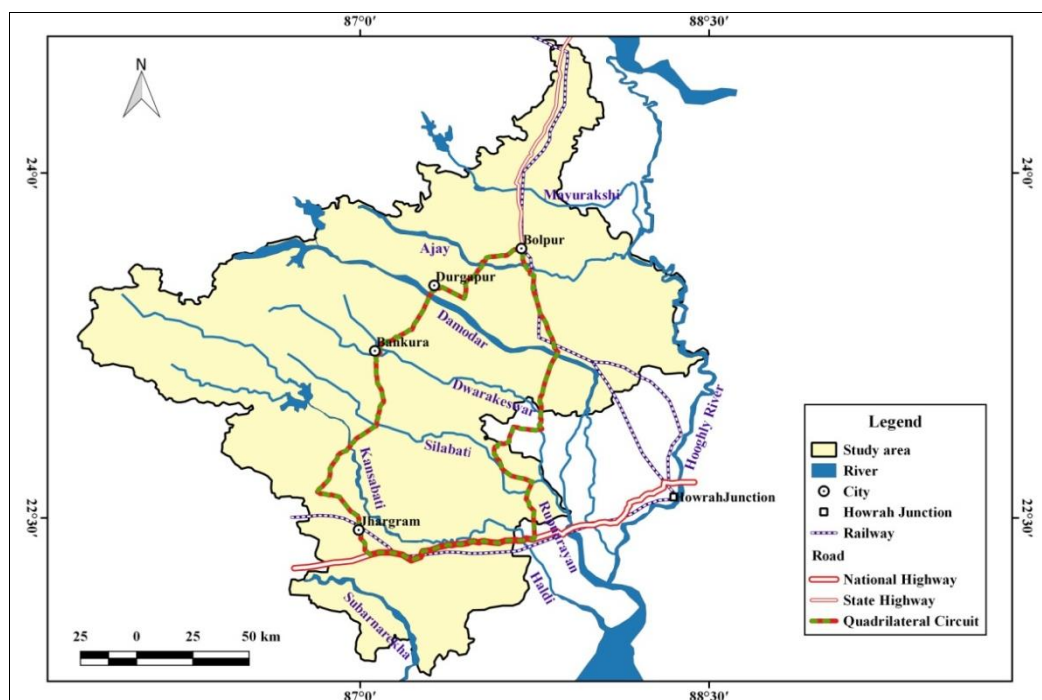
<b>Geoarchaeotourism circuits proposed</b>	<b>Base settlement (Urban facility hubs)</b>	<b>Merit of the hub</b>
Circuit 1	Bolpur	A very developed tourist town
Circuit 2	Bankura	District headquarter
Circuit 3	Purulia	District headquarter
Circuit 4	Mukutmanipur	A well known ecotourism centre
Circuit 5	Jhargram	District headquarter

Figure 4 represents the tour plan for geoarchaeotourism sites in the region. There is entry and exit point for international tourists at Kolkata, the city of joy, a world famous metropolis with international airport. Geotourists either have to drive from Kolkata airport about 160 km to reach Bolpur, one of the amenity hubs of Rarh Bengal or may also prefer a train journey from Howrah station, which is about 20 km from Kolkata airport. A tourist willing to visit all the circuits together may spent first night at Bolpur, second night at Bankura, third night at Purulia, fourth night at Mukutmanipur and fifth night at Jhargram, from where may finally depart by rail for Howrah to avail the route of returning to their places of origin.

## CONCLUSIONS

Archaeologists are end user of excavated materials, which were found embedded in rock surface. Primarily most of these tangible heritages are geological legacy, thereby termed as geoarchaeological which offers outstanding scientific, aesthetic, cultural historical and recreational values (Rapidah et al, 2018). With the incorporation of geoarchaeosites for geotourism, visitors could be enlightened on changing environment of different geological ages. It is not until the of spatio-temporal database management under GIS domain, the spectators of open-air museum could relate the exhibits with the

time frame of evolution. Depending on archaeological time scale based mapping of the geoarchaeosites for the study area, a number of geoarchaeotourism circuits could be developed in which each site may serve as an open air museum.



**Figure 4.** Geoarchaeotourism circuits of Rarh Bengal

A spatial analysis undertaken with the application of nearest neighbour and network analyst extension of GIS software reveals the pattern of distribution of such geoarchaeosites for planning and development of geotourism in the region. The expectation is to increase the volume of quality visitors for whom educative tourism is an essential requirement. Trained guides are required to explain the past geological environment relating with the geoarchaeological materials excavated from these sites. The audio-visual infrastructure in interpretation centre of each of such sites is essential to draw the attention of geotourists, which serves the objective of blending geomorphosites with the cultural history of mankind.

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## **SOCIAL CAPITAL AND THE MAKING OF DIASPORA: EVIDENCE FROM THE PORTUGUESE COMMUNITY OF JOHANNESBURG, SOUTH AFRICA**

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**Abstract:** Studies on diaspora and their links to tourism have more recently gained attention in academic literature, and have become a major theme in tourism scholarship. There is a gap, however, in understanding the role that social capital and networks play in constructing diasporic communities and identities, which can ultimately lead to curiosity around people's heritage and spark the desire to travel for heritage tourism and VFR reasons. The Portuguese diaspora in South Africa have roots dating back to the 15th century when European explorers first landed in the Cape. Since then, significant immigration events have occurred where the community has evolved and integrated into South African society at varying levels. There are numerous examples of the Portuguese social and economic footprint in the country but despite its significant presence, it has been for the most part under researched. The 1<sup>st</sup> São Jorge Scouts Group is an instructive case study into how Portuguese immigrants in the wake of the wars in their previous homes in Angola and Mozambique, came together to create an identifiably Portuguese social group in the context of the international Scouting movement. This paper focuses on the making of diasporic communities and the particular role of social capital and networks in the construction of Portuguese identity retained by the scouts group, and contributes to the larger discourse on immigrant integration, sense of belonging and their links to tourism. Key interviews revealed fundamental areas of relevance to the diasporic experience, including notions of identity, the role of religious institutions and a developed sense of community and belonging.

**Key words:** diaspora, social capital, social networks, identity, Portuguese diaspora

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### **INTRODUCTION**

The concept of diasporas has been widely debated in the literature, from endeavours to define them (Cohen, 1997; Brubaker, 2005; King, 2012; Quayson & Daswani, 2013; Alexander, 2017), discussions on their integration into host societies

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(Greenman & Xie, 2008; Piedra & Engstrom, 2009; Schneider & Crul, 2010), the idea of transnationalism (Portes et al., 2002; Haller & Landolt, 2005; Huang et al., 2013; Quayson & Daswani, 2013), elements of identity and diaspora (Georgiou, 2006; Ben-Moshe & Segev, 2007; Hall, 2014) and their links to tourism (Hughes & Allen, 2010; Iorio & Corsale, 2012; Pelliccia, 2016; Io, 2017). The very notion of the existence of diasporic communities lends itself to the possibilities of diaspora-induced tourism, including VFR travel and heritage tourism (Stephenson, 2002; Sim & Leith, 2009; Hughes & Allen, 2010; Iorio & Corsale, 2012; Rogerson & Hoogendoorn, 2014; Pelliccia, 2016; Io, 2017; Rogerson, 2017). However, it is the social organisation of diasporic communities through social capital, social networks, and the relationships they build within host societies that allow them to maintain an ethnic identity and create links with countries of origin and paving the way for the need and/or desire to connect with one's heritage through travel, be it actual or imaginary. The example of the 1<sup>st</sup> São Jorge Scouts Group provides an instructive case study into how Portuguese immigrants in Johannesburg, South Africa were able to create and maintain an identifiably Portuguese social group in the context of the international Scouting movement.

The paper begins by looking at the literature surrounding the links between diaspora and tourism, as well as the social organisation of diaspora, then outlines the historical background of Portuguese immigrants to South Africa as well as the historical context of the global and South African Scouting movement. Key findings from in-depth interviews with 10 members (both former and current) of the group reveal four areas of evidence akin to the characteristics of diasporic experiences elsewhere in the world.

## **STUDY CONTEXT**

### **Diasporas and Tourism**

Brubaker (2005: 1) argues that the term 'diaspora' has evolved over time and been stretched in many ways whilst expanding in interest beyond academia, particularly since the late 1980s. According to Alexander (2017: 1545) the term has increased alongside the study of migration and mobility, given the pace of transformation in the global north. Over time, the term has moved away from its original reference to Jewish diaspora and the notion of forced exile and into the idea of any migrant community that shares connections, be it sentimental or material to a common 'homeland' (King, 2012: 145).

Alongside diaspora, 'transnationalism' has also proliferated. Transnationalism refers to the "processes through which immigrants maintain social relations that connect their home country and host society" (Huang et al., 2013: 286). As such, advancements in technology and transportation allow for immigrants to effectively live in two worlds. A key element of transnationalism is the array of transnational practices that immigrants engage themselves in to maintain the ties between home and their host country, which can include individual and collective activities, such as the ownership of or investment in real estate, attendance of home events, remittances to the home country, and the participation in associations and/or organisations, sports clubs, social groups (such as a Scouts group) and so on (Portes et al., 2002; Haller & Landolt, 2005). Such activities have surfaced in the literature creating links between diaspora and tourism, particularly diaspora heritage tourism (Huang et al., 2013). In addition, several examples exist of studies on the travels of diasporic communities in search of their roots and heritage (see for example, Stephenson, 2002; Sim & Leith, 2009; Hughes & Allen, 2010; Iorio & Corsale, 2012; Pelliccia, 2016; Io, 2017). Notwithstanding this body of research surrounding the travels of diasporic communities in search of their heritage, a knowledge gap exists about the social capital that such transnational practices bring to these communities.

### **The Social Organisation of Diaspora**

The integration of immigrant communities into host societies has been widely debated in the literature (see e.g., Phinney et al., 2002; Reitz, 2002; Van Oudenhoven et al., 2006). One aspect related to both the process of migration itself as well as the processes surrounding integration and adaption into host societies is that of the role and significance played by networks of kinship and friendship (Brettel, 2014). In this sense, networks and social organisations provide social capital and enable communities to maintain their identities and social ties both within their host community and the country of origin. In the same vein, immigrant organisations form important links to the country of origin and help to “create, express and maintain a collective identity” (Schrover & Vermeulen, 2005: 823). The notion of social capital is an important feature of diaspora and immigrant literature and has roots in sociological discourse. Its definition, much like that of diaspora, has evolved over time to suit different contexts and levels of application (Sampson & Graif, 2009; Portes, 1998). One of the earliest definitions of the term was by Bourdieu (1985: 248) that social capital is “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition”. Other key early definitions have been provided by Loury (1977), Coleman (1988), Schiff (1992) and Burt (1992). Portes (1998) provides a more recent detailed discussion on the origins of social capital. Nevertheless, despite an array of definitions, in a more general sense social capital refers to the features of social groups in contemporary societies that includes a shared sense of identity, interpersonal relationships, mutual norms and values, trust, cooperation and importantly, reciprocity (Putnam, 1993; Coleman, 1998; Portes, 1998).

The idea of social capital being influenced by the role of migrant networks has also featured in academic inquiry (Anthias, 2007; Garip, 2008; Ryan et al., 2008; Morales & Giugni, 2016) and filtered into tourism studies. Social capital is no stranger to tourism scholarship and mostly focused on communities at destinations and their reactions to tourism development, and entrepreneurship (Macbeth et al., 2008; McGehee et al., 2010; Zhao et al., 2011; Park et al., 2012; Park et al., 2014; Moscardo et al., 2017). One notable study on the links between tourism and social capital looks at the transnational social capital maintained by British retirees in Spain and the resultant VFR tourism flows (Casado-Díaz et al., 2014). However, despite the existence of this literature, there is limited attention on the social capital generated by specific social groups that spill into the discourse on the power of social capital and its links to identity and the desire to connect to one’s heritage through travel.

### **THE PORTUGUESE DIASPORA IN SOUTH AFRICA**

The Portuguese diaspora in South Africa have a long-standing history, dating back to the late 15th century as a result of the early Portuguese explorers (Boxer, 1969; Axelson, 1990; Newitt, 2015). Bartholomeus Dias was the first of the Portuguese explorers to land in the Cape in 1486, later followed by Vasco da Gama in 1497. Although the connection between the two countries is ancient, it is the more contemporary groups of immigrants spanning between the 1800s to the mid to late 1970s that have resulted in the complex and varied diasporic settlement of the Portuguese in the country.

In his historical studies on Portuguese migration to South Africa, Glaser (2010, 2012, 2013) outlines three distinct groups of immigrants that can be identified. The first group refers to the Madeirans from the early 1800s to the 1970s (Glaser, 2010). This group consisted of mostly men that had been facing economic despair in their home country and were in search of a better life in South Africa, often entering the country

illegally. They were typically later followed by their wives and children or on some occasions women would be sent over to become their wives and settle with them in their new home. The Madeirans were for the most part illiterate and lacked in skill but tended to stick together, offering employment to fellow Madeirans on and in their farms, shops, coffee houses and fishing endeavours. The second group of Portuguese immigrants saw a more literate and skilled populace from mainland Portugal between 1940 and 1980, with the most substantial concentration being between 1963 and 1971 (Glaser, 2012, 2013).

Despite experiencing similar economic challenges as the Madeirans, the mainlanders tended to be skilled in specific fields such as building, engineering and steel production and manufacturing, thus giving them a distinct advantage and appeal to the South African government who at the time was experiencing a severe skills shortage and preferred to support (white) immigrant skilled labour rather than relaxing policies on the employment of black South Africans (see Perbedy, 2009).

It is the third, and possibly most significant group of Portuguese immigrants to South Africa that saw a more visible and socially organized Portuguese identity in the country. This group included the Angolan and Mozambican Portuguese diaspora that had to flee their respective countries in the wake of civil war and decolonisation between 1974 and 1976 (Glaser, 2012, 2013). They made up the largest single event of Portuguese settlement in the country and differed greatly from the first two groups in that they were a privileged elite, highly educated and skilled professionals, many of whom had suffered great loss in both status and material possessions. With a pride for having a separate 'African identity', this last group of Portuguese-speaking immigrants introduced a variety of social and economic footprints in the form of societies, sports clubs, food, charity and media. One such example is that of the 1st São Jorge Scouts Group. Although all three groups feature in the literature it is the last two groups that managed to make the most visible social and economic impact especially in relation to residential enclaves particularly in the southern suburbs of Johannesburg (Cohen & Hart, 1972; Harrison & Zack, 2014; Moyo & Cossa, 2015).

### **THE GLOBAL AND SOUTH AFRICAN SCOUTING MOVEMENT**

The Scouting movement has been around since 1907, originally started by Lord Robert Baden-Powell with the intention of tapping into the unrealised potential of the British youth stemming from his experience as a soldier. The movement has since spread globally and currently has over 50 million members worldwide (WOSM, 2016, no date). According to their mission and vision statements, the Scouting movement is socially significant in that it aims at contributing to the education of young people with a focus on active citizenship (WOSM, 2014). The organisation can be considered a noteworthy example of the establishment of a group identity in itself as those who have been or are currently members can identify themselves as Scouts and part of a much larger collective social identity (Ashforth & Mael, 1989; Jenkins, 2008). Literature surrounding the global Boy Scouts and Girl Guides movement largely has been linked to topics such as imperialism and war (Proctor, 2000, 2002; Warren, 2017), as well as active 'global' citizenship and its role in informal education (Vallory, 2012; Mills, 2013), and the gendered perspectives of girl guides and gay boy scouts (Proctor, 2009; Arneil, 2010; Mills, 2011; Martin, 2016; Halls et al., 2018). South Africa assumes an important role in the early history of the international Scouting movement. Its founder, Lord Baden-Powell, was stationed at Mafikeng during the Boer War as a Lieutenant-General.

During his duty in South Africa, he wrote a handbook titled "*Aids to Scouting*," which garnered him fame on his return home to Britain in 1903 as a national hero (Scouts

South Africa, no date). Scouting was officially introduced in South Africa in 1908 (Scouts South Africa, no date), shortly after its launch in the UK in 1907. Some of the original groups of the Cape and the Transvaal are still in existence including 1<sup>st</sup> Claremont in the Western Cape, and 1<sup>st</sup> Kengray BK in Gauteng with roots to the 1<sup>st</sup> Belgravia group, founded in 1908 (Scouts South Africa, no date). Currently, it is estimated that Scouts South Africa has over 308 000 members across the country (Scouts South Africa, no date). In South Africa Scouts groups have formed for a variety of reasons; it is those that hold a specific ethnic identity that are of particular interest to this research.

In the Gauteng province, with Johannesburg as the major city, three groups stand out; these are the 1<sup>st</sup> German, 1<sup>st</sup> Hellenic, and 1<sup>st</sup> São Jorge, respectively having distinct German, Greek and Portuguese identities. It is the 1<sup>st</sup> São Jorge group which is the focus of this study as it relates to the significant history of Portuguese settlement in South Africa.

### **CASE STUDY: THE 1<sup>ST</sup> SÃO JORGE SCOUTS GROUP**

The 1<sup>st</sup> São Jorge Scouts Group came into being when two families introduced the idea of Portuguese scouting in Johannesburg in July 1976. The group was originally named 5th Kensington but later changed its name to 1<sup>st</sup> São Jorge, given the changes in the districts within the province. The new name was reflective of both their Portuguese heritage and the Catholic faith placed on the importance of saints. The group officially began on the 30<sup>th</sup> of January 1977 and grew steadily in numbers, drawing many of its members from the Holy Angels Catholic Church's Portuguese parish base. The church is located in Bezuidenhout Valley, which was home to a predominantly Portuguese community (see Cohen & Hart, 1972; Harrison & Zack, 2014; Moyo & Cossa, 2015) as well as also servicing a large English speaking community. The church and its hall (Marywill Hall, a separate property belonging to the church) became the group's home base with the full support of the then priest. Over the years the group's membership has fluctuated but throughout its existence has maintained a distinct Portuguese identity within the South African Scouting community as well as its surrounding Portuguese- and English-speaking communities.

### **METHODOLOGY**

A qualitative research approach was used to examine the experiences of current and former members of the 1<sup>st</sup> São Jorge Scouts Group. Such an approach allows for "understanding the world from the perspective of its participants" (Phillimore & Goodson, 2004: 4). The research aimed to explore the scouts group as an example of the social organisation of the Portuguese community in South Africa. Since the group is based in Johannesburg, its network was geographically limited to its surroundings, and therefore influenced by activities related to the Portuguese community mostly around Johannesburg, the province of Gauteng and in some cases in other provinces of South Africa when participating in Scouting activities and trips. The study was conducted over January to March 2019, using in-depth semi-structured interviews as well as a range of documentary sources. A total of 10 detailed interviews were conducted, including 1 original founding member, 1 district commissioner, 1 group scouter, 1 former scout leader, 1 former parent and parents' association secretary, and 5 former Scouts.

In addition, a variety of materials such as minutes of meetings from the parents' association, group photo albums, and their collection of newspaper and magazine clippings were also analysed for content where evidence of their activities and social identity was documented. It is important to note that the group is still in existence today, albeit on a different property. However, the findings are written in past tense as the experiences of the interviewees range from the group's beginnings to around the early



2000s, with the exception of the Group Scouter and the District Commissioner, both of whom are still active. Table 1 below depicts information regarding the interviewees and the relevant codes to identify each interviewee in the discussions that follow:

**Table 1.** Profile of Interviewees

Interviewee Number	Role	Gender	Age Group
F1	One of the original founders	Male	60-70
GS	Group Scouter	Male	70-80
DC	District Commissioner	Female	70-80
SL	Former Scout Leader (cubs)	Female	30-40
P1	Former Parent and Parents Association Secretary	Female	60-70
S1	Former Scout	Male	30-40
S2	Former Scout	Male	30-40
S3	Former Scout	Male	30-40
S4	Former Scout	Male	20-30
S5	Former Scout	Female	20-30

**FINDINGS**

Four key themes were identified from the responses of the interviewees. These include: aspects of identity, the group’s frequent representation in the media, the role of the Holy Angels Catholic Church, and an ongoing sense of community with support particularly from the Portuguese community at large, both locally and internationally, as well as the social capital gained from participating in the group.

**Identity**

Identity plays a significant role in the study of migration and diaspora and has featured substantially in academic literature (Boyarin & Boyarin, 1993; Gilroy, 1997; Georgiou, 2006; Ben-Moshe & Segev, 2007; Hall, 2014). The 1st São Jorge Scouts Group seems to hold two definitive identities: the first being a respected representative of the Portuguese community in Johannesburg and South Africa, and the second being a beloved South African Scouts group while being a part of the bigger global Scouting movement.



**Figure 1.** Example of the uniform  
(Source: Group Scouter’s personal archive – left, and Author’s personal archive – right)

The group successfully built and maintained an identity within the South African Portuguese community in a variety of ways. The uniform (Figure 1), for instance, indicated elements of Portuguese identity. The traditional Scout uniform in South Africa includes khaki pants but the group requested to be able to wear navy pants to match those of Scouts in Portugal. The scarf also distinguished them as Portuguese, being red with a white trim, representing both the prominent red colour of the Portuguese flag and the red and white colours associated with São Jorge. The emblem included at the point of the scarf is green with an embroidered golden cross similar to that of the Portuguese order of Christ and the crosses of Portuguese explorers. The parents would wear an inverted scarf (no uniform) at events and fundraisers that was white with a red trim and had the same green badge.

Despite, according to one of the original founders, the group's intention not initially being to become a specifically Portuguese group, the general composition of the group was, for the most part, of Portuguese descent given its geographical location:

„...we registered as an ordinary Scouts group, an open Scouts group so it was not a Scouts group that was only for Portuguese people, it was not a Scouts group that was only for Roman Catholic people. So it was an open group, Roman Catholic base, Portuguese base but open to any kids of any religion, and of any race, and of any background whatsoever... but when we started, 100% of the kids were of Portuguese origin” (F1).

The parents were mainly first generation immigrants and the children which they enrolled in the group were likely to be second or third generation and holders of both South African and Portuguese passports. Although the group was mostly made up of Portuguese members, the group was open to anyone who wanted to join and several members had no relation to Portuguese culture or identity:

„It [the group] actually pulled all the Portuguese community together, not just Portuguese, I mean there were other kids that were not Portuguese speaking... We never turned anyone down... [but] to me I see it as a Portuguese group” (SL).

This being said, for those who did hold a Portuguese passport, its value was undeniably held in high esteem:

”It's gold [the Portuguese passport], it gives travel opportunities, it gives immigration opportunities, it basically is just like and Ace in the pocket, like if anything happens I've got that to fall back on” (S1).

When asked about whether being part of the 1st São Jorge Scouts Group added to their Portuguese identity, most interviewees agreed that it played a moderate to significant role in their Portuguese identity:

”It [being part of the group] gives you major Portuguese points... it is the Portuguese thing to do because then you start mingling with all the Portuguese people” (S1).

Language is linked to the experiences of immigrant and diasporic communities in terms of the preservation of their culture and identity. The mother tongue of immigrants is often lost through subsequent generations (Alba et al., 2002; Rumbaut, 2002). Although the scouts themselves largely spoke English amongst themselves, Portuguese was widely spoken by the parents and their children who had heard it regularly at home, church, and at Scouts, with some attending Portuguese classes after school. In addition, the group was frequently represented as an important part of the Portuguese community often appearing alongside the Portuguese Consulate as part of the annual 10th of June

Portugal Day celebrations. The decisions made by the interviewees and their parents to join the group evidenced the desire to fit into a similar culture and to be amongst people who spoke the same language:

"It's just easier... if you're coming from overseas and you speak Portuguese... if it's like-minded people and people from a similar culture you should fit right in, even though its not family it will feel like family pretty quickly" (S1).

"My parents would not have let me join [just] any group, they were very protective so because it was Portuguese, they would trust them more" (SL).

Being part of the local and global Scouting movement, interviewees indicated significant pride in being identified as a Scout or a member of a Scout group, with the Scouts, in particular, indicating that they had included being a Scout as part of their early Curriculum Vitae in search of work:

"It's always a good thing to say that you were part of Scouts...it's one of those things, you're always a Scout" (S1).

The group was also fondly recalled by the District Commissioner as being special and a welcoming group that felt like home. Indeed, it is clear that the group was well-liked and easily identifiable among the rest of the Scout groups in the district:

"...if you're asking on a personality thing [the group], it has enormous warmth, it really does... and they are very, very inclusive of one, which is also a little bit unusual, you know you don't feel I'm the odd one out when you go there" (DC).

### Representation in the media

Media – local, regional or international – plays an important role in the lives of diasporic communities. In academic literature, the role of the media has featured in terms of maintaining links to the homeland by keeping up to date with news and events as well as of the media's representation of diaspora (Georgiou, 2006; Bailey et al., 2007).



Figure 2. Examples of publications that the group featured in (Source: Group Scouter's personal archive)

More recently, besides its obvious use as a means for communication between transnational connections and the creation and maintenance of identities, social media has also widely been used in the representation of diasporic communities (Mainsah, 2011; Komito, 2011; Bacigalupe & Camara, 2012). For the 1st São Jorge Scouts Group, the print media was a significant roleplayer in both the creation of its identity as well as cementing the group's visual presence within the South African Portuguese community.

The Scout group was frequently featured in an array of ethnic media including newspapers and magazines (Figure 2 above). These included *Jornal Popular* during the 1970s and 1980s (no longer in circulation) and *O Século*, a Portuguese language newspaper (started in 1963) based in Johannesburg, claiming to have a circulation of 40 000 and readership of over 200 000 (Glaser, 2012). The latter featured local news stories of people from the Portuguese community as well as an obituary section. Other important media were *Vóz Portuguesa*, a more modern newspaper by the Portuguese Forum, including articles in Portuguese and English; *Notícia*, a Portuguese magazine no longer in circulation, often sold alongside *O Século* featuring stories of local people and organisations within the Portuguese community and also served for the advertisement of Portuguese-owned businesses and services. The group also featured in interviews and snippets of Portuguese day celebrations on television shows (both locally and internationally) dedicated to Portuguese diasporic communities available on local service provider, M-Net and DSTV, which made *M-Net Portuguesa* available to the Portuguese community through subscriptions to their digital satellite television service, and also offers Brazilian channels and a dedicated local sports channel in Portuguese:

„RTP International [a Portuguese television network] would say we are going to cover such and such a topic on whatever day, we need the consulate to give us a list of the communities [and groups] that exist in South Africa and so the Scouts were invited for those specific events because we are part of the [Portuguese] community, they [the consulate] know that we exist so we would get a written invite” (GS).

This kind of exposure through media meant that the group was constantly visible in the eyes of the Portuguese community that engaged with the content provided through this media available in their own language. The media stories portrayed the group as proud of and participating in Portuguese celebrations and, on occasion, its visits to old people and pursuit of charity work.

### **The role of the church**

Churches have been a common feature in the literature surrounding diasporic communities. Several studies investigate the role that churches and other faith-based organizations have as key points of transition and integration into the host society (Appleby, 2011; Mensah et al., 2013; Tsang, 2015), most especially amongst refugees and internally displaced people (Parsitau, 2011; Snyder, 2011). The Holy Angels Catholic Church is based in Bezuidenhout Valley, a suburb just outside of the Johannesburg CBD. The suburb was once home to a prominent Portuguese and Italian community. The church largely served the surrounding Portuguese and English speaking community with separate masses held in Portuguese and English. During the late 1970s when the 1st São Jorge Scouts Group first came into being the (then) priest was interested in the group's aims to service the local youth and extended his support by offering them a space to operate from. The church property, Marywill Hall, on the adjacent block, was home to the group's meetings, activities and fundraising initiatives. Throughout the duration of the group's stay on the church property, the scout group was highly visible in church activities. The Portuguese speaking parish base of the church was a significant source of

the group's membership. Once a month the group would be present at Sunday mass in full uniform at the front of the church, and would participate regularly in church fundraising events as well as charitable initiatives:

„... [the] majority of the people that went to the group attended the church so they'd be at mass on a Sunday... so with the church functions like with their annual party [to raise funds for the church], we used to go as a Scout group and they had a Portuguese stall [where] the parents did the farturas and maybe pregos... but we were involved in that way” (S3).

„...once a month, we used to stand in front of the church for the whole mass... they [the church] included us as part of their parish... if we as the Scouts had functions we would advertise it at the church as well and we would have the support from them and vice versa” (S4).

### **Sense of community, support and social capital**

A key element of the settlement and integration of diasporic communities is that a sense of community and belonging. When the culture and language of the host society is different from the diasporic community often they can find solace in sticking together. All interviewees indicated that the Scout group brought a sense of family and built a tight network of people that worked hard to maintain it:

”I thought it was awesome, it was like family... it was quite a closely-knit community...” (S1).

„... [it's] almost an alumni that exists between everybody that has gone through it and I think it played a very important role, a different role in everyone's life... you almost have a [sense of] pride when you have to give back or are asked to give back” (S2).

One of the parents and former Parents Association secretary, recalls how the group provided herself, like many others, the opportunity to provide hers and other children with important opportunities through the dedication and work of the parents whilst also giving back to the larger Portuguese community:

„...when you work for a group like this one, you're not only working for one person, you're working for many people inside the group and outside the group because the parents association doesn't raise funds just for the group, the group has also assisted other people in the community” (P1).

The value of the social connections and networks established between the members of the group was also emphasised by interviewees:

”You make social connections, it's a social place to be, its a fun place to be, you have something to do every week, every Friday. It probably kept me out [of trouble] because it was a Friday night and we wouldn't go drinking, we'd actually sit there and make some use of our life and now it's just the connections, people that you know that you can pull on in your network, friends that you can call up every once in a while” (S1).

The role of the parents association was significant and most influential and compared differently to parents in local non-Portuguese Scouts groups. In its activities elements of Portuguese culture and traditions came through strongly through the use of food, both at gatherings at Scouting events as well as in their own fundraising events and those of the church:

”There was this thing called Kontiki that we used to do, it was a boat race thing. With the Portuguese scouts group, all of the families kind of knew each

other and when it came to food and setting up the tent and having the whole base camp set up, everybody would be there, family and friends so we would have one of the most rocking base camps around and that I think came from the Portuguese aspect that other camps wouldn't have. They'd have to work a lot harder to get people to come and volunteer like that..." (S1).

Indeed, the on-going recognition and respect by the larger Portuguese community recorded in the presence of the group in Portuguese media further entrenched the group's social capital value within the community. The presence of and recognition by the Portuguese consulate of Johannesburg further highlighted the support from the local Portuguese community from the highest level and resulted in the group being invited to represent both the Scouting movement in general and the South African Portuguese community at locally hosted Portuguese events such as the 10th of June Portuguese Day celebrations, monthly representation during masses at the Holy Angels Catholic church, and calls for assistance by the group at local Portuguese cultural events such as the Lusito Land festival and at various children and old age homes around Johannesburg.

An interesting feature of the interviewee experience, specifically among the Scouts and which stems from the fundraising support provided by the parents association, was the opportunity for domestic travel due to camping, hiking and competitions with other Scout groups. Some of these experiences were described as lifechanging experiences to a degree, putting them to the test and in turn learning essential life skills:

"Cederberg [a mountain range in the Western Cape]... it was just like, throw you in the deep end, 10 days in the middle of nowhere, 40 degree [celsius] heat, good fun, like-minded people... like sometimes I wish I could just go back and do a Cederberg hike if I was busy with the group again." (S1).

„...it's awesome to socialise with different people... also teaching you to survive, it teaches a lot of life skills, and learning to work with people, surviving out there in different conditions... and also teamwork within the group" (S5).

The interviewees also indicated that despite some of the parents perhaps having had the means to provide travel and other opportunities for their children, many of the scouts particularly towards the end of the 1990s did not have parents who had the means to do so:

„I think the the Scout [group] also started changing and I think that was also based on our location where if your'e looking at a bigger, maybe 10km radius, there was a lot more poverty in the area than when it was initially established... where we started seeing people started joining the Scout [group] coming from almost a bit of a more lower class... not as priviledged backgrounds. And I think the Scouting movement did give these individuals a slightly different aspect and look at life... and it did expose them to things that they possibly would not have been exposed to" (S2).

Thus, the opportunities provided by the group for these children echo the similar efforts of other organisations in South Africa with the aim of exposing children to travel and other parts of the country which they would not have otherwise had the opportunity to do so (Adinolfi & Ivanovic, 2015).

## CONCLUSION

Research and scholarship on diaspora and tourism is of expanding interest. Currently, however, there are only limited investigations concerning the lived experiences of diasporic communities. This paper addresses the manner in which diasporic

communities organise themselves socially, economically and politically whilst integrating into the host community. In particular, a specific focus was upon the role of social capital and networks. The 1st São Jorge Scouts Group provides a useful lens into the efforts of the Portuguese diaspora in Johannesburg attempting to preserve its homeland culture whilst at the same time meeting the goals and vision of the global Scouting movement. The group, established in 1977, facilitated a platform for Portuguese immigrants to socialize and provide educational experiences for their children. With a catholic church that had a significantly Portuguese parish base, being the group's home base for the majority of its existence and recognition by the Portuguese consulate, the group encompassed several aspects of Portuguese identity. Overall, the research discloses the vital role of social capital and networks in the construction of Portuguese identity and contributes to a larger discourse on immigrant integration, sense of belonging and links to tourism.

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## **INFLUENCE OF BORDER REGIONS RELATIONS ON THE TOURIST CHOICES OF THE POPULATION**

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**Abstract:** The relevance of the research topic is determined by the differences in the conditions of Russian border regions development depending on their type, as well as certain tourism features in these territories. The purpose of the study is to identify and justify differences in the tourist preferences of border regions residents. The subjects of this research are so called development corridorborder region, represented by the Kaliningrad region, and the peripheral resource region, represented by the Altai Krai. The choice of regions is defined by the high level of tourist industry development. While doing the research, the authors of the article used general research methodology, quantitative and qualitative assessment, methods of economic, statistical, comparative and factor analysis, statistical groupings, and sociological observation. A statistical analysis revealed and analytically justified the difference in the level of socio-economic development of the Kaliningrad region and the Altai Krai. Development corridors show significant advantages in foreign trade and the size of the gross regional product, which confirms the correctness of the considered approaches to the classification of border regions. A sociological survey of tourist preferences showed differences in the tourist orientation of young people that correlate with the typology of border regions, which may define the developed programs for the marketing promotion of tourist destinations considering the main barriers.

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**Keywords:** cross-border cooperation, border regions, socio-economic development, Russian Federation, tourism

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## INTRODUCTION

The development of cross-border relations and cross-border cooperation is an important tool for overcoming the negative consequences of the peripheral nature of border regions. Therefore, the study of the cross-border relations experience and the development of cross-border regions are particularly relevant for the border regions of Russia. Only 5 out of 37 Russian regions are located on the border with the European Union (the Republic of Karelia, the Murmansk Leningrad, Pskov and Kaliningrad regions), but these regions are currently the most active participants in cross-border cooperation and initiate the development of integration processes between Russia and the European Union. The extended length of Russian land borders (including river and lake borders) of 24,625.3 km increases the importance of international cooperation for the state, especially cooperation between the Russian Federation and the border states, which confirms the relevance of research on cross-border and border regions.

Russian land border is the longest. It is 7512.8 km with Kazakhstan, 4209.3 km with China, and 3485 km with Mongolia. The minimum length of land borders with North Korea (DPRK) is 17.3 km, South Ossetia is 70 km, and with Poland it is 204.1 km. However, in itself, the length of borderlines with the countries and regions does not affect the intensity of cross-border links. Thus, in terms of foreign trade turnover with Russia, Kazakhstan (with a maximum length of land borders) and Poland (with a minimum length of borders) are approximately equal: 15.5 billion US dollars with Kazakhstan and 14.5, with Poland ([http://www.customs.ru/index.php?option=com\\_content&view=article&id=13858&Itemid=2095](http://www.customs.ru/index.php?option=com_content&view=article&id=13858&Itemid=2095)) respectively. During this period, according to the border service, the number of Russian tourists amounted to 3.4 thousand in Kazakhstan, and 32 thousand went to Poland, which absolutely does not correlate with the length of borders. Therefore, in order to make decisions about the intensification of relations between border and cross-border regions, it is necessary to have a good understanding of their specifics and development potential, including the clustering of goods production and services.

## RESEARCH METHODS AND MATERIALS

The study of key issues of developing and adapting quantitative and qualitative indicators for assessing the competitiveness of the hospitality industry was carried out using some information sources like Tourism Market Trends UN WTO, The Travel & Tourism Competitiveness Report 2017, materials of scientific conferences on the development of tourism in the regions, research papers on the role of tourism in the development of border areas. While studying the problems of quantitative and qualitative assessment of differences in tourist preferences of residents of border regions, traditional research methods were used. In addition, when conducting a comparative analysis of various types of border regions, general scientific methods of cognition were used, including theoretical studies (analysis, synthesis, aggregation) and empirical (observation, comparison), as well as a systematic approach, economic and statistical methods, comparative and factor analysis, statistical methods groupings, sociological observation.

## PUBLICATIONS' REVIEW

### TYPES AND FEATURES OF BORDER REGIONS

Based on the study of previously published works on the border regions development (Zubarevich, 2010; Klemeshev et al., 2004; Mezhevich, 2002; Korneevets

et al., 2015; Korneevets et al., 2017), it can be concluded that these regions represent special types of territories, the specific development of which is determined by functional dualism of the border, combining barrier and contact functions. In case of unfriendly relations between the countries, the border can become an insurmountable barrier to the communication, as it happened with the Russia - Ukraine border. When the cooperation between neighbors is developing, like between Russia and China, growing flows of goods, services, and the population pass across borders. In such cases, the border regions may become "development corridors" (Klemeshev et al., 2004). That is, the functionality of the boundaries is dynamic and may change either to increase the contact function, or to enhance the barrier function of the boundary.

At the same time, as noted by J. Berdell and An. Goshal (2015), border regions may be either active areas of commercial exchange that contribute to the development of their larger economies, or, on the other hand, they may be relatively isolated peripheral areas where their stagnation reduces national progress as a whole. We agree with Cooper and Rumford (2013), who believe that boundaries should be considered as mechanisms of connectivity and interaction, but not as markers of separation. The unique location of cities near the borders (on the example of Gdansk and Kaliningrad), according to Studzińska and Domanevsky (2016), can be a major factor in the development of border regions. That will affect the transformation of the border function by increasing its permeability and will be a resource for the development of local communities. J. Friedmann's (1968) typology of the border regions which is recommended to be applied to Russian ones (with a land border), distinguishes between the following types of regions: core regions, transitional developing regions; transition crisis regions; peripheral resource regions; development corridors. St. Petersburg and the Leningrad Region have the highest level of development of cross-border ties, which we consider as a single territorial system that belongs simultaneously to core regions and development corridors. The function of the development corridor here is implied in the conditions of a developed industrial, scientific, educational, and socio-cultural potential of St. Petersburg, which is also the second most important center of inbound foreign tourism in Russia after Moscow. The regions - development corridors in Russia include the Kaliningrad region and the Primorsky Krai, which connect other Russian regions with foreign countries in the west and east of Russia, respectively, and the development of these two regions is largely determined by their transit role.

Gumenyuk and Studzieniecki (2018) note that transport is both a tool for strengthening cross-border links, and an object of cross-border cooperation, which includes joint transport projects and the creation of transport and logistics corridors. A number of researchers (A.P. Klemeshev, G.M. Fedorov) additionally distinguish a special subtype of regions – development corridors located not between national regions (as in J. Friedmann), but between them and the core regions of foreign countries.

These regions include, on the one hand, the Kaliningrad region (as a development corridor between Russia and the EU), and on the other, the Baltic Euro-region, which functions as a development corridor in the economic system of the Baltic space (Klemeshev et al., 2004). Given transitional developing regions, transitional crisis regions and peripheral resource regions, we can distinguish various groups of border regions (with land borders) according to their development, calculated on a set of indicators of GRP and foreign trade per capita, the ratio of nominal wages to the cost of consumer goods and services, population migration dynamics (Korneevets, 2010).

## **REVISION OF THE TYPOLOGY OF BORDER AREAS CONSIDERING THE CURRENT FEATURES OF THEIR DEVELOPMENT**

Given the specificity of the border regions development, manifested in various

combinations of border barrier and contact functions, a common typology of Martinez (1994) can be added to the classification of border (with land border) regions according to the degree of development of their relations with neighboring regions. Based on the classification of B. Van der Velde (1997), a number of researchers, including V. Korneevets and N. Zaitseva, distinguish the following types of Russian border regions (Korneevets et al., 2017; Zaitseva et al., 2016).

A) alienated border regions: the Republic of the North Caucasus (except for Dagestan) and, in part, the border regions of Russia and Ukraine;

B) co-existing border regions (Dagestan; a number of regions on the borders with China and Mongolia);

C) interdependent border regions (regions on the borders with Kazakhstan, Belarus and partly with the countries of the European Union, the trend in this direction is in regions bordering on China);

D) there are still no integrated border regions, although all regions on the borders with Kazakhstan and Belarus have the same prerequisites, to the greatest extent - the Smolensk region.

The typology of border regions was further developed in the works of L. Osmolovskaya, who transforms definitions of types of border regions in accordance with current trends and complements typology with a fifth type of border regions: open (barrier-free) border regions. First of all, interior regions within the European Union may be related to this type of border region (Osmolovskaya, 2016). In general, the factors that determine the development of relations between various subjects located on both sides of the border, the development of border regions and the formation of cross-border regions are diverse. We can distinguish between objective and subjective, internal and external, general, private and special factors.

They can be classified in accordance with the functional structure of the society depending on which of the territorial socio-economic systems is involved in the formation of cross-border regions. It is most advisable to consider political, economic, social, demographic, ethnic, ekistics, environmental and natural factors. In some cases, it is possible to use the basic factors of spatial development identified by the World Bank, which can fall into three main groups, as states N. Zubarevich (2010):

A) density, taking into account the agglomeration effect;

B) economic distance, determined by remoteness from the global and domestic markets;

C) various institutional divisions, including the barrier function of borders.

Although these factors are most often considered in relation to the development of countries and national regions, since the latter include the border regions, it can be argued that these groups of factors are significant to various types of cross-border regions. At the same time, as Voloshenko (2018) notes, the border position of a region and its assumed distance or isolation (for example, in our study such are the Kaliningrad region and the Altai Krai) from the largest industrial-technological, resource and production centers places special demands on balanced development of such territories from the standpoint of ensuring internal growth and socio-economic development.

Considering the development of border regions, it should be noted that in the early stages tourism can be one of the mechanisms to facilitate cross-border cooperation followed by transformation into a diversified economic center due to the multiplication effect and the formation of a favorable investment climate, followed by a transition from alienated to integrated regions. At the same time, the administrative focus on tourism in transboundary regional development can be considered as a tool for gaining socio-economic and political power through a commitment to broader participation in the development of international cooperation (Stoffelen et al., 2017;

Ilies et al., 2018). Conversely, borders can serve as additional obstacles for sustainable development if they lead to situations where “different interest groups in the region are differently involved in the process of cross-border regionalization”.

## **OUTCOMES OF THE RESEARCH ASSESSMENT OF THE STATE AND DEVELOPMENT PROSPECTS OF THE BORDER REGIONS OF THE RUSSIAN FEDERATION**

Previously, the author's research showed that in addition to St. Petersburg, the Leningrad and Kaliningrad regions, Belgorod and Tyumen regions are among the most developed border regions of Russia. The level of development of such frontier industrial-agrarian regions, as Orenburg, Chelyabinsk and Novosibirsk, as well as a number of raw material regions (Murmansk Region, Karelia, Khabarovsk Krai) is above the average. Accordingly, they have a greater potential of their own for cross-border cooperation. The southern regions of the European part of the country and the Krasnodar Krai are of the average level of development. All of them have a certain potential for the development of cross-border relations. A low level of development is characteristic of the three border regions located on the border with Belarus (the Pskov, Smolensk, Bryansk regions), which belong to transitional crisis regions, and the Kurgan region, which is a group of peripheral resource regions.

In the east of the country, as far east as from the Altai Krai and the Jewish Autonomous Region, the regions have a low and a very low (Tyva) level of development. All the border republics of the North Caucasus belong to regions with a very low level of development; their potential for cross-border cooperation is poor, which makes it possible to attribute them to transitional crisis regions.

All regions of the Russian Federation bordering on Kazakhstan can be attributed to peripheral resource regions, less densely populated and less developed, the economy here is primarily industrial-agrarian, and a number of regions are characterized by an increased specific weight of the extracting industries. Among the transitional and peripheral resource regions, in addition to developing and crisis ones, we can distinguish an intermediate type - stable regions, which do not show either serious crisis phenomena or dynamic development. These regions include the Krasnodar and Altai Krais, the Astrakhan and Novosibirsk regions. It should be noted that in conditions of political crisis situations leading to sanctions policy (border regions with the European Union) or interrupting economic ties (border regions with Ukraine), the typology of border regions may change from developing to stable. But most often, this influence has a short-term effect, prior to the search for new trading partners and markets.

## **COMPARATIVE ANALYSIS OF VARIOUS TYPES OF BORDER REGIONS OF THE RUSSIAN FEDERATION**

In their studies, the authors conducted a comparative analysis of two Russian border regions belonging to different classification types, based on the above-mentioned analysis of approaches to the typology of regions (Ilies et al., 2014). The objects of research are the Kaliningrad region, which has common borders with the states of the European Union Poland - 236.3 km and Lithuania - 288.4 km, and the Altai Krai, which has a border with Kazakhstan - 844 km, a member of the Commonwealth of Independent States (Figure 1). At the same time, despite the shorter length of the borders, the Kaliningrad region has more border-crossing checkpoints: 14 in the Kaliningrad region and 13 in the Altai Krai. The density of land border-crossing checkpoints in the Kaliningrad region is much higher than in the Altai Krai: from 50 km to one checkpoint on the border with Poland, up to 170 km on the border with Kazakhstan. In accordance

with J. Friedmann's typology of the regions and the previous studies, the Kaliningrad region belongs to development corridors, while the Altai Krai, as less densely populated and less developed, has an industrial-agrarian economy, belongs to peripheral resource regions with 17.4% in the structure of the gross regional product against 4.8% for the Kaliningrad region. The population density in the Altai Krai (table 1) is 14.1 people / km<sup>2</sup>, which is significantly lower than the Kaliningrad region with its 65.2 people / km<sup>2</sup>.



**Figure 1.** Geographic location of the Kaliningrad region and the Altai Krai

**Table 1.** Socio-economic characteristics of the Kaliningrad region and the Altai Krai

(Data source: Compiled and calculated on [http://www.gks.ru/bgd/regl/b17\\_14s/IssWWW.exe/Stg/.doc](http://www.gks.ru/bgd/regl/b17_14s/IssWWW.exe/Stg/.doc))

Indicators	The Kaliningrad region	The Altai Krai
Total area, thousand km <sup>2</sup>	15,1	168,0
Population, thousand people (as of January 1, 2017)	986,3	2365,7
Population density, people / km <sup>2</sup> (as of January 1, 2017)	65,2	14,1
The largest cities, thousand people	Kaliningrad – 467,3	Barnaul – 633,3 Biysk – 203,1 Rubtsovsk – 145,3
National population structure, 2010 census, %	Russians - 86,4 Ukrainians – 3,7 Belorussians – 3,6	Russians – 93,9 Germans – 2,1 Ukrainians – 3,7
Per capita cash income (per month), rub.	25903	21485
Consumer basket (at the end of the year)	14547	12721
The ratio of cash income to the cost of the consumer basket	1,78	1,69
Gross regional product, per capita, rub.	337990	206712
Revenues of the consolidated budget of the subject, mln. rub.	85509	99465
Revenues of the consolidated budget of the subject per capita, rub.	86697	42045
Foreign trade turnover, mln.	7047	968,4

Considering the demographic, ethnic, ekistics factors of border regions development, it should be noted that the dominance of the titular nation in the national composition of the population does not make much difference between regions: 86.4% of Russians in the Kaliningrad region and 93.9% in the Altai Krai. The structure of settlement in the Altai Krai is more optimal than in the Kaliningrad region, where 47.4% of the region's inhabitants live in the regional center (26.8% in Barnaul), and the population in the secondary urban center is almost 12 times higher than in the major one (in the Altai Krai, this ratio is slightly higher than 3). The most significant differences between regions are manifested in the demographic situation: the Kaliningrad region is characterized by increasing migration dynamics - from +4 ppm in 2008 to +10 ppm in 2016, in contrast to the growing negative migration balance in the Altai Krai (respectively: -2.0 and -2.7 ppm). Since 2000, the population in the Altai Krai has decreased by 10.8%, while in the Kaliningrad region it has increased by 2.9%.

Regarding the Kaliningrad region, it should be noted after G. Fedorov (2018) that the maritime situation clearly has a positive effect on its more favorable demographic and socio-economic characteristics. In general, the border regions, including the Altai Krai, being peripheral (according to the polarization hypothesis), find themselves in a demographically more difficult position than the internal ones (especially if the barrier functions prevail over the contact ones). To identify the subtype of the border region, we will conduct a comparative assessment of the regional development dynamic factors for both the Kaliningrad region and the Altai Krai in 2008 and 2016 (Table 2).

**Table 2.** Dynamic factors of regional development of the Kaliningrad region and the Altai Krai in 2008 and 2016 (Data source: Compiled and calculated on [http://www.gks.ru/bgd/regl/b17\\_14s/IssWWW.exe/Stg/.doc](http://www.gks.ru/bgd/regl/b17_14s/IssWWW.exe/Stg/.doc))

		GRP per capita (thousand rubles)	Foreign trade turnover per capita (US dollars)	The ratio of nominal wages to the cost of consumer goods and services	Migration growth (+) or loss (-), pers. per 1000 total population
The Kaliningrad region	2008	193,9	10799	2,06	+4,0
	2016	338,0	7140	2,02	+10,0
The Altai Krai	2008	107,4	790	1,61	-2,0
	2016	206,7	409	1,67	-2,7

As can be seen from table 2, the social development factors of the two border regions are somewhat better in the Kaliningrad region, since the level of per capita cash income and the ratio of income and nominal wages to the cost of consumer goods and services are higher than in the Altai Krai. Although it is worth noting the decline of this indicator in the Kaliningrad region from 2.06 in 2008 to 2.02 in 2016, against the growth in Altai Krai from 1.61 to 1.67, which is primarily due to the greater orientation of the Kaliningrad regional consumer market for imported goods, which in the conditions of decrease in the exchange difference of the national currency led to a more significant increase in prices. Economic factors were described with three main indicators, i.e. gross regional product, foreign trade turnover and the consolidated budget of the region. All economic indicators of the effectiveness of regional development per capita are significantly higher in the Kaliningrad region.

The gross regional product in 2016 amounted to 338 thousand rubles per capita (in the Altai Krai - 206.7 thousand rubles), and the revenue of the consolidated budget is 86.7 thousand rubles per capita (in the Altai Krai it is 42.0 thousand rubles.). But the difference in the gross regional product between the regions gradually decreases: if in



2008 the gross regional product per capita of the Altai Krai was 55.4% of the level of the Kaliningrad region, then in 2016 this figure was 61.1%. However, this was not due to higher rates of economic development, but due to the multidirectional dynamics of population change: growth in the Kaliningrad region and decline in the Altai Krai.

The most significant difference between the regions is manifested in the foreign trade turnover of the regions: \$ 7,140 per capita in 2016 in the Kaliningrad region and only \$ 409 in the Altai Krai, with an average Russian figure of \$ 3,215.

These economic indicators confirm the Kaliningrad region to be one of development corridors, and the Altai Krai to be a stable peripheral resource region in accordance with the considered typology of border regions.

### **EVALUATION OF THE TOURIST CHOICES OF THE RF BORDER REGIONS POPULATION (ON THE EXAMPLE OF THE KALININGRAD REGION AND THE ALTAI KRAI)**

The tourism sector in the Kaliningrad region and the Altai Krai is quite developed and has developed dynamically in recent years, especially after 2013. In 2016, 1,300 tourists visited the Kaliningrad region and 2050 people came to the Altai Krai (<http://tourism.gov39.ru/>; <http://alttur22.ru/pages/turizm-v-cifrah-v-altayskom-krae>). In the national tourist rating of the Information Communications Center "Rating" for 2016, Altai Krai ranks the 7<sup>th</sup>, while the Kaliningrad Oblast is the 9<sup>th</sup> (<http://russia-rating.ru/info/10950.html>). Although Altai Krai is rated higher for tourist attractiveness, the density of tourist flows is higher in the Kaliningrad region: 1.32 tourists per region or 86 tourists per km<sup>2</sup>. In the Altai Krai, these figures are 0.9 tourists per capita and 12.2 tourists per km<sup>2</sup>. At the same time, both border regions specialize in health tourism and have areas with the status of federal resorts: for example, Belokurikha in Altai or Svetlogorsk in the Kaliningrad region.

The number of sanatorium and recreation centers in the Altai Krai significantly exceeds that in the Kaliningrad region. Also, in these regions gambling and entertainment zones have been established. Both regions have a high level of development of rural and event tourism. However, it should be noted the low level of inbound foreign tourism and, if in the Kaliningrad region it reaches a figure of 10% of the total tourist flow, in the Altai Krai the share of foreign tourists is only 0.5%. When it comes to outbound tourism there are significant differences in travel destinations. In the Altai Krai, the share of travel to other Russian regions is high in sales of package tours, 72.2% go to other regions of Russia and 27.8% in other countries. In the Kaliningrad region, they are more focused on foreign tourism than on holidays in Russia: 70.7% travel to other countries and only 29.3% travel around Russia (<http://akstat.gks.ru/wps/wcm/connect/rosstat/ts/akstat/resources/.htm>; [http://kaliningrad.gks.ru/wps/wcm/connect/rosstat\\_ts/kaliningrad/resources/](http://kaliningrad.gks.ru/wps/wcm/connect/rosstat_ts/kaliningrad/resources/)).

To assess the impact of the typology of these regions and their border location on the population tourist orientation, including that of young people, a survey of students whose major is geography or tourism was conducted in the Immanuel Kant Baltic Federal University and Altai State University. The choice of these study fields was determined by a higher level of knowledge about countries and destinations so that to reduce the number of random responses and provide for comparability of the groups. The survey methodology is presented in the work of T. Studzieniecki (2018).

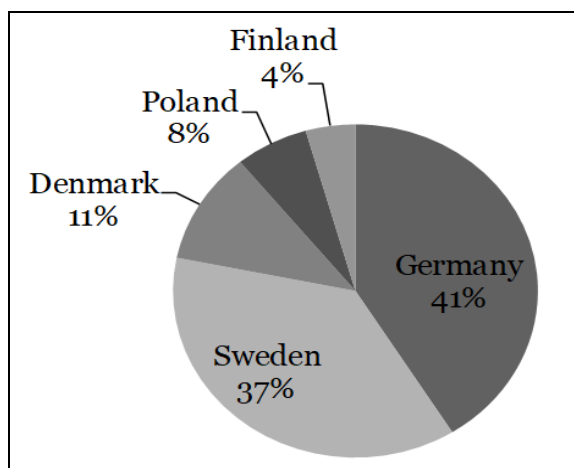
The question "Where would you go with a tourist purpose?" emphasized the tourist attractiveness of border countries and cross-border macro-regions. Altai students in their responses identified 43 countries, and Kaliningrad residents only 29, which partly indicates a better formation of tourist preferences, and higher proportion

of people traveling abroad. Country preferences also have a significant difference. In the Altai Krai, countries such as Italy, USA, Norway and China received the highest preference among young people (from 10 to 12 answers out of 161 or from 6.2% to 7.5% of the respondents), while in the Kaliningrad region Germany was the top choice for 15, 8% of respondents and Sweden for 14.2%. Of greatest interest is the tourist orientation to the border countries and cross-border macroregions. Only 3.1% of Altai respondents (in Kaliningrad, -o) mentioned bordering Kazakhstan.

In Kaliningrad, Poland was chosen by 2.5% of the respondents, and no one mentioned Lithuania. Why do such a small number of respondents choose bordering countries for traveling? The main reason relates to the fact that the majority of respondents have already visited these countries: 66.7% of respondents have visited Lithuania, and 65% have been to Poland. To this is added the so-called accessibility phenomenon, when a short-term trip to a neighboring country or region is easily made at any convenient time and with no planning.

For a cross-border macroregion, the situation is somewhat different. Less remote Asian countries, including Kazakhstan, Mongolia and China, account for 13% of potential tourist demand from the Altai Krai. Having added South Korea and Japan, this figure rises to 18%. As for Kaliningrad, the potential demand for this region amounted to only 2.4% (one response per China, Japan and South Korea).

The Baltic Sea region, which includes the Kaliningrad region as well, is more attractive for tourists: 38.4% of respondents would like to visit the Baltic region countries from Kaliningrad, and 6.2% from the Altai Krai (Germany, ranked first, is likely to be visited by 5% of respondents). The distribution of potential tourist demand for the Baltic region from the side of Kaliningrad students was: Germany - 41.1%, Sweden - 37.1%, Denmark - 10.9%, Poland - 6.5% and Finland - 4.4% (Figure 2).



**Figure 2.** Structure of potential tourist demand for the Baltic Sea region countries by Kaliningrad students

As it can be seen from Figure 2, none of the respondents identified the Baltic countries (Lithuania, Latvia, and Estonia) as potential travel destinations, which is primarily associated with a negative assessment of the political situation and inter-ethnic relations, in particular official attitudes towards the Russian-speaking population.

When travelling, visa formalities cause the greatest troubles, - for 54.2% of all interviewed, while financial well-being - 45.8%. For Altai students, these problems are

more acute, given the distance from the main centers of tourism and the lack of visa centers and consulates. Even for visa-free countries, the cost of tours between regions is significantly different. For example, for the most popular outbound destination, the cost of an all included tour package in a five-star hotel in Turkey for 10 nights (other things being equal) in July 2018 was 61479 rubles from Kaliningrad and 77722 rubles from Barnaul which is 16 thousand rubles more.

For weekend tours there is also a big difference due to the remoteness of cities, which leads to higher travel costs and reduce the time spent in the tourist center. According to the Autodispatcher (<https://www.avtodispatcher.ru/distance/>), in the vicinity of 100 km from Kaliningrad's there are urban centers with a population of over 100 thousand: Elblag, Poland, is 102 km away, Klaipeda, Lithuania, is 136 km away and Berlin is 684 km away. In Barnaul, the situation is different because of the peripheral nature of the situation: the distance to Pavlodar in Kazakhstan is 517 km, to Astana - 1027 km, and to Beijing - 4380 km. The cost of air travel from Kaliningrad to Berlin is 9,278 rubles, and from Barnaul - 28,390 rubles.

Thus, residents of the Kaliningrad region, including students, have a number of advantages in implementing their tourism plans compared to residents of the Altai Krai and are more oriented towards neighboring countries.

## CONCLUSION

The study was based on several ideas: firstly, the development of cross-border relations and participation in various forms of cross-border cooperation is an important tool for overcoming the negative consequences of the peripheral character of border regions, secondly, the types of border regions from core regions to transition crisis regions determine behavioral characteristics of the population.

At the same time, in the early stages of the development of border regions, tourism can be one of the mechanisms to start developing cross-border cooperation with subsequent transformation into a diversified economic center due to the multiplication effect and favorable investment climate. The border Kaliningrad region as a development corridor brings significant economic advantages in the development of cross-border relations in comparison with the Altai Krai, which belongs to peripheral resource regions. These advantages are transformed into a higher standard of living of the population, which ultimately determines the tourist preferences.

Research on tourism preferences can influence the adjustment of marketing policies with respect to a number of destinations, as well as the coordinated development of border areas of neighboring states, with the aim of diversifying the economy and creating favorable conditions for stimulating inbound tourism.

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## **MODELING KEY SELECTED MULTISENSORY DIMENSIONS ON PLACE SATISFACTION AND PLACE ATTACHMENT AMONG TOURISTS IN VICTORIA FALLS, ZIMBABWE**

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**Abstract:** This study investigated the influence of multisensory dimensions on place satisfaction and attachment in the African tourism context. Using a data set consisting of 151 tourists who had visited the Victoria Falls of Zimbabwe, the study examines the relationships involved. All the posited six hypotheses are supported. The results indicate that the relationship between sight, sound and place satisfaction, as well as the relationship between place satisfaction, place dependence, place identity, place affect, and place social bonding were significantly positive. The research paper discusses both the academic and the managerial implications of the results, and future research directions are suggested.

**Key words:** Sight, sound, place satisfaction, place attachment, Zimbabwe

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### **INTRODUCTION**

Due to the local activities, a lovely natural landscape, important individuals, or symbolic meanings, tourists form an attachment to a destination (Yuksel et al. 2010). Gross and Brown (2008) propose that the amount of tourist participation in a location is favourably linked to the degree of place attachment of the visitors concerned. Yuksel et al. (2010) verify that the intention to revisit the site can be efficiently predicted by location

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attachment. Hidalgo and Hernandez (2001), therefore, indicate that individuals develop a desire to remain close to specific locations. Individuals are also claimed to describe themselves as belonging to certain locations (Stedman, 2002). Thus, in relation to particular settings, they may shape their identity (Shamsuddina & Ujangb, 2008). The attachments concerned may occur on various scales, such as a neighbourhood, a certain landscape, a village, or a bigger region than the aforementioned (Schilar & Keskitalo, 2018). As far as tourism actors are concerned, individuals are possibly connected to the built tourist 'location', or make sense of location alongside other geographical scales (Schilar & Keskitalo, 2018). Connections, or bonds, between people and sites are conceived as site attachments (Line et al., 2018; McDowell, 2018; Woosnam et al., 2018). Previous studies have demonstrated place importance in predicting revisit behaviour or behavioural intent (e.g. Lee et al., 2012; Loureiro, 2014) and how place attachment mechanisms play a different role in terms of tourism decision-making (e.g. Kil et al., 2012; Lee et al., 2012; Prayag & Ryan, 2012). This discussion is inconclusive, because the majority of the previous studies include place attachment with only two or three sub-dimensions (e.g. Kuo et al., 2018). The amount of research undertaken into place attachment combined with the four sub-dimensions (i.e. place identity, place dependence, place social bonding, and place affect) (e.g. Xu et al., 2016) has, so far, been limited.

Against the above-mentioned background, and based on the discussion of the importance of place attachment, it is essential to note that the prior researchers within the African context have, among others, examined place attachment in different settings, focusing on place attachment and on living arrangement determinants in a family house in Ibadan, Nigeria (Akinjokun et al., 2018); on gated nature and its role in establishing place attachment and place of identity in post-apartheid South Africa: on analysis of the private housing property in Grotto Bay (Ramsawmy, 2017); on place attachment in Newtown, Johannesburg (Van Loggerenberg, 2007); and on the background of the allegiance of visitors to Mauritius with regard to the role and impact of the target picture, attachment, private participation, and happiness (Prayag & Ryan, 2012). Along such lines, there appears to be a lack of research into the key multisensory dimensions influencing place satisfaction and place attachment, leading to the basic motive behind the current inquiry being to fill the existing gap in knowledge pertaining to the above. Furthermore, no, or few, researchers have yet used structural equation modelling (SEM) to assess the causal relationships of sight, sound, place satisfaction, and place attachment dimensions to the utmost understanding of the investigators involved. The research model is also unique in terms of its robustness in relation to the study in question. Moreover, the study gap limits the holistic knowledge of the perceptions, experiences and behaviours of tourists. Furthermore, the impact of place attachment on the intention of visitors to revisit is contentious. Some studies conclude that place attachment directly predicts revisit behavioural intent (e.g. Loureiro, 2014; Shi et al., 2016), while others address the indirect impact through other mediating factors, such as location satisfaction, or attitude (e.g. Lee et al., 2012).

The absence of a solid theoretical context is ascribed to the inconclusive explanations as yet given for the connection between location attachment and revisit conduct. To tackle the existing gaps, the present research uses the interpersonal attachment theory to enhance the clarification of the theoretical connection between place satisfaction and place attachment, by means of revisiting the issue of destination, using the chosen multisensory dimensions of the visitors concerned. The current article is structured as follows: the theoretical grounding is provided, followed by the conceptual framework. The literature review, together with the hypothesis statements, is presented. The research design and

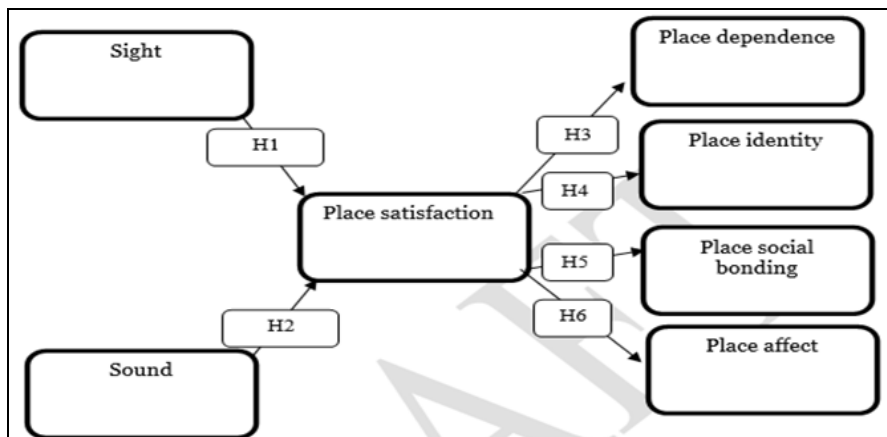
methodology, as well as the study demarcation area, is then described, the findings submitted, and the central issue discussed. The final parts of the article address the implications, constraints and instructions of the present research for future studies.

## THEORETICAL GROUNDING: THE INTERPERSONAL ATTACHMENT THEORY

To attain a clear understanding of the context of the present research, the current study is anchored within the framework of the interpersonal attachment theory, which is deemed to provide an appropriate theoretical grounding for the study.

The attachment theory describes the innate human need to form affectionate bonds (Bowlby, 1980). Additionally, the theory propounds that attachment to figures is an inborn behavioural system (Chinomona & Maziriri, 2017). Amin and Malin (2012) point out that, according to the theory in question, a child shows separation anxiety and distress as soon as a parent or significant other is no longer present. Such behaviour indicates attachment to place, with the consumer showing feelings of regret and sorrow when the desired object is no longer available (Amin & Malin, 2012). Conversely, Moussa and Touzani (2013, p. 339) argue that many of the attachment theory's premises are transferable to the consumer-brand relationship. According to Ismail and Ali (2013, p. 55), the basic underlying premise of attachment theory is "Separation Distress", which refers to the extent to which consumers show their emotions when they are exposed to real, or imagined, separation from an object of strong attachment. Thomson (2006) suggests that the attachment theory can have input into the conceptualisation of destination marketing, because of the distinctive qualities pertaining to an attachment.

Therefore, based on the authors' explanations, it can be noted that, the consideration of attachment theory could assist the tourism managers at various natural tourism geographical sites to gain a thorough understanding of what motivates tourists to seek satisfaction from, and, ultimately, to become attached to, a place like Victoria Falls.



**Figure 1.** Conceptual framework

### Conceptual Model and Hypothesis Development

The connection between variables investigated in the research is described in terms of a conceptual model (Maziriri et al., 2018). Furthermore, Maziriri et al., (2018) note that

a conceptual model schematic diagram enables the viewer to visualise the theoretical interactions between the factors in the model, and, thus, to ascertain quickly how a leadership issue can be solved. The conceptual model in the present research indicates that sight and sound are the predictor variables.

In addition, the model also suggests that place satisfaction is the mediator variable. Moreover, the dependent, or outcome, variables for the current study model are place dependence, place identity, place social bonding, and place affect. Based on a synthesis of the converging literature related to the research variables concerned, a conceptual model was, accordingly, proposed to guide the empirical study, as is shown in Figure 1.

## LITERATURE REVIEW

### Sight

Sight has commonly been recognised as a sensory dimension impacting on the subjective perception of visitors, as well as on consequent conduct, and choice of destination (Mao & Lyu, 2017; Miller et al., 2017; Hartwell et al., 2018; Wu et al., 2018). Tourism management theorists have defined sight (destination image) as consisting of a set of impressions, ideas, expectations, and emotional thoughts that tourists hold of a place (Foroudi et al., 2018; Lin et al., 2011), representing the associations and pieces of information related to a destination (Rahmani et al., 2019). Destinations with more favourable pictures are thought to be more likely to be included in the decision-making process. Furthermore, the holding of a destination picture has a beneficial impact on perceived quality and satisfaction (Papadimitriou et al., 2018). Increased tourist satisfaction results in a comparatively favourable picture. In the above-mentioned context, the Victoria Falls is seen as one of the world's most dramatic natural attractions (Cosgrove, 2018). Affectionately known as 'Mosi-oa-Tunya', meaning the smoke that thunders, the Falls consist of a towering spray column that drops away in a beautiful cascade, when the Zambezi River is high. The Victoria Falls are known as the favourite tourist attraction in Zimbabwe, and throughout most of Africa, due to the amazing views, landscapes and broad variety of operations that are associated therewith (Matura & Mapira, 2018).

*Hypothesis 1: Sight positively influences tourists' sense of place satisfaction.*

### Sound

Sound, which is a basic component of immersing visitors in 'sensing' the destination of tourism, plays a key role in shaping the experiences and the happiness of tourists in terms of destinations (Henrique de Souza et al., 2018). As noise is an important component of tourist attractions and tourism products, the sound of a destination is described as the nature and magnitude of the auditory component that is perceived by visitors at a destination (Neuburger et al., 2018). The sound environment generated at the location, thus, adds considerably to the general tourism experience of the tourists visiting there. In addition, the presence of sound emphasises the interrelationships between listeners, sounds and the surrounding environment, and takes into consideration the destination's social, cultural and aesthetic significance (Al-Saad et al., 2014). The Victoria Falls is one such place, with it being characterised by the thunder of falling water, the stunning gorge, and the quiet lagoons upstream, where hippos and crocodiles reside (Davidson, 2012). Against such a background, therefore, efficient sound management is as essential as is maintaining the visual picture of a destination. The above is so because sound can improve the picture of a destination, and it may also define a feeling of location.

*Hypothesis 2: Sound positively influences tourists' sense of place satisfaction.*



**Place satisfaction**

Ramkissoon et al., (2012) describe place satisfaction as consisting of the perceived quality of an environment in terms of meeting the requirements of tourists relating to the physical characteristics and facilities concerned. Those individuals who are relatively well attached to a natural environment are more likely to be satisfied by the place than are others who are less well attached to it (Prayag & Ryan, 2012). Place satisfaction is seen as a key to the achievement of many tourist destinations (Chen & Dwyer, 2018). Emotions are seen to play a significant part in the creation of satisfaction by tourism attractions (Yan et al., 2018). Place satisfaction consists of a multidimensional summary judgment of the perceived performance of an environment, in regard to whether it meets the requirements of an individual in terms of the physical features of a place, as well as its facilities and social dimensions, according to Han et al. (2019). Although some studies, including that of Eusébio et al., (2018), have shown the connections between the dimensions of place attachment and place satisfaction, further study is justified in terms of investigating the connection between the two constructs. Evidence indicates that place attachment, which is conceptualised as place dependency, place identity (Eusébio et al., 2018; Prayag et al., 2018), and place influence (Prayag et al., 2018), can play a substantive role in predicting the levels of tourist satisfaction experienced. However, the literature still has to establish the connection between place social bonding and place satisfaction (Ramkissoon et al., 2012). Thus, place satisfaction and place attachment in today's competitive market are viewed as being key to the achievement of nature-based attractions (Schilar & Keskitalo, 2018).

**Place attachment**

Place attachment relates to the emotional and psychological bonds that have been established between a person and a specific place (Fu et al., 2019), as well as to the extent to which people value, and identify with, specific environmental environments (Ballantyne et al., 2018). Han et al., (2019) state that a place attachment can be understood in relation to individuals within a natural setting, in terms of which identification, gratification, and concern for distinctive environments is evoked, thus affecting the related human affections, perceptions, and behaviours (Eller & Frey, 2019). Place attachment is, therefore, considered to be a unique marketing force for tourism, which has a significant effect on the creation of the attitude allegiance of the tourist, and which revisits the conduct adopted towards the destination (Lai et al., 2019). Studies have shown that place attachment also plays a significant part in tourist experiences covered in tourism research (Io & Wan, 2018), as place attachment intensity enhances loyalty and revisit behaviour (George & George, 2012). Positive tourism experiences can determine the satisfaction of visitors and their emotional attachment to a destination (Io & Wan, 2018). The above study indicates a need to further examine the function of satisfaction in predicting place attachment, in terms of its four sub-dimensions (reliance, identity, impact, and social bonding).

**Place Dependence**

In a tourism and leisure context, place dependence is described as visitors' functional attachment to a specific place, and their awareness of the uniqueness of a setting, which contributes to meeting their visitation goals (Silva et al., 2018). Such functional attachment reflects the importance of a resource in providing required services for desired recreational activities (Abou-Shouk et al., 2018), with it being embodied in the physical characteristics of a setting (e.g. the Victoria Falls) (Wiltshire et al., 2019).

*Hypothesis 3: Place satisfaction positively influences tourists sense of place dependence.*

### **Place Identity**

Shamir and Eilam-Shamir (2018) state that place identity refers to the connection between a place and one's personal identity, with it containing both cognitive and affective elements. Natural settings, like the Victoria Falls, offer individuals the opportunity to develop a sense of identity with a place (Chen et al., 2018), due to the latter's uniqueness, or distinctiveness, from other places (Truong et al., 2018). Several researchers have operationalised place attachment, using just the two sub-constructs of place dependence and place identity (e.g. Combrinck, 2018; Truong et al., 2018).

*Hypothesis 4: Place satisfaction positively influences tourists sense of place identity.*

### **Place Affect**

Some researchers conceptualise place attachment as including place affect (Kals et al., 1999; Ramkissoon et al., 2012). While, in the environmental psychology and tourism literature, destinations are widely acknowledged as being grounded in environmental and social experiences (Price et al., 2018; Schild, 2018), they also note an affective link that individuals develop by building their sentiments about the place (Slaby et al. 2019). Within the context of the current study, affective connection with Victoria Falls generates a sense of psychological well-being for tourists. Therefore, it is evident that natural settings tend to further increase positive emotions in individuals about the setting (Fonagy, 2018a; Wyles et al., 2019). Individuals with relatively extensive experience with natural environments might express stronger emotional attachment with those environments than do those with less experience of such environments (Wood & Kenyon, 2018).

*Hypothesis 5: Place satisfaction positively influences tourists sense of place affect.*

### **Place Social Bonding**

Another sub-dimension of place attachment is place social bonding. A place can be valued by an individual, due to it facilitating the development of interpersonal relationships (Moulay et al., 2018), and due to it fostering a sense of 'group belonging' (Truong et al., 2018). In terms of such spatial contexts, individuals tend to develop communal bonds with others through people-place interaction (Wellman, 2018; Jovchelovitch, 2019). Fonagy (2018b) and Ramkissoon et al., (2018) argue that natural settings set the context for social experiences which, if they are maintained in such settings, are likely to lead to relatively high levels of attachment. Place social bonding was found to be a strong predictor of place attachment by Tumanan and Lansangan (2012). Social bonds, in fact, can be the primary source of meaning in some contexts (Fonagy, 2018b). Taken together, the multivalent nature of place illustrates the cultivation of place attachment through dependence, identity, affect, and the socially shared experiences associated with the place. The above review suggests that place attachment is a multidimensional construct consisting of place dependence, place identity, place social bonding, and place affect. Each sub-construct is conceptually different from the others, with it reflecting the various underlying dimensions of place attachment (Fonagy, 2018a; Ramkissoon et al., 2018; Wyles et al., 2019).

*Hypothesis 6: Place satisfaction positively influences tourists sense of place social bonding.*

## **MATERIALS AND METHODS**

The current study submits to the positivist paradigm, since it intends to test several a priori hypotheses to determine the relationships concerned existing between the independent and dependent variables. The authors selected to adopt a quantitative research approach, since the application of such an approach increases the degree of

accuracy attained through statistical analysis. The adoption of the design justified requesting the required data related to sight, sound, place satisfaction, place dependence, place identity, place affect, and place social bonding.

The Victoria Falls is one of the most famous geographical characteristics of the African continent as a whole. The international fame of the Falls relies heavily on concepts of natural form and beauty rooted in European romantic and natural history traditions, which have earned it a prominent place in the worldwide lexicon of natural wonders (McGregor, 2003). In addition, the town of Victoria Falls is Zimbabwe's most prominent tourist destination, with it being chosen as the country's main attraction, and the main venue for Africa's basketball (Mudimba & Tichaawa, 2017). The destination offers such prominent tourist-related activities as bungee jumping, gorge swinging, abseiling, elephant-back paths, and cheetah walking, which distinguishes it from other locations on the continent (Mudimba & Tichaawa, 2017). The current study centres on the Victoria Falls, and on visitors to the destination.

### Research Instrument and Questionnaire Design

Table 1 depicts the demographic data of the participants, including their gender, age, marital status, and frequency of visits to the Victoria Falls. The respondents were found to be mainly women (57.6%), with the average age of the respondents being under 30 years old (54.3%). Of the respondents, 57% were single. Their degree of agreement with the statements made was indicated on a scale of 1 (strongly disagree) to 5 (strongly agree).

### Participants and Sampling

Table 1 displays the depiction of the participants. The respondents were requested to report their demographic data, including gender, age, marital status and frequency of visit to the Victoria Falls. The respondents were mainly females (57.6%). The average age of the respondents was under 30 years (54.3%). Fourty-three per cent of the respondents were married.

**Table 1.** Sample demographic characteristics

Characteristics	Frequency	%
<b>Gender</b>		
Male	64	42.4
Female	87	57.6
Total	151	100.0
<b>Age</b>		
≤30	82	54.3
31–60	51	33.8
≥60	18	11.9
Total	151	100.0
<b>Marital status</b>		
Married	65	43.0
Single	86	57.0
Total	151	100.0

## RESULTS AND DISCUSSIONS

The research model developed in the present investigation was tested using partial least squares (PLS), which is a variance-based structural equation modelling approach (Subramaniam et al., 2017). Additionally, Monecke and Leisch (2012, p. 3) elucidate that “SmartPLS is stand-alone software specialized for PLS path models and it is built on a Java Eclipse platform making its operating system independent”. Partial least squares can

facilitate the assessment of both the measurement and structural models (Subramaniam et al., 2017). The current study utilised PLS for two main reasons: firstly, the aim of the study was oriented towards the prediction of the dependent variable (Chin, 2010), and, secondly, the latent variable scores were used in the subsequent analysis for predictive relevance (Hair et al., 2011). Furthermore, Hair et al., (2011) stress that such arguments have led to the widespread acceptance of PLS in research. Specifically, the present study used the smart PLS approach introduced by Ringle et al., (2005).

**Table 2.** Accuracy statistics table

Research constructs	PLS code item	Descriptive statistics*		Cronbach's test		CR	AVE	Measurement item loadings
		Mean	SD	Item-total	Cronbach's alpha value			
Sight	ST1	3.03	1.300	0.716	0.713	0.843	0.646	0.898
	ST2			0.784				0.856
	ST3			0.750				0.632
Sound	SD1	3.79	1.655	0.741	0.851	0.891	0.581	0.834
	SD2			0.872				0.904
	SD3			0.781				0.765
	SD5			0.775				0.618
	SD6			0.767				0.802
	SD7			0.719				0.603
Place satisfaction	PS1	3.10	1.133	0.718	0.719	0.843	0.642	0.843
	PS2			0.754				0.819
	PS3			0.726				0.739
Place dependence	PD1	3.23	1.239	0.736	0.794	0.876	0.702	0.868
	PD2			0.739				0.852
	PD3			0.729				0.790
Place identity	PI1	3.37	1.394	0.815	0.850	0.909	0.769	0.884
	PI2			0.843				0.908
	PI3			0.853				0.837
Place affect	PA1	3.63	1.470	0.621	0.615	0.757	0.519	0.500
	PA2			0.741				0.801
	PA3			0.798				0.816
Place social bonding	PSB1	3.90	1.588	0.774	0.670	0.749	0.622	0.992
	PSB3			0.771				0.509

Note: ST = Sight; SD = Sound; PS = Place satisfaction; PD = Place dependence; PI = Place identity; PA = Place affect; PSB = Place social bonding.

The researchers checked the measurements' reliability and validity. The reliability of the study was checked using mainly the composite reliability (CR) and Cronbach's alpha values. To ensure the convergent validity of the study, the researcher checked whether the items loaded on their respective (a priori) constructs with loadings greater than 0.5, while the discriminant validity was checked by means of the use of the average variance extracted (AVE) value, and by means of ensuring that no significant inter-research variable cross-loadings were present (Chin, 1998). Moreover, the statistical measures of accuracy tests, as shown in Table 2, specify the different measures that were used to assess the reliability and validity of the constructs for the study.

Confirmatory factor analysis (CFA) was employed, and the SEM was estimated with the PLS data. Table 3 and Figure 2 depict the CFA findings that were made,

whereas Table 4 and Figure 2 summarise the SEM findings. The CFA was used to evaluate the measurement model, representing the outer model in PLS. Maria and Yusniza (2016:1) mention that the purpose of the measurement model is to “evaluate the reliability and validity of variables”. Table 2 shows that the item-total correlation value lies between 0.621 and 0.872, which is above the cut-off point of 0.5, as recommended by Anderson and Gerbing (1988, p. 411). The higher inter-item correlations reveal convergence among the measured items. Nunnally and Bernstein (1994, p. 1) explain that “alpha values should exceed 0.6”. All variables in the current study represented good reliability, with the Cronbach’s alpha being between 0.615 and 0.851.

The study also used CR values in testing the reliability of the five research constructs, with the values ranging between 0.749 and 0.909. The values obtained from the CR exceeded the acceptable reliability score of 0.7, thus validating the internal consistency of the five research construct measures, according to Nunnally and Bernstein (1994). The result shows that the AVE of the study ranged between 0.519 and 0.762. The AVE values exceeded the recommended 0.40, indicating a satisfactory measure (Anderson & Gerbing, 1988, p. 411). As shown in Table 2, “loadings of all items should be more than the suggested value of 0.5” (Hair et al., 2009 p. 23). Factor loadings in the study met the specification of the recommended value of 0.5, ranging from 0.500 to 0.992. Items PSB2 and SD4 were deleted, due to the low factor loadings that were below 0.5. The remaining items fulfilled the requirement of reliability and convergent validity. According to Hair et al., (2013, p. 13), discriminant validity refers “to items measuring different concepts”. Table 3 indicates the results of discriminant validity obtained.

**Table 3.** Results of discriminant validity analysis

Variables	ST	SD	PS	PD	PI	PA	PSB
ST	1.000	-	-	-	-	-	-
SD	0.494	1.000	-	-	-	-	-
PS	0.343	0.540	1.000	-	-	-	-
PD	0.491	0.565	0.347	1.000	-	-	-
PI	0.294	0.447	0.566	0.501	1.000	-	-
PA	0.527	0.402	0.537	0.488	0.412	1.000	-
PSB	0.342	0.458	0.500	0.478	0.312	0.234	1.000

Note: ST = Sight; SD = Sound; PS = Place satisfaction; PD = Place dependence; PI = Place identity; PA = Place affect; PSB = Place social bonding.

### Inter-construct Correlation Matrix

Nunnally and Bernstein (1994) have shown that one of the methods used to check for the discriminant validity of research constructs is the evaluation of whether the correlations among latent constructs are 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 in the present study are below the standard level of 0.60, which indicates the existence of discriminant validity. As shown in Table 3, the inter-construct correlation values range from 0.234 to 0.566 below the rule of thumb of 0.8 (Fraering & Minor, 2006), indicating the attainment of discriminant validity. Therefore, Table 3 above shows that the results serve still further to validate the existence of discriminant validity.

### Assessment of the Goodness of Fit (GoF)

Smart PLS, unlike the AMOS and LISREL software, does not offer the GoF measures for the full path model. Rather, the software simply gives the  $R^2$  values for the dependent variables (place satisfaction, place dependence, place identity, place affect, and

place social bonding). Nevertheless, the GoF in the current article was determined by utilising a universal GoF method, which, according to Tenenhaus, Amato and Vinzi (2004), accounts for both the quality of measurement and the structural model. The following formula was used to calculate the global goodness of fit:

$$\begin{aligned}\text{Goodness of Fit} &= \sqrt{(\text{average of all AVEs values} * \text{average of all } R^2)} \\ &= \sqrt{0.640 * 0.212} \\ &= 0.37\end{aligned}$$

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 GoF is 0.37, which exceeds the threshold of  $\text{GoF} > 0.36$  suggested by Wetzels et al. (2009). Therefore, the present study concludes that the research model has a good overall fit.

### Path Model Results and Factor Loadings

The PLS estimation results for the structural model, as well as the item loadings for the research constructs, are shown in Figure 2.

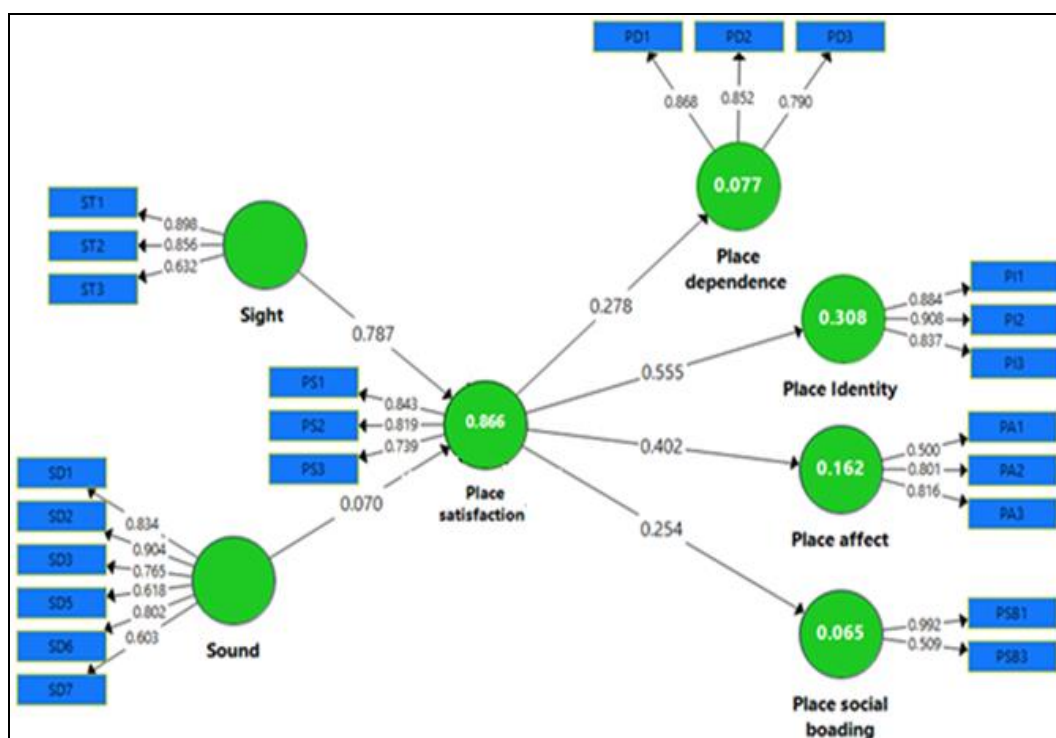


Figure 2. Path modelling and factor loading results

### Outcomes of Hypothesis Testing

In the current study, the testing of the hypothesis was determined by the path coefficient values, as well as the t-values for the structural model obtained from the bootstrapping algorithm. According to Beneke and Blampied (2012), the t-values indicate whether or not a significant relationship exists between variables within a model, and the path coefficients demonstrate the strength of the relationships in the model. Two tailed t-tests were conducted at the 5% significance level.

In the current study, the related hypothesis was supported. Figure 2 and Table 4 show that sight exerted a positive impact ( $\beta = 0.787$ ), and that it was statistically significant ( $t = 11.971$ ) in predicting place satisfaction. The result suggests that sight positively influences place satisfaction in a significant way. With regards to hypothesis two, Figure 2 and Table 4 show that sound exerted a positive impact ( $\beta = 0.070$ ), and that it was statistically insignificant ( $t = 1.614$ ) in predicting place satisfaction. The result implies that sound directly influences place satisfaction both positively and significantly. In the present study, the related hypothesis was supported.

Figure 2 and Table 4 show that place satisfaction exerted a positive impact on ( $\beta = 0.278$ ), and was statistically significant ( $t = 2.254$ ) in, predicting place dependence. The result suggests that place satisfaction positively influences place dependence in a significant way. The fourth hypothesis, which proposed that place satisfaction has a positive impact on place identity, was reinforced in the study.

**Table 4.** Results of structural equation model analysis

Path	Hypothesis	Path coefficients ( $\beta$ )	T-statistics	Decision
ST $\rightarrow$ PS	H1(+)	0.787	11.971	Positive and significant
SD $\rightarrow$ PS	H2(+)	0.070	1.614	Positive and insignificant
PS $\rightarrow$ PD	H3(+)	0.278	2.254	Positive and significant
PS $\rightarrow$ PI	H4(+)	0.555	8.943	Positive and significant
PS $\rightarrow$ PA	H5(+)	0.402	5.127	Positive and significant
PS $\rightarrow$ PSB	H6(+)	0.254	2.138	Positive and significant

Note: ST = Sight; SD = Sound; PS = Place satisfaction; PD = Place dependence; PI = Place identity; PA = Place affect; PSB = Place social bonding.

Figure 2 and Table 4 indicate that place satisfaction and place identity are supported. Place satisfaction exerted a positive influence ( $\beta = 0.555$ ) on place identity, with it being statistically substantial ( $t = 8.943$ ). The result signifies that place satisfaction is related both positively and meaningfully to place identity. In addition, the fifth hypothesis proposed that place satisfaction has a positive impact on place affect. The related hypothesis was reinforced in the present study. Figure 2 and Table 4 indicate that place satisfaction and place affect were supported. Place satisfaction exerted a positive impact ( $\beta = 0.402$ ) on place affect ( $t = 5.127$ ). The result signifies that place satisfaction is positively related to place affect. Figure 2 and Table 4 show that the related hypothesis is supported significantly. The t-statistic is 2.138. The strength of the relationship is indicated by the path coefficient ( $\beta = 0.254$ ). The finding suggests that place satisfaction has a positive impact on place social bonding.

#### **Academic and Practical Implications of the Study**

The present study offers implications for academicians. For example, an investigation of the research findings indicates that sight  $\rightarrow$  place satisfaction has the strongest mutual influence, as indicated by a path coefficient of ( $\beta = 0.787$ ). Therefore, for academicians in the field of geosites and tourism, the finding enhances their understanding of the relationship between sight and place satisfaction, as it is a useful contribution to the existing literature on the two variables.

On the practitioners' side, the current study therefore submits that tourism managers can benefit from the implications of the findings made. For example, given the robust relationship between place satisfaction and place social bonding ( $\beta = 0.254$ ), tourism managers should find ways of keeping their tourists satisfied in their environment, which would ultimately result to place social bonding among tourists.

## CONCLUSION

The current research was undertaken with the aim of investigating the impact of selected multisensory dimensions, like sight and sound, on place satisfaction and place attachment. In particular, six hypotheses were postulated.

To test the proposed hypotheses, the required data were collected from individuals in the town of Victoria Falls in Zimbabwe. The study validates the thesis that such factors as sight and sound are instrumental in stimulating place satisfaction and place attachment among Zimbabwean tourists at Victoria Falls. The managerial implications of the findings were discussed, and the limitations of the study, as well as the future research directions, were indicated. Above all, the study should add new knowledge to the existing body of tourism management literature in the African setting, which is a research context that has been under-researched in the past. Although the present study offers valuable insights into the antecedents of place attachment, it is limited, thus offering avenues for future research. The results of the study were based on a relatively small sample of 151 respondents situated in Victoria Falls, so that the findings may not be generalised to most other geosites of Zimbabwe. Therefore, future studies should consider investigating the other tourism attractions of Zimbabwe.

Doing so should offer additional insights into, and accurate research findings in relation to, the understanding of the antecedents of place satisfaction and place attachment. Furthermore, the researchers concerned adopted only a quantitative research approach. Future research might consider using a mixed-method approach, including both a qualitative and quantitative research design, as a quantitative design technique could prove to be more reliable and objective than the technique employed in the present study, due to the use of statistics to generalise the findings made.

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# Modeling Key Selected Multisensory Dimensions on Place Satisfaction and Place Attachment Among Tourists in Victoria Falls, Zimbabwe

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## **TOURISM AND NATURAL ENVIRONMENT IN THE NP TAGANAY (RUSSIA) - HABITS AND PERCEPTIONS OF THE VISITORS**

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**Abstract:** The research analyzes attitudes and habits of the visitors in the National Park (NP) Taganay on South Urals in Russia. The survey method was applied on a sample of 305 respondents in order to investigate visitors' travel habits, as well as their perceptions regarding different experiences they were exposed to. The results identified a strong positive perception regarding overall experiences from visiting the NP. Specific permanent patterns of behavior were observed and compatibility between visitors' habits and the environment was determined. The most significant variables affecting perceptions are the frequency of visits and the age. The study has identified certain concerns regarding environmental issues. Respondents were found sensitive to garbage production in public areas and the presence of noise in protected

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territory. The results of the study provide inputs for solving the long-standing conflict between nature conservation and mass tourism in Russian protected areas.

**Keywords:** visitors' perceptions, tourism, natural environment, NP Taganay, Russia

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## INTRODUCTION

NPs (NPs) are of great importance for achieving different objectives, such as realization of recreational activities, preservation of the unique natural landscapes of the territory and wildlife habitat, etc. (Brankov et al., 2017). These areas contribute to stopping the loss of biodiversity, maintaining the naturalness and beauty of the landscape and the supply of ecosystem services (Schägner et al., 2016). NPs are the highest category of protected area systems in most countries where scientists, educators, local population and other participants are allowed to meet their various needs (Ezebilo & Mattsson, 2010). Over the last few decades, there is a growing number of studies analyzing the increased request for recreational experiences in NPs (Frick et al., 2007; Tomczyk, 2011; Sessions et al., 2016; Çetin & Sevik, 2016). Academic attention has also been paid to geoecological evaluation of the recreational potentials of NPs (Popović et al., 2018). That is partially a consequence of rapid urban development, with loss of open and green spaces in urban areas that was followed by the mental and physical deterioration of one's daily living environment (Goddard et al., 2010; Çetin & Sevik, 2016). In such cases, inhabitants have begun to look for alternative places for their recreational needs. Efforts are being made to meet people's various needs through leisure facilities and recreation areas, and they are turning to natural protected areas to restore the balance (Çetin & Sevik, 2016). Consequently, for people living in cities, it is important to ensure availability of recreational areas and to meet their environmental needs (Geneletti and Dawa, 2009; Ngoka, 2013; Barros et al., 2013). Increased claims for NPs globally and other protected areas have caused a spectrum of wide influences and raised the danger of their excessive use. Visitors' experiences in NPs can affect their support.

If people feel unwelcome in – or excluded from the parks, they may be unlikely to support such parks (Byrne, 2012). Due to this, various authors suggest that understanding visitor attitudes is of great value to resource managers (Vaske et al., 1995). Also, visitors to natural areas are increasing and research of perceptions could help to seclude visitor types, which could contribute to the success of the future managerial actions (Fennel, 2001). Visitors are at the center of tourism management and represent a valuable resource for gaining information about the presence and extent of impacts, the acceptability of changes in protected area and the consequences of management actions for their experience (Chin et al., 2000). Daily (1997) claims that the whole management of recreational ecosystem services depend on how they are perceived by people.

A number of studies have assessed how park visitors' demographic and socioeconomic characteristics affect their environmental attitudes in various ways (Milanović Pešić et al., 2018; Lynn & Brown, 2003; Stern & Dietz, 1994). Baysan's study suggests that differences in environmental perceptions were more strongly connected to differences in nationality than education levels and occupation (Baysan, 2001). According to Milanović et al., 2018, visitors' perceptions are affected by their age and education. This study also shows that tourists who spend more money on a daily basis express attitudes that are more critical.

On the territory of Russia, NPs are a relatively new form of protection of natural territories (started since 1983) (Trofimova & Kozlova, 2015). Currently, there are more than 40 NPs in Russia. In present conditions, it seems necessary to extend its network, especially in areas with a strong tradition for nature-orientated sorts of tourism. According to the Concept of the development of specially protected natural areas of federal importance, another 20 NPs are planned to be created in Russia by 2020 (Ziryanov et al., 2016). The vector of development and creation of the network of protected areas has changed in modern Russia. New NPs are formed every year for which recreation is one of the main functions. However, traditions, which have been developing over a hundred years of 'self-regulating' tourism, are impossible to overcome (Ziryanov et al., 2016). For this reason, recent attempts have been made to harmonize the development of tourism with the protection of nature.

At the same time, this means defining comprehensive and wide tasks for NPs, such as preservation of unique natural and cultural complexes in ways of sustainable development of the territory and the organization of controlled tourism. The development of tourist infrastructure is only taking place when priority consideration is given to environmental restrictions, which is related to the resistance to landscape loads of the protected area (Trofimova & Kozlova, 2015). Although tourist development of this area has a certain history, there is no objective and systematically processed information on visitors' habits and perceptions in the territory of NPs in Russia. In order to improve the aforementioned scenario, this study observes the attitudes and habits of the visitors in the NP Taganay on South Urals, in the Chelyabinsk Region. In our research, we have applied methodology relying on surveys with the aim to investigate visitors' travel habits during their trip to NPs, as well as their attitudes regarding different experiences they were exposed to. In order to achieve this, two specific research questions are discussed:

1. Are the explored travel habits and attitudes of visitors in line with the natural environment?
2. Are there any differences in observed travel habits and perceptions among visitors with different socio-demographic and socio-economic characteristics?

Bivariate and multivariate statistical analysis is used for identifying and testing the relationship between socio-economic characteristics and the perception of tourism impacts.

## STUDY AREA

The NP Taganay is located in the South Urals, covering both the mountain ranges of the Southern Urals and the plateaus and the flat forest-steppe of the mountainous corner. It was declared in 1991 on the territory of the Chelyabinsk region. A total area of the park is about 568,4 km<sup>2</sup> and its south-western border reaches down to the city of Zlatoust. There are nine ranges of a meridional strike in the park. The largest ridge is the Greater Taganay (26 km long), with the highest point of the entire park – the Kruglitsa Mountain (1177,8 m) (Trofimova & Kozlova, 2015) (Figure 1). The NP Taganay is a part of newly designated UNESCO *Mountainous Urals Biosphere Reserve* that was declared in 2018. Biosphere reserve was established in the territory of a very special mining area in South Urals, where unique and protected natural areas border old industrial cities and settlements. The Reserve is fundamentally composed of three protected areas: Taganay National Park, Arshinsky Sanctuary and Turgoyak Natural Site (Gordeyev et al., 2017). About 12,000 people inhabit the site, whose main goal is to shift from extractive industries to a sustainable development model based on biological natural resource management, tourism and the rehabilitation of landscapes damaged by mining (<https://en.unesco.org/biosphere-reserves/russia/mountainous-urals>).



**Figure 1.** Location of the study area

Unique natural conditions enabled the development and survival of a variety of plant and animal life, with a significant percentage of endemic and relics. The protected area is characterized by the presence of 749 species of vascular plants, among which 42 species are included in *The Red Book of the Chelyabinsk region*, 20 species are listed in the *Appendix to the Red Data Book of the Chelyabinsk region* and 12 species are included in *The Red Book of the Russian Federation*. The protected area is characterized by a high-altitude zonation, including the mountain-forest, sub-bald mountain and mountain-tundra belts. One of the basic phenomena of NP Taganay is forest ecosystems, which cover more than 93% of the total protected area. Mixed forests of fir and spruce are the

most common for the mountain forest belt and occupy a well-humidified western and central part of the park (the Greater Taganay Range, Yurma Range, Itsyl Range). The sub-bald mountain belt is represented by rare fir forest areas, usually with an admixture of birch, together with the lichen or moss cover and blueberry in a shrub-grass layer. There are also the stone rivers and mountain high-grass meadows. The peaks of the mountains are occupied by mountain tundra, with large areas of rocks outcrops – huge stone placers, devoid of vegetation (<https://www.taganay.org>).

The territory of the NP Taganay is inhabited by 56 species of mammals; 192 species of birds; 6 species of reptiles; 3 species of amphibians and 14 species of fish (<https://www.taganay.org>). Of the total number of species of wildlife living in the NP, *The Red Book of the Chelyabinsk region* includes 73 species and *The Red Data Book of the Russian Federation* includes 17 species. NP Taganay is a well-known tourist destination of the Chelyabinsk region. Generations of visitors and travelers have passed through the mountains and intermountain valleys of the NP well before its establishment.

Today, there are 6 tourist routes and 7 ecological paths with a total length of over 200 km, which takes from several hours to 5 days (Trofimova & Kozlova, 2015). One of the most popular routes goes along the eastern slope of the Greater Taganay Range. At the same time, the territory of the NP Taganay is part of Zlatoust's mining district, a highly industrialized area. With the development of mining and metallurgy in the Urals, that began two centuries ago, nature has undergone a significant transformation. In order to reduce additional negative impacts on the environment and ecosystems, management of the NP pays special attention to create conditions for organized and controlled tourism and raise the ecological awareness of the park's visitors. Some of the NP's most important tasks are forming conditions for regulated recreation and getting to know natural and historical sites with soft methods of nature management. In this sense, the territory of the NP is divided into different zones of protection (Trofimova & Kozlova, 2015).

## METHODOLOGY

A survey was applied as a methodological procedure in the data collection. The survey was conducted in August 2018 in the area of the NP Taganay. During the preparation of the survey, the methodological procedure for the analysis of indicators of sustainable tourism was used, proposed by the World Tourism Organization (WTO, 2004) and adapted for the investigated area in agreement with the management of the NP. Authors used the questionnaire model related to the satisfaction of tourists. In order to examine the various dimensions of the views of respondents, and especially to obtain precise information when testing was performed, a mixture of alternative questions and statements was used. The sample consisted of 305 respondents, of which 167 were male and 138 were female. Respondents lived outside the area of NP Taganay and were approached randomly, usually near the tourist's facilities or after the individual was leaving the attraction. The survey was carried out by a written survey and filling was made after oral responses obtained from respondents. The survey was conducted by researchers of the South Ural State University, Institute of Sport, Tourism and Service.

The questionnaire comprised two main sections. The first section captured visitors' habits during travelling and coming to the NP, as well as their activities and visits to the localities. This part of the questionnaire consisted of six questions. The visitors were asked about the reason and the number of visits to the NP, as well as the type of transport they have used and the type of accommodation they have stayed in. Also, they were asked about activities they had during their stay in the NP Taganay and about the sites they visited. The second part of the questionnaire aimed to measure visitors' perceptions of

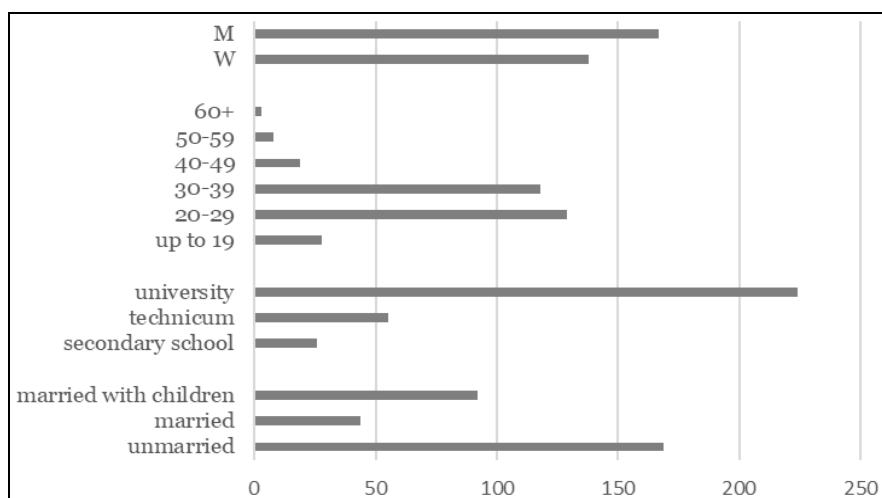


different issues in the NP Taganay. For answering within this section, Likert-type scale (with a scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*) has been used. This section consists of two variables reflecting the overall experience; six variables related to the state of (tourist) infrastructure and the quality of available services; four items on the environmental issues and two statements on the ecotourism issues.

The questionnaire analysis was processed according to the specific socio-demographic and socio-economic indicators (age, gender, education, marital status, repeated visits, daily consumption). Data analysis involved using descriptive statistics (frequency, central tendency), as well as bivariate (t-tests) analysis.

## RESULTS

By examining the socio-demographic profile of the respondents in the NP Taganay, it was found that men dominate to a certain extent (54.8%), as well as the age categories – 20-29 (42.3%) and 30-39 (38.7%) years. The share of the respondents who had university degree was 73.4%. The unmarried respondents accounted for 55.4% of the sample in the NP, while the share of the married visitors (14.4%) or married visitors with children (30.2%) was significant, but somewhat smaller (Figure 2).



**Figure 2.** The sample structure of the visitors of the NP Taganay<sup>1</sup>

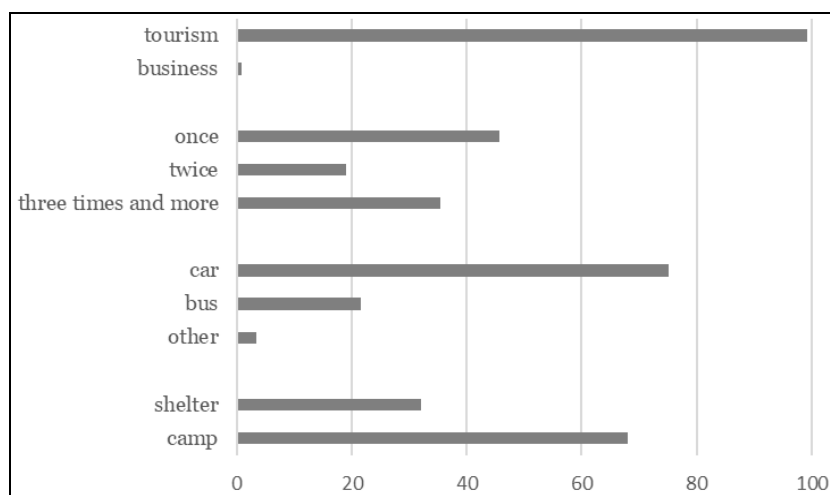
At first, the visitors were asked questions about the reason and the number of visits to this area, and afterward about the means of arrival in the NP and the type of accommodation they stayed in. The highest percentage of the respondents (99.3%) visited NP Taganay as tourists, while the minimum number of visitors came for business reasons (0.7%). When it comes to the number of visits to this protected area, a significant percentage of the respondents recorded only one visit (45.6%), while those who visited NP twice are at 19% and three or more times - 35.4% (Figure 2).

In order to reduce the impact on the natural environment, specific types of accommodation for visitors have been built in the NP Taganay. Travelers are settled in so-

<sup>1</sup> Due to the small number of respondents in certain age groups, categories were merged, so all the analyzes were based on the presence of three age categories: up to 29 years, 30-39 and 40+ years.

called “shelters”, which contain guest houses and tents. There are 6 shelters in the park and their design is inspired by the use of traditional building methods applied by local craftsmen in the area. Another type of accommodation is present in the camping areas in the territory of the NP Taganay. Results of the study show that the visitors who stayed for more than one day, most often stayed in camps (66.9%) or shelters (31.5%) (Figure 3).

The type of transport of visitors indicates the accessibility of a certain space, the habits of travel and the state of transport infrastructure. The highest percentage of the visitors used the car for coming to the NP Taganay, while a smaller percentage decided to arrive by bus. Several other types of transportation were also used by a couple of visitors (Figure 3). It is important to emphasize that environmentally-friendly modes of transport should be encouraged. To reduce impacts, using cycling, public transport, rail transport, etc., as more sustainable options in environmental terms, needs to be increased. Data show that alternative types of transport use less energy per passenger, causing less noise and pollution. In terms of land use, buses require only 5% of the road space (per passenger) required for cars. Some measures giving priority to public transport also have the effect of restricting access for cars (UNWTO, 2004).



**Figure 3.** The distribution (%) of the tourists' responses on the reason for visiting, the number of arrivals, the type of transportation and the accommodation they have stayed in

In order to determine whether there are statistically significant differences in observed characteristics, i.e. frequencies of two or more independent samples, a chi-square test was used. The influence between the variables is interpreted by the Cramer (V) coefficient (Table 1). A statistically significant relationship was found between a marital status of the respondents and the number of visits to the NP Taganay. Most of the visitors who are married and have children visited the NP Taganay three times or more (46.7% of the tourists from this category), while visitors who are single or married without children have mostly visited this protected area once (47.3 % of visitors from the first category and 52.3% of the second category). Cramer's coefficient value (0.14) suggests low correlation strength between the variables.

In addition, the correlation is found between the marital status of the respondents and the type of transportation they have used for coming to the NP. Visitors who are married and have children mostly decided to arrive by car, while a significant percentage

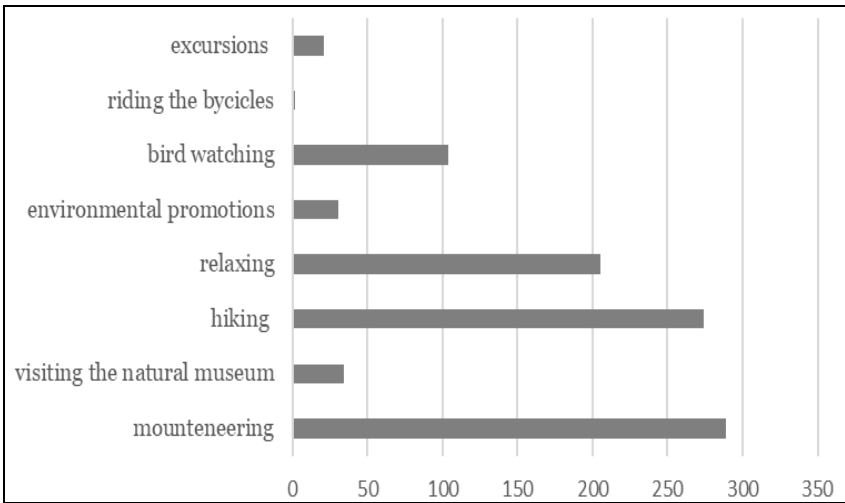
of non-married visitors prefer to choose a bus for coming to the NP. Cramer's coefficient of correlation of variables (0.17) indicates the low strength of the correlation between the variables. A statistically significant relationship was also found between daily consumption of the respondents and the type of accommodation they stayed in. Visitors with low daily consumption mostly choose to stay in the camps, while those who spend more often pick shelters, while being in the NP. In this case, Cramer's coefficient value (0.18) suggests low correlation strength between the variables.

**Table 1.** Differences in visitors' perceptions on the number of visits, means of arrival and the type of accommodation by sociodemographic variables

Question		$\chi^2$ (p value)	Cramer's V coeffic.
Number of visits	gender	0.50	0.07
	age	0.34	0.08
	education	0.38	0.08
	marital status	<b>0.03*</b>	0.14
	daily consumption	0.06	0.12
Type of accommodation	gender	0.25	0.07
	age	0.84	0.03
	education	0.67	0.05
	marital status	0.59	0.06
	daily consumption	<b>0.008*</b>	0.18
Type of transport	gender	0.67	0.03
	age	0.63	0.05
	education	0.69	0.05
	marital status	<b>0.01*</b>	0.17
	daily consumption	0.40	0.08

### Activities of tourists and visits to localities

Certain questions within the questionnaire were related to the activities that visitors had during their stay in the NP Taganay, as well as the tourist sites and places they visited.

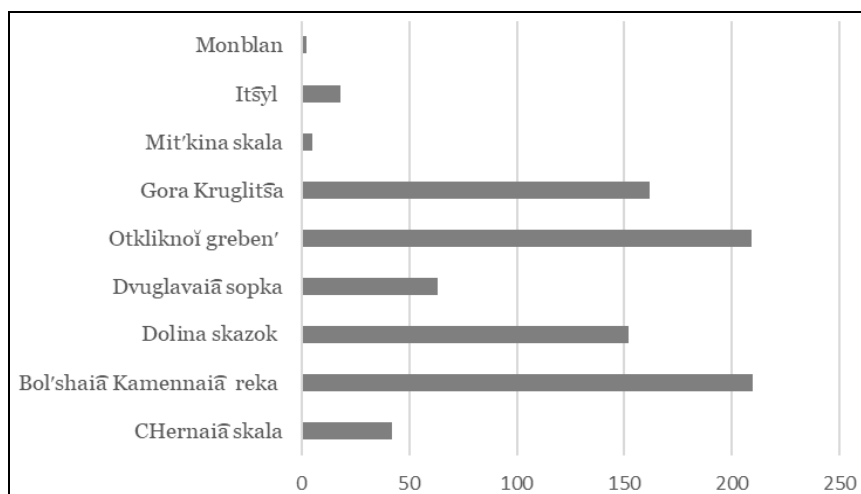


**Figure 4.** The activities of the visitors during the stay in the NP Taganay

When asked to declare what activities they were doing during their stay within the protected area, the largest number of visitors stated that they climbed on top of the mountain (94.7%) (Figure 4). A significant percentage of respondents went hiking on footpaths (89.8%) and relaxing in nature (67.2%). A specific segment of visitors was bird watching (34%), visiting the natural museum (11%), participating in the promotion of nature protection (10.2%), took part in the excursions (6.9%).

The minority of the visitors were riding the bicycles (0.6%) (Figure 4).

The next question in the survey was about the sites visitors had the opportunity to visit and see during their stay in the NP (Figure 5). The analysis showed that the most visited localities (attractions) were: *Bol'shaiā Kamennaiā reka* (69%), *Otkliknoī greben'* (68.5%) and *Gora Kruglitša* (53%). A significant number of respondents were able to see: *Dolina skazok* (49.8%) and *Dvuglaviā sopka* (20.7%). Minority of the visitors have visited the following natural attractions of this area: *CHernaiā skala* (13.8%), *Itšyl* (5.9%), *Mit'kina skala* (1.6%) and *Monblan* (0.6%).



**Figure 5.** Tourist attractions visited during the stay in the NP Taganay

### Visitor's perceptions on the NP Taganay

In order to analyze the attitudes of the visitors regarding different issues related to tourism in the NP Taganay, 14 variables were defined and were taken into consideration in relative terms, with regard to their impact (the mean value of the variable ranging between 1 and 2.4 revealed a negative perception, 2.5–3.4 neutral, and a value of 3.5 and higher showed a positive attitude) (Table 2). Majority of the respondents (97.3%) agreed that they enjoyed their stay in NP Taganay, while the most percentage of the respondents (68.9%) considers that NP provides a plethora of experiences. Regarding the quality of the road infrastructure, 82.2% of the visitors agreed with the statement: *"The state of roads and signage made travel easy"*. Most of the visitors (88.5%) consider this destination as „clean“ destination. Viewing platforms are considered to be clean and well maintained by 86.5% of the visitors. Respondents also commented about the presence and the quality of the souvenirs and crafts. Many comments were positive (69.5%) regarding this question, but there were those that stated the contrary (12.7%). In order to analyze the quality of accommodation in the NP Taganay, visitors were asked to provide a response to the following statement: *"The quality of accommodation was good"*.

Visitors that stayed longer than one day mostly considered that quality of accommodation was good (70.5%), however there were those with the neutral opinion (25.2%). When it comes to services offered in accommodation and catering facilities, 74.1% of respondents agreed that they were high, 21% of respondents gave the neutral answer, and 4.9% of respondents expressed disagreement with this claim. The opinion of the respondents is divided regarding the presence of noise in the NP. A significant percentage of visitors (44.3%) agreed that they were not disturbed by the noise in the NP during their stay, while 42.7% of the respondents had a contrary opinion. A very small percentage responded neutrally to this claim (13%).

**Table 2.** Visitors perceptions on the NP Taganay

Visitors' perceptions	Mean	SD
I enjoyed my experience in NP	4.7	.5
NP provided a good variety of experiences	3.9	1.0
The state of roads and signage made travel easy	4.2	.9
I found the NP to be clean	4.4	.7
The viewing platforms were clean and well maintained	4.3	.8
Good souvenirs and crafts were available	3.9	1.1
The quality of accommodation was good	4.0	.9
The level of service provided was high	4.0	.9
Service staff were competent and helpful	4.2	.9
I was bothered by noise	2.9	1.5
I was bothered by garbage in public areas	2.8	1.5
The state of the natural environment was good	4.4	.7
I consider myself an eco-tourist	4.1	1.0
I would be willing to pay extra for ecotourism activities (birdwatching, visiting ecosystems, mountain hiking, etc.)	3.4	1.3

1 – Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree

The opinion difference is also present when it comes to the presence of garbage in public places, where 46.9% of visitors say that the garbage is not present in public places, 41.9% of the respondents consider the opposite, while 11.2% of the respondents have a neutral attitude. The vast majority of respondents, 93.2%, confirmed that they considered the state of the environment in the park to be undamaged.

**Table 3.** Differences in visitors' perceptions on NP Taganay by sociodemographic and socioeconomic variables

Visitors' perceptions	Variable	$\chi^2$ (p value)	Cramer's V coeff.
NP provided a good variety of experiences	repeated visits	<b>0.013*</b>	0.144
The state of roads and signage made travel easy	age	<b>0.046*</b>	0.126
Good souvenirs and crafts were available	marital status	<b>0.041*</b>	0.128
I found the NP to be clean	repeated visits	<b>0.003*</b>	0.160
I was bothered by noise	repeated visits	<b>0.017*</b>	0.140
I was bothered by garbage in public areas	repeated visits	<b>0.043*</b>	0.127

Two questions in the survey were about ecotourism. To the claim: "I consider myself an eco-tourist", the largest number of visitors answered affirmatively (73.1%). A certain part of the respondents was neutral (18.7%), and the minority did not agree with this statement (8.2%). Another question related to the market identification for sustainable tourism was given to the visitors in the form of a statement: "I would be

*willing to pay extra for ecotourism activities (birdwatching, visiting ecosystems, mountain hiking, etc.)*". Half of the respondents (50.8%) answered that they agreed with the previous statement, 23.3% of the respondents were neutral and 25.9% were not ready to allocate additional funds. In order to determine whether there are statistically significant differences in the distribution of the perceptions according to the various sociodemographic and socioeconomic characteristics, the chi-square test was used (Table 3).

The analysis determined the relationship between respondents' viewpoints on a variety of experiences in NP and their repeated visits to this area ( $\chi^2= 12.702$ ,  $p=0.013$ ). Majority of visitors who visited NP once or twice agreed that various experiences are provided in NP Taganay (over 70% of positive answers), while people who came several times tend to have more restrained attitude. This can be explained by the fact that those who visited NP several times had the opportunity to get to know the area better and to create more critical opinion. The Chi-square test identified the statistically significant relationship between the age of the visitors and the claims about the quality of the traffic infrastructure ( $\chi^2= 9.674$ ,  $p=0.046$ ). The oldest population (over 40 years) was the most restrained in its attitudes, with 70% affirmative responses, 13.3% neutral and 16.7% negative. By contrast, the other two categories of younger respondents gave over 80% positive answers to this claim. Cramer's coefficient of strength is 0.13, indicating a small correlation between variables. A statistically significant correlation was registered between the marital status of the respondents and the statement on the availability of good souvenirs and old craft products in the NP Taganay ( $\chi^2= 9.983$ ,  $p=0.041$ ). Compared to the other two categories, married respondents with children responded positively to this statement in higher percentages. In the other two categories, neutral responses are represented in a significant percentage (married - 22.7%; single - 21.9%). This situation can be partly explained by the fact that the population with children is paying more attention to such things and buy the souvenirs more often. In this case, the value of the Cramer coefficient (0.13) testifies to the small correlation between the variables.

The relationship between the visitors' perceptions on the presence of noise in the protected area and their repeated visits was ascertained ( $\chi^2= 12.013$ ,  $p=0.017$ ).

Also, a statistically significant correlation was registered between the perceptions on the presence of garbage in the public areas and the repeated visits of the respondents ( $\chi^2= 9.858$ ,  $p=0.043$ ). Similarly to the statement on the overall experiences in NP, in both of these cases, it was determined that people who visited NP several times have more critical perceptions on environmental issues. 63.8% of the visitors who came to NP twice stated that they weren't bothered by the noise, while only 38% of visitors who visited the NP several times stated the same. Through the analysis of perceptions on the overall cleanliness of destination, similar results were obtained, i.e. repeated visits were found to be determining variable ( $\chi^2= 15.713$ ,  $p=0.016$ ).

## DISCUSSION AND CONCLUSION

The purpose of NPs in the developed world is questionable due to the fact that competing objectives around multiple-use and diverse ideas about the reasons for protection versus utilization, can produce disagreements. As urban expansion continues to grow, it creates new challenges for natural resource management and effective strategic planning in protected areas. In that context, various personal perceptions and motivations of people spending time in and 'using' NPs, requires closer examination from researchers of different specialties. Supported by interviews with the visitors, as well as with the insight into the on-site situation, results presented in this study lead to the following conclusions. From a general point of view, a strong positive perception

regarding the overall experiences from visiting the NP Taganay is observed. Specific habits of traveling, which testify about permanent patterns of behavior, are registered – most visitors repeat their visits to the NP and use the car to come to the protected area.

If tourism were to develop on sustainable principles, it is necessary to shift away from the use of the private car to the increased use of other types of transport. This requires adequate spatial planning of the wider zone, as well as detailed planning of development of the road infrastructure in the future.

The study has shown that the most popular visitors' activities are deeply connected to the nature (mountaineering, hiking and relaxing in the nature), which allows people to realize their various physical and mental needs. This is also witnessed by the most visited tourist attractions belonging to the group of natural tourist values. The specific type of accommodation in the NP ensures connection with the natural environment for visitors that mostly expressed positive perceptions on its quality. Although, compared to primary types of accommodation, shelters and camps do not provide sufficient comfort; this type of accommodation allows visitors to connect with nature in deepest sense. Survey research identified a high level of satisfaction with accommodation facilities among visitors, as well as the services provided in these objects. The similar situation is registered regarding the perceptions on the service staff (particularly tourist guides engaged in guiding (hiking) tours). All of these findings confirm the hypothesis on the compatibility between visitors' habits and the environment.

Interviewees stated a high satisfaction with a complete experience in the NP Taganay, as well as the state of the natural environment and the overall cleanliness of the destination. Although this strong positive perception can be a good indicator of the high ecological values of protected territory, the study has also identified certain concerns regarding environmental issues. Respondents were found sensitive to garbage production in public areas and the presence of noise in protected territory. These results confirm the findings of previous studies suggesting that the most valuable natural areas of Urals are under constant pressure of mass tourism (waste, accumulation, trampling vegetation in the parking places, cutting down of trees, etc.) (Ziryanov et al., 2016).

Accordingly, the obtained information could be useful for formulating specific visitor education strategies for activities that are specifically connected to the nature, such as hiking, mountaineering, birdwatching. Based on our results and discussions with tourists, it is clear that socio-economic variables affect visitors' perception, particularly those related to environmental harm. This is in accordance with the other studies indicating that demographic and socio-economic characteristics are related to differing levels of satisfaction (Mossberg, 1995; Yu & Weiler, 2000). The most significant variable affecting environmental perceptions is the frequency of visits. Unlike some previous studies (Geva & Goldman 1991; Tian-Cole et al., 2002), suggesting repeated visits to a tourist destination are related to higher levels of visitor satisfaction, results of this study showed that multiple visits of protected area enabled people to get to know area better and to create opinion that is more critical. Similarly to different earlier research (Priskin, 2003; Milanović et al., 2018), age influenced perceptions of the visitors.

The findings of our research have important implications for park management and policy-making. Our study acknowledges that investigating tourist perceptions can produce information, which should be used together with traditional monitoring in protected areas. Data coming from the attitude analysis can be important for implementing appropriate visitor management strategies, scenario creating and simulation models. Growing numbers of NPs in Russia, which once have been marked by self-regulating tourism, are now being arranged for a mixture of controlled

recreational activities, such as hiking, mountaineering, biking, etc. Besides, the literature suggests that the long-standing conflict between nature conservation and self-regulating mass tourism in Russian protected areas is a major problem that hasn't been solved yet and also a great challenge for management structures (Ziryanov et al., 2016).

This is particularly critical in such protected areas where conservation status has been assigned, but its implementation is controlled poorly. Due to this, more effective management is required to attract tourists to visit the NP Taganay more frequently and to use recreational opportunities with increased awareness of possible negative influence on natural ecosystems. Knowing what types of visitors are to use a protected territory of NP Taganay is crucial for advanced management and for providing public support for conservation goals. By understanding visitors' habits and attitudes, NP managers can expect which activities their users will be willing to engage in and are able to estimate the need to potentially determine some areas for more/less intensive activities. As variability in visitor perception can indicate the need for visitor education (Priskin, 2003), in the case of NP Taganay we emphasize the importance of visitors education policies as a foundation on which a complete management program could be built in the future.

It is yet to be seen how visitors' perceptions toward specific problems will translate into action, and whether such an attitude will have social consequences. Related to that, our research points to the various threats to future tourism development and gives a chance to take actions. In order to ensure a better understanding of visitors' habits and attitudes, as well as to complement the outcomes of this research, implementation of the comparative interstate research studies is recommended. For achieving this objective, specific development projects regarding the visitors-protected area relationship could also be helpful. For future comparative analysis, research would be useful to incorporate various socio-economic indicators and variables (place of residence, occupation, personal income) that may affect visitors' satisfaction.

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## **ATTITUDE TOWARDS BORDER TOURISM AND ITS RELATIONSHIP WITH VISITOR SATISFACTION AND LOYALTY**

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**Abstract:** This study proposes new knowledge about tourism developed in border areas. In this study, structural equations models based on variance are applied, with a sample of 583 tourists. The study was conducted on the northern border of the Dominican Republic and Haiti. The results show that there is a positive influence of the attitudes of tourists in the value they perceive in the border destination, in their satisfaction with the destination and in the loyalty they have towards the place. It has been observed a positive influence of the value perceived by border visitors with satisfaction and loyalty.

**Key words:** border tourism; attitudes; satisfaction; perceived value; loyalty

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### **INTRODUCTION**

All economic sectors are subjected to globalization, which makes them be in continuous change. Tourist activity, one of the main sectors at a national level, is not an exception as far as employment is concerned and regarding the foreign exchange market. Following the data given by the World Tourism Organization (UNWTO, 2017), tourism contributes 10% of the global Gross Domestic Product. The continuous change that tourism is suffering is related to the new needs experienced by tourists, changing their behavior patterns and motivations, in search of new experiences.

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Thus, new tourist typologies emerge, which try to respond to these motivations, conforming new tourism products capable of attracting a tourist demand of their own and generating a complementary offer in the destination. This is why border tourism emerges (Jimber et al., 2017; Rogerson & Rogerson, 2019).

The definition of border tourism has several previous implicit concepts that are basic for the understanding of how this kind of tourism is conceived. Lacoste (1993) defines border as that line of separation and contact between two or more states, where the existence of a discontinuity between the spaces of each country is manifested, not only due to territoriality, but also due to cultural, religious or other kinds of references. These limits are conceived as symbols of identity by antonomasia (Campos-Delgado & Odgers-Ortiz, 2012), so the borders are formed as a point of interaction and encounter (Newman, 2006). Regarding the concept of border, Sofield (2006) distinguishes between a delimitation of a legal nature and a cultural nature, since, as mentioned by Hageman et al. (2004), borders have been conceived as institutions that serve to mark functioning barriers between states, to impose control over the flow of people, to regulate cross-border trade or to indicate the platform and facilitate contact and exchange.

Bringas-Rábago (2004) defines border tourism as the temporary movement of people away from their place of habitual residence to the cities or zones adjacent to the dividing line between two countries, originated for reasons of leisure, fun, rest, health, business, visits to relatives and/or friends, religion, social events or purchases, among others, whose stay can last between a night and a year. In short, border tourism is the temporary displacement that implies, at least, an overnight stay in areas contiguous to the dividing line between countries, for different reasons of leisure, where activities related to tourism activity are carried out. The temporality of border tourism has been subject to criticism, since Valenzuela (2003) establishes that, to be identified as border tourists, the stay must last between 24 to 72 hours in the destination.

Nevertheless, this position is evidenced by other studies (Bringas & González, 2003) that argue that a large number of tourists do not stay at the destination 24 hours, although in their stay they carry out tourist behavior (Gallegos & López-López, 2004). The development of tourism activities in border areas between countries is closely related to the concept of cross-border cooperation (Studzieniecki et al., 2016), which is defined as an institutionalized collaboration between authorities of a subnational nature that are contiguous through the national borders (Perkmann, 2003). This conceptualization is an evolution of a previous definition given by Schmitt-Egner (1998), who understands cross-border cooperation as the cross-border interaction between neighboring regions for the preservation, governance and development of a common living space, without the participation of its central authorities. These areas, which have a consistent flow of visitors, require deepening the perceptions and valuations of tourism demand, with the aim of establishing improvements in the border tourist offer. Among the variables to analyze, it is important to study attitudes, perceived value, satisfaction and loyalty, which are characteristics that must be taken into account to know the behavior of visitors.

The aim of this study is to empirically compare the relationship between attitudes towards border tourism and the value, satisfaction and loyalty perceived by visitors who arrive at the border. The fieldwork of this research has been carried out on the northern border of the Dominican Republic and Haiti, which is the main passage point by land between these two countries (Jimber et al., 2017). This subject of investigation is pertinent because there are few notorious studies about this tourist typology. In addition, this study is relevant because it seeks empirical evidence on issues addressed for other tourism typologies, but not analyzed in border visitors. In this way, the fact that the Dominican Republic is a consolidated country in sun and beach tourism should

be taken into consideration, even if it does different complementary activities, especially in relation to local culture and nature (Orgaz-Agüera & López-Guzmán, 2015). For its part, the Republic of Haiti has many tourist resources, although it has not yet experienced major developments in tourist activity, highlighting sun and beach tourism and historical-cultural activities (Jimber et al., 2017). For both countries, border tourism is a formula to improve the management of tourist resources located on the border and, in addition, promote the sustainable development of local communities.

## **LITERATURE REVIEW**

This research focuses on the attitudes of tourists, the value perceived by the tourist, tourist's satisfaction and their loyalty. Accordingly, the review of the literature has been divided into several sub-sections, which in turn delve into the components of the research.

### **Value perceived by the tourist**

The value perceived by the consumer of a certain product or service has been deeply investigated in recent decades (Williams & Soutar, 2009). Chiu et al. (2014) establish that the value perceived by the client is produced through the analysis of the costs and benefits derived from the acquisition of tangible and intangible products, in combination with quality, price and service. The perceived value, from a tourist point of view, is divided into two groups: the first one, a functional value where quality and value for money are included; and, secondly, a symbolic value derived from social and emotional aspects (Chen & Hu, 2010). Information on the attitudes of stakeholders towards tourism is of particular importance for the sustainability of a given geographical area, because the destination managers must understand the values and perceptions of the local and visiting community clearly in order to integrate them into the decision-making process and encourage their participation in the tourism area (Nicholas et al., 2009). Thus, the perceived value is useful to explain the opinions of consumers and their subsequent reactions (Moliner et al., 2011).

Thus, attitudes can be established as determinants when developing certain tourism behaviors (Han & Kim, 2010), positively influencing tourism attitudes on perceived value (Castellanos-Verdugo et al., 2016). The improvement of the quality of the local environment also increases the visual appeal for tourists visiting the geographical area, promoting the improvement of aesthetic, recreational values and the residents and visitor's quality of life (Zhang & Lai, 2012). Consequently, we propose that: H1: The attitude of the tourist positively influences the value perceived by the tourist in the destination.

### **Tourist satisfaction**

Applied to tourism, satisfaction is understood as a mental and emotional state of the tourist after a given experience (Williams & Soutar, 2009), that is, a psychological result that is derived from the lived experience (Lee et al., 2007). Oviedo-García et al. (2016) place the satisfaction as an important and relevant element for the survival of tourist companies. The existing literature on tourist satisfaction is abundant (Gursoy et al., 2007; Chi & Qu, 2008; Mason & Navasierra, 2013). Studies in which tourist satisfaction is shown exist in different contexts: purchases (Yüksel & Yüksel, 2007), travel agencies (Millán & Esteban, 2004) or wild refuges (Tian-Cole et al., 2002). Several authors (Ryu et al., 2008; Bajs, 2015) have analyzed the different effects of perceived value in relation to satisfaction, considering it as the best antecedent of satisfaction, since it has a positive effect on the satisfaction in the tourism field (Williams & Soutar, 2009; Prebensen et al., 2014; Mohd-Any et al., 2015). The scientific literature also highlights the existence of a relationship between the tourist's attitude and satisfaction (Hernández-Maestro et al., 2006; Oviedo et al., 2016). Consequently, we propose that: H2: The attitude of the tourist positively influences the tourist's satisfaction; and H3: The value perceived by the tourist positively influences the tourist's satisfaction.

### **Tourist Loyalty**

Loyalty is understood as a preference to visit a certain destination with an intention to revisit it or to recommend it (Chi & Qu, 2008; Boo et al., 2009; Pike et al., 2010). Loyalty has been conceptualized and related to marketing, understanding it as a result of satisfaction (Mattila, 2001). Chen and Tsai (2007) identify different degrees of loyalty regarding a given destination, distinguishing between the intentions of recommending a visited destination (Word of Mouth) and the intentions of revisiting this place (behavioral intentions). The Word of Mouth is the main indicator of loyalty in the purchase intention of a certain product or service (Rundle-Thiele, 2005).

Different authors (Chen & Tsai, 2007; Lee et al., 2007; Chi & Qu, 2008; Lee, 2009; Chi, 2011; Lee et al., 2011; Prayag & Ryan, 2012) have addressed tourism-focused studies, which analyze the behavioral intentions and intentions of recommending destination. Some studies (Chen & Tsai, 2007; Chi & Qu, 2008; Ekinçi et al., 2013) establish satisfaction and quality as antecedents of loyalty, as satisfaction is decisive from a certain tourist point for generating loyalty towards a destination (Alexandris et al., 2006).

Satisfaction, as well as other variables such as perceived value or quality of service, has been positioned as the most important antecedents that affect tourists' loyalty (Baker & Crompton, 2000; Petrick, 2004). Similarly, several authors (Williams & Soutar, 2009; Prebensen et al., 2016) consider the perceived value along with satisfaction as a direct antecedent in making behavioral and recommendation decisions.

Attitudes of tourists are then understood as determinants of the behavioral intentions of visitors (Wurzingler & Johansson, 2006; Han & Kim, 2010), directly affecting tourists' loyalty. As a result of what has been argued, we propose that: H4: The attitude of the tourist positively influences the tourist's loyalty; H5: The value perceived by the tourist positively influences the tourist's loyalty; and H6: The satisfaction of the tourist positively influences the tourist's loyalty. There are studies that have worked with these hypotheses, although the set of hypotheses raised in the model have not been studied for border tourism, where there are special characteristics due to the diversity of existing cultures and products belonging to different countries. In this way, the model proposed can generate very useful data on the perceptions of border tourists and this, in turn, will encourage the development of more specific strategies and actions to improve border tourism between the Dominican Republic and the Republic of Haiti.

## **RESEARCH METHODOLOGY**

### **Sample**

The population of this study consists on tourists who have visited the northern border between the Dominican Republic and the Republic of Haiti, passing through the Dominican town of Dajabon and the Haitian town of Juana Mendez. It should be noted that there is no database that confirms the number of tourists visiting the border, so it has not been possible to establish a target population, as has already occurred in a previous research conducted in this destination (Orgaz-Agüera & López-Guzmán, 2015). The lack of a target population led to the establishment of a sample size of about 600 surveys. The fieldwork was carried out between the months of July and September 2015, during which a total of 610 questionnaires were obtained. Nevertheless, only 583 were valid, which places the total number very closely to the originally planned sample size.

The questionnaire that was provided to the tourists was properly structured and translated into three languages (Spanish, English and French) to achieve the widest possible scope. It was applied anonymously. In addition, pollsters trained for the purpose of the research constantly supported the people who were surveyed. The survey respondents were selected randomly; for this, the pollsters were located in the border

crossing between both countries, but in the Dominican Republic territory, and only those tourists who travelled from one country to another for tourism and leisure reasons were contacted. In order to discern this detail, an interview was planned for the visitor. Said interview provided a means to indicate if the reason for their trip was tourism and, in turn, if this tourist trip was going to take place in the border area.

All those visitors crossing the border but going to destinations far from the border, were discarded. The sociodemographic profile of the tourists who visited the Dominican-Haitian northern border is presented in Table 1.

**Table 1.** Sociodemographic profile

Items	(%)	Items	(%)
Gender (n=571)		Level of studies (n=521)	
Male	52.5	College or institute	57.0
Female	47.5	Graduate	34.5
		Master	6.3
		Ph.D.	2.1
Civil status (n=531)		Accommodation country (n=541)	
Married	43.7	Dominican Republic	84.3
Single	56.3	Haiti	15.7
Age (years) (n=532)		Who accompanies you on the trip? (n=525)	
18-25	23.7	Alone	29.1
26-34	35.5	Colleague or friends	45.5
35-44	32.3	Couple	14.9
45-54	6.0	Couple and childre	10.5
55-64	0.0		
+65	2.4		
Country of origin (n=554)		First visit? (n=531)	
Dominican Republic	35.6	Yes	38.8
United States	24.7	No	61.2
Haiti	14.8		
Mexico	6.1		
Puerto Rico	4.2		
Venezuela	3.1		
Colombia	2.2		
Argentina	1.6		
Spain	1.3		
Others	6.4		

As a result of the data obtained from the previous table, the profile of the tourist visiting the Dominican-Haitian northern border consists of single men, between 26 and 44 years of age in almost 68% of the cases, mostly with a Dominican nationality (35.6%), American (24.7%), Haitian (14.8%) and Mexican (6.1%). Nevertheless, if tourists from the island are removed, the profile varies, and places Americans as those who visit the border the most (49.8%), followed by Mexicans (12.4%) and Puerto Ricans (8.4%).

The works carried out by tourists are mostly carried out on their own in 41.3% of the cases. Another important percentage is that of the students (29.4%), which relates to the fact that 23.7% of tourists are between 18 and 25 years old. The level of studies in more than half of the cases (57%) is bachelor or lower, with few cases with postgraduate studies (Master 6.3% and Ph.D 2.1%). The vast majority of respondents said that they stay in the Dominican Republic (84.3%). Almost half of the cases are traveling (45.5%) with colleagues or friends. In 61.2% of the cases surveyed, people were not doing their first visit, and 33% of the respondents spent 2 days and 1 night. It is interesting that, if the cases where the respondents are Dominicans or Haitians are removed, the range of

responses that makes reference to the previous presence in the place is considerably reduced, going from 38.8% to 48.8% in the case of those who have not previously been in the place, and from 61.2% to 51.2% in the case of those who had been there previously.

### **Measurements**

In order to carry out the research, a duly structured questionnaire was carried out, collecting useful and pertinent information to achieve the objectives set forth in this investigation. The questionnaire was designed based on closed-ended questions. The formulation of the different items included in the questionnaire was selected from previous research (Martín-Ruiz et al., 2010; Yoon et al., 2010; Gelbman & Timothy, 2011, Zhang & Lai, 2012; Sullivan et al., 2012), aiming to guarantee its validity.

Based on the different items included in the questionnaire, a triple validation was performed: In a first phase, the items from the previous investigations were obtained, and the survey was reviewed by a tourism expert researcher, who analyzed the proposed items for each composite; subsequently, the questionnaire was analyzed by an expert from the area under study, so that the validity of the items was checked twice. In a second phase, the translation of the different items from English to Spanish was performed, looking for the relevant adaptations so that it could be understood in a Spanish and Dominican context, thus avoiding erroneous interpretations by the tourists answering the questionnaire. Finally, in a third phase, a pre-test of 20 surveys was carried out to corroborate that the items were perfectly understood. Once the first questionnaire model was developed, the aforementioned pre-test was carried out in order to analyze aspects such as the correct selection of variables, as well as the quality of the statements, and the order and/or clarity of the instructions for the completion of the questionnaire. After carrying the pre-test out in the Dominican-Haitian border area, the respondents stated that they had not had any problems understanding the test since it was written in Spanish, English and French. It should be noted that, for the preparation of the questionnaire in Dominican language, it was applied to several students of the Master of Business Administration and Management of the Technological University of Santiago in the Dominican Republic, with the objective of validating the adapted items.

Regarding the questionnaire, it was divided into three sections: the first one examines the attitudes of tourists towards border tourism; in the second section, different aspects are evaluated, such as the value of the destination, satisfaction and loyalty towards said destination; and, in the third part, the sociodemographic aspects of tourists are addressed. In the first two sections of the questionnaire, the assessments are measured through a Likert Scale of 5 points, in which 1 is interpreted as "strongly disagree or not at all important" and 5 as "strongly agree or very important", interpreting the central value (3) as indifference when evaluating said item. The total number of items is 22.

### **Data analysis techniques**

After the questionnaires were applied, the data was computerized, creating a database in Microsoft Excel for a further in-depth analysis through the statistical programs of IBM SPSS 24.0 for the descriptive analysis, the analysis of reliability using the Cronbach Alpha and the analysis of means, and of SmartPLS 3 (PLS: Partial Least Squares), to proceed with the analysis of the structural equations (SEM, Structural Equation Modeling). SEMs are characterized by two elements: the first of the elements refers to the evaluation regarding the relations of dependence, both multiple and crossed (Batista & Coenders, 2000); and secondly, they are characterized by the degree they have to represent concepts that are not observed in the relationships, also taking into account the measurement error during the estimation process (Cea, 2002). In addition, SEMs have the advantage of analyzing relationships for each subset of variables, allowing a series of interrelationships between the different variables of the different groups (Chin, 1998).

Concerning the PLS method, it is placed within the structural equation models, making it one of the most important tools of multivariate analysis, denominated as second-generation multivariate analysis (Fornell, 1982). The objective of this analysis is the connection between theory and data (Fornell, 1982). There are different models when proceeding with the estimation of structural models. Some are based on the analysis of covariance structures, used in statistical programs such as SPSS AMOS and LISREL, and others based on an analysis centered on variances, through the Partial least squares algorithm (PLS), where a principal component analysis is combined with a Path analysis (Barclay et al., 1995). One of the main objectives of the PLS refers to the explanation of the variances of the variables of endogenous nature, which makes it a reliable tool for the determination of the behavior of the variables. The difference between the aforementioned second-generation analysis compared to the first generation (factorial analysis, analysis of major components, among others) is that the former allows us to incorporate technical knowledge prior to practical analysis (Fornell, 1982). The estimation methods based on covariance (LISREL, AMOS, among others) are more suitable when they possess a solid theoretical knowledge, focused on the development and evaluation of the theory, although with a lower theoretical knowledge. For the purpose of predictive research, using the PLS technique is considered more convenient (Barclay et al., 1995).

In the case of the social sciences particularly, the use of the analysis through PLS offers a series of advantages (Long Range Planning, 2012). Firstly, the limited sample size makes the PLS analysis be considered as more appropriate, given the sample-type requirements of the method based on covariance. And, secondly, in various disciplines, such as strategic planning, marketing or information systems management, formative measures are used, which makes using the method based on covariance difficult.

One of the main reasons why the PLS analysis was used for this proceeding is that it can confirm if the initial theoretical concepts are measured correctly through the different variables observed, analyzing the validity and reliability. These properties are essential when measuring attitudes, predispositions or emotional responses, which are exposed to great subjectivity. Thus, although the measurement and structural parameters are estimated at the same time, a PLS model is analyzed and presented in two clearly differentiated stages (Barclay et al., 1995): the evaluation of the reliability and validity of the measurement model, and the evaluation of the structural model.

## **DATA AND RESULTS ANALYSIS**

### **Evaluation of the reliability and validity of the measurement model**

The present measurement model intends to analyze the theoretical relationships that are measured by the observable variables, analyzing the reliability of the different items or indicators that make up the composites, such as the reliability of the latter (Castellanos-Verdugo et al., 2016). Table 2 and 3 show mode A (perceived value, satisfaction and loyalty) and mode B (attitudes) composites respectively. For mode A composites, the following factorial loads are presented, which are all greater than 0.707 (Cepeda & Roldán, 2004) except for one of them (SA3).

Nevertheless, it is accepted since this limit of 0.707 should not be so strict in initial stages, permitting lower loads. However, the load should never be, in any case, lower than 0.4, so it should proceed to its elimination from the model (Hair et al., 2012). Thus, the commonality of the variable shows the variance of an observable variable explained by the composite, so all indicators have a commonality higher than 0.5 (50%), except that of item SA3 that presents a commonality of 0.487 (48.7%).

The reliability of the composites verifies the internal consistency of the observable variables, evaluating the rigor with which these observable variables measure the same



composite (Cepeda & Roldán, 2004). This reliability is measured through Cronbach's Alpha and the Composite Reliability (Werts et al., 1974). The use of Composite Reliability is more common, since according to some authors (Fornell & Larcker, 1981; Barclay et al., 1995) this measure is not influenced by the number of items that the scale could have or, in other words, the Composite Reliability does not assume that all the indicators receive the same weighting (Chin, 1998). Dijkstra & Henseler (2015) indicate that Composite Reliability is the only consistent measure of reliability. The Composite Reliability has to be above 0.80 (Nunnally, 1978), in each and every one of the mode A composites (perceived value, satisfaction and loyalty). These measures (Cronbach's Alpha and Composite Reliability) do not apply to B-mode composites.

**Table 2.** Reliability and validity of the mode A composites

	Cronbach's Alpha	Composite Reliability	AVE	Loading	Commonality
Perceived value	0.679	0.862	0.757		
This destination offers more value than expected				0.882	0.778
This destination offers me more value than other border areas visited				0.858	0.736
Satisfaction	0.638	0.804	0.579		
I am satisfied with the visit to the Dominican-Haitian border				0.814	0.663
I am happy to visit this border region				0.766	0.587
I am satisfied with my visit to the Dominican Republic				0.698	0.487
Loyalty	0.701	0.870	0.870		
I will recommend this destination to my friends and family				0.877	0.769
In the future, I will repeat the visit				0.877	0.769

Convergent validity implies that a set of observable variables presents a single underlying composite, explained due to its unidimensionality (Henseler et al., 2009). The convergent validity is measured through the Average Variance Extracted, providing the amount of variance that the composite obtained from its indicators, in relation to the amount of variance that is due to the measurement error (Cepeda & Roldán, 2004). This variance should be greater than 0.5 (Fornell & Larcker, 1981), which would imply that each composite would explain at least 50% of the variance of its observable variables. All the mode A composites present in the model satisfy this condition.

The discriminant validity indicates the extent to which a given composite is different from other composites (Cepeda & Roldán, 2004). To measure this discriminant validity, two measures are used: Fornell criterion and Heterotrait-Monotrait ratio, which is a more demanding measure than the first one (Henseler, Hubona & Ray, 2016).

For there to be discriminant validity using the Fornell criterion, the correlation between the different composites must be less than the square root of the AVE (Average Variance Extracted) (Barclay et al., 1995), while the ratio of Heterotrait-Monotrait has to present a ratio between composites of 0.85 (Clark & Watson, 1995; Kline, 2011). However, other authors (Gold et al., 2001; Teo et al., 2008) place this ratio at 0.90, showing discriminant validity for the two measurements, according to what is shown in Table 4. Mode B composites (attitudes) are studied through weights, and not charges used for the mode A composites (Chin, 1998). These weights report the importance of each indicator in the formation of their respective composite, indicating possible multicollinearity by various authors (Mathieson et al., 2001; Diamantopoulos & Winklhofer, 2001) in the

indicators of the B-mode composite. Variable Inflation Factor Test (VIF) corroborates the existence or not of this multicollinearity, assuming, following various authors (Mathieson et al., 2001; Diamantopoulos & Winklhofer, 2001; Hair et al., 2014) values higher than VIF 5. This presents potential collinearity problems. Roberts and Thatcher (2009) propose a stricter criterion, placing the limit value of VIF for the existence of multicollinearity at 3.3. The position of Roberts and Thatcher (2009) has been chosen for this study and, as shown in Table 3, all the VIF values of the training indicators have values below 3.3, so it can be said that multicollinearity is not a limitation in this research.

**Table 3.** Reliability and validity of the mode B composites

Attitudes	Weight	VIF
- Border tourism should be based on enjoying and appreciating the natural or cultural characteristics of a destination	0.197	1.331
- The development of border tourism should focus on the local culture	0.296	1.339
- Border tourism encourages the participation of the population in this tourist activity	0.377	1.473
- Part of the income from border tourism should finance the conservation of tourism resources of the border in the region	0.220	1.174
- Border tourism should encourage cooperation between bordering countries	0.323	1.931

**Table 4.** Discriminant validity. Fornell Criteria (Ratio Heterotrait-Monotrait)

	Attitudes	Loyalty	Satisfaction	Perceived value
Attitudes				
Loyalty	0.365	0.877		
Satisfaction	0.416	0.571 (0.843)	0.761	
Perceived value	0.234	0.483 (0.698)	0.466 (0.691)	0.870

The valuation of the measurement model has turned out to be optimal as a result of the data obtained in Tables 2, 3 and 4, thus beginning the analysis of the structural model, which is initiated in the following section.

### Evaluation of the structural model

Castellanos-Verdugo et al. (2016) point out that, in the structural models, the weights and the different magnitudes of the relationships between the different variables that make up the model are measured and evaluated.

**Table 5.** Contrast hypothesis via confidence intervals

Hypothesis	Path coefficients	Intervals		Is it supported?
		5%	95%	
H1(+): <b>Attitudes → Perceived value</b>	0.234 <sup>sig</sup>	0.177	0.302	Yes
H2(+): <b>Attitudes → Satisfaction</b>	0.325 <sup>sig</sup>	0.267	0.391	Yes
H3(+): <b>Perceived value → Satisfaction</b>	0.390 <sup>sig</sup>	0.329	0.444	Yes
H4(+): <b>Attitudes → Loyalty</b>	0.142 <sup>sig</sup>	0.075	0.217	Yes
H5(+): <b>Perceived value → Loyalty</b>	0.270 <sup>sig</sup>	0.206	0.336	Yes
H6(+): <b>Satisfaction → Loyalty</b>	0.386 <sup>sig</sup>	0.294	0.471	Yes

Through a Bootstrapping of 5,000 subsamples, the stability of the estimates is examined, and it is not necessary for the sample to follow a normal distribution, as it should happen in the case of the CB-SEM (Hair et al., 2017). Since the measures are non-parametric (Barroso et al., 2010), the contrast is carried out by means of a hypothesis test based on confidence intervals, with a level of significance of 0.05. The Bootstrapping technique applied to PLS is a measure used for the exact estimation of the measurement model (Roldán & Sánchez-Franco, 2012). The hypotheses to be completed in the contrast

of the previous hypothesis are the ones presented in Table 5 contrasted by confidence intervals. The results obtained from the hypothesis test carried out using confidence intervals obtain identical results as if they were carried out through the t test, as shown in Table 6. On the other hand, the amount of explained variance of each exogenous variable explained in relation to the endogenous variables is shown in Table 7.

**Table 6.** Hypotheses contrast via t test

Hypothesis	Path coefficients	t values	p-limit	Is it supported?
H1(+): <b>Attitudes → Perceived value</b>	0.234***	6.160	0.000	Yes
H2(+): <b>Attitudes → Satisfaction</b>	0.325***	8.547	0.000	Yes
H3(+): <b>Perceived value → Satisfaction</b>	0.390***	10.834	0.000	Yes
H4(+): <b>Attitudes → Loyalty</b>	0.142***	3.258	0.001	Yes
H5(+): <b>Perceived value → Loyalty</b>	0.270***	6.873	0.000	Yes
H6(+): <b>Satisfaction → Loyalty</b>	0.386***	7.154	0.000	Yes

\*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ . (one tailed t student).  $t(0.001; 4999) = 3.092$ ;  $t(0.01; 4999) = 2.327$ ;  $t(0.05; 4999) = 1.645$

**Table 7.** Effect on endogenous variable

	R <sup>2</sup>	Q <sup>2</sup>	Coefficient Path	Correlation	Explained variance (%)
Perceived value H1: Attitudes	0.055	0.039	0.234	0.234	5.48%
Satisfaction H2: Attitudes H3: Perceived value	0.317	0.171	0.325 0.390	0.416 0.466	13.52% 18.17%
Loyalty H4: Attitudes H5: Perceived value H6: Satisfaction	0.402	0.290	0.142 0.270 0.386	0.365 0.483 0.571	5.18% 13.04% 22.04%

After the data shown in Table 7, attitude explains 5.18% of the variance of loyalty, 13.52% of the satisfaction variance and 5.48% of the perceived value. The perceived value explains 13.04% of the variance of loyalty and 18.17% of satisfaction. The latter, satisfaction, explains 22.04% of the variance of loyalty. Regarding the predictive relevance (Geisser, 1975) of the composites dependent on the model, the  $Q^2$  of Stone-Geisser is used, which is positive in all cases ( $Q^2 = 0.290$  for loyalty,  $Q^2 = 0.171$  for satisfaction,  $Q^2 = 0.039$  for perceived value), so that the model presents sufficient predictive relevance in relation to each of its endogenous variables, because for there to be predictive relevance,  $Q^2$  must be greater than zero (Henseler et al., 2009). As it has been observed in the previous tables, there is a positive influence of the attitudes on the perceived value (H1). In the same way, attitudes have a positive influence on tourist satisfaction (H2) and on tourist loyalty (H4). Also, a positive influence of perceived value has been observed on tourist satisfaction (H3) and tourist loyalty (H5). Finally, that hypothesis that signaled a positive influence of tourist satisfaction on loyalty has also been supported (H6).

## CONCLUSION

Tourism is one of the sectors with the highest growth, due to its multidisciplinary nature (López-Guzmán et al., 2018). It has experienced a considerable growth during the last decade in the number of tourists, income and employment derived from tourism activity, generating continuous interrelations between supply and demand. Tourism has not only been taken into account by developed countries but developing countries which increasingly see tourism as a socio-economic engine that creates jobs and currency movements. It has been demonstrated through studies that the economic growth and the

reduction of the poverty is derived from tourist activities carried out in a given destination. In relation to border tourism, there is little scientific literature, and, for this reason, it is pertinent to address aspects related to it, especially in relation to the behavior of visitors.

Regarding the proposed model, the tests related to the reliability of the A-mode composites (Composite Reliability) are positive, since all the values obtained are above the minimum value required in each of the analyzed composite (value perceived by the tourist in the destination, satisfaction of the tourist in the destination and loyalty of the tourist towards the destination). As regards to the convergent validity and the discriminant validity, the results are also positive since there are no anomalous values. Regarding the predictive measures, each and every one of them are positive, both in the variance explained ( $R^2$ ), where all the values are above the minimum value ( $> 0.1$ ) in each of the analyzed composite (attitude toward border tourism, value perceived by the tourist in the destination, satisfaction of the tourist in the destination and loyalty of the tourist towards the destination), as well as in the case of the  $Q^2$  redundancy ( $> 0$ ), where all the composites have values higher than zero, so it can be confirmed that each of the constructs inserted in the structural model have predictive relevance.

It has been proven that there is a positive influence of the attitudes of border tourists on the value perceived by them in the border destination. Similarly, it has been proven that the attitudes of border visitors have a positive influence on their satisfaction with the border destination and on the loyalty, they have towards the place. Also, a positive influence of the value perceived by the border visitors has been observed in the satisfaction of the border tourist and in their loyalty. Finally, it has been verified that there is a positive influence of border tourist satisfaction on their loyalty towards the destination of the border. All relationships have been low regarding the explanatory variance, although they provide relevant data to know the behavior of border visitors. These results can be very useful for different organizations belonging to each of the two countries that make up the border: on the one hand, for the Ministry of Tourism and the Ministry of Environment and Natural Resources of the Dominican Republic; on the other hand, for the Ministry of Tourism and Creative Industries and the Ministry of Agriculture, Natural Resources and Rural Development of the Republic of Haiti, with intentions of working on border promotion strategies and establishing companies in border areas in order to stimulate the area from an economic, social and a sustainable point of view, affecting the minimum environment where they are inserted.

The results obtained for the provincial border agencies may also be interesting, including the Administrations of the provinces of Montecristi, Dajabon, Elías Piña, Independencia and Pedernales by the Dominican Republic, and the provinces Northeast, Center, West and Southeast in the case of the Republic of Haiti. It should be noted that the managers of the existing resources in the border limits, whether public or private entities, have to work for the sustainable development of the area, generating jobs that go mostly to the local community. In addition, the development of corporate social responsibility has to be supported, in favor of improving employees' education, as well as of local communities, as this will generate an increase in value and perceived quality, and the satisfaction of visitors. Thus, efforts must be made by public and private entities for the controlled increase of accommodation places in the border area, as well as other services, in order to retain tourists in these areas, to generate a tourism offer that, added to the potential border resources mentioned above, generate a consistent offer. They can increase the number of tourists and, therefore, the income derived from the activity, provided it is done from a sustainable and responsible point of view. It should also be noted that this work is limited by the fact that only direct relationships can be demonstrated, without examining the mediating or moderating roles of other variables. Thus, future research should verify the

relationship between the different variables of this study, applying this questionnaire in other national and international border areas, and verifying the relationship of mediation and moderation of some variables with age, gender or nationality. In turn, the motivations of tourists visiting the border should be analyzed and these motivations should be related to the perceived value, satisfaction and loyalty of the visitor.

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## **DESIGN OF AN INDICATORS SYSTEM FOR THE EVALUATION OF TECHNOLOGICAL INNOVATION IN THE TOURISM DESTINATION OF PUERTO LOPEZ, ECUADOR**

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**Abstract:** The objective of this research was to design indicators for the evaluation of technological innovation (TI) in Puerto López. The methodology used is based on an analysis of the current TI situation and the perspective of the visitors on this issue. The diagnosis reported an incipient technological management by the public institutions and the scarce investment in R+D+i. The results provided 19 indicators to evaluate the TI before, during and after the visit, under the dimensions of product, process, organization and marketing that were identified and validated through experts' methods. The indicators show the importance to start working on technological intelligence.

**Key words:** Technological innovation, innovation in tourism, tourism destination.

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### **INTRODUCTION**

Innovation has changed the face of the industry in all sectors of the global economy nowadays. According to Simpson et al., (2006) and Goffin and Mitchell (2017) the positive or negative effects of innovation come out from its orientation. In this sense, not all the “innovative performers” have clearly oriented innovation in the different sectors, therefore the implementation of this factor has not had the expected results. Indeed, it is an indispensable factor for the success and survival of any sort of business in terms of

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getting over competitors today, through the differentiation of their products and services in the market (Hernández, 2013; Rivas, 2006; Azar & Ciabuschi, 2017; Gault, 2018). For Ponti (2013), Pisano (2015), Dziallas & Blind (2019) innovating means changing ideas into products, services or strategies to later be valued by a group of target consumers. However, in many countries across the globe, innovation has not been explored in depth due to the lack of knowledge regarding its system. Innovation differs from creativity. Creativity refers to the production of new ideas, new approaches and inventions, whereas innovation is the application of new and creative ideas and the implementation of inventions. From this it follows that people and organizations may be creators without being innovators (Decelle, 2004; Dewangan & Godse, 2014; Taylor, 2017).

Innovation in tourism must be seen as a permanent, global and dynamic process (Cosma et al., 2014). Innovation system in tourism can be complex as the theoretical underpinning is extensive but scarce in objectivity (Hjalager, 2010). The limited theorizing and empirical investigation of innovative practices by tourism organizations is a considerable weakness (Thomas and Wood, 2014). It means that innovativeness is not only the concept but also the knowing about “what to do” and “how to do it” to transform it into business (Souto, 2015; Mohd et al., 2016). In the entrepreneurial sector, innovativeness can improve the level of incomes, and the number of new jobs. A study run by Ríos y Marroquín (2013) and Kogan et al. (2017) found that a growth in the amount of industry innovation increases the quantity of capital and labor services in the industry. However, for Erspertive & Lusch (2015) TI broadly contributes to enhance the opportunities for innovating services. Clearly, TI is a powerful mechanism for boosting business competitiveness. Since the 90s, it started to suffer several modifications. Since then, it was no longer a linear model and began evolving into an interactive one which not only considered product and process but the importance of organization and marketing (Redes, 1996; Damanpour et al., 2009). This definition, however, has evolved a lot ever since. In the view of Diaconu (2011) it comprises new or significantly modified products and processes where technological novelty emerges. For instance, the introduction of new technology generates new products or processes in the business. In respect with the aforementioned facts, Alfonso (2013) asserts the following:

TI is the most important power for the change in the production of goods and services. Nowadays, this process is seen as the real and tangible result of technology, which enables innovators to combine technical, financial, commercial and administrative capacities along with the launching of new and better products or processes to the market. The process of innovating as well as its relationship with society turns out complex, since it not just implies the application of the obtained results from the research at a high level, but also it is the result of entrepreneurial, strategic, organizational and imaginative and decision-making capacities. In this regard (Alfonso, Rodríguez & Blanco, 2016; Suárez, 2018) assert that the tourism industry has become interested in inserting activities of TI as a competitive strategy for the improvements of results and quality in the service.

Innovativeness in tourism is the combination of applied research (knowledge production), training levels of human capital to enable them to assimilate and communicate that knowledge (knowledge dissemination) and the destinations and companies' capacity to absorb new technologies, therefore, TI itself is an instrument for sustainable growing of companies and destinations, in order to boost the competitiveness in the area where tourism is implemented. Furthermore, In Ecuador, TI is one of the main weaknesses not just in the travel and hospitality industry but in the majority of entrepreneurship. In the public sector, just the MIPRO (Ministry of Industry and Productivity of Ecuador) is working in this field; it has launched the initiative MIPROLab

to engage university students from all over the country to present innovative proposals that affect positively the economic development. In the PNBV 2013-2017 (National Plan for Good Living of Ecuador) prepared by the National Secretary for Planning and Development of Ecuador [SENPLADES] (2013) innovation is presented as the key mean for the transition from a primary producer- based economy to a knowledge-based economy, and introduces the idea of social and technological innovation as the fundamentals of what is called the Productive Matrix Change. However, the capacity of innovation has not shown any signs of growing in this context as no information inventory exists. Moreover, such structural change must be supported by an easy and understandable policy framework, which leads people to direct their effort to a common goal.

Innovation today is one of the priorities in the tourism agenda at all institutional levels. For the World Tourism Organization [UNWTO] (2018) it is an indispensable tool for management of the tourist activity. However, Ecuador considerably bet on innovation during the past government in order to achieve the goal of changing the productive matrix, for this purpose, the current Government Secretariat for Higher Education, Science and Technology ([SENESCYT] Government Secretariat of Science and Technology [SENACYT] by then) in 2015 promoted great support for innovative ventures and promoted proposals for innovation in various fronts of the economy and invested in the global training of human talent. This year marked important advances for this phenomenon, such as the appearance of Innopolis (Fair of innovation projects) managed by the university YACHAY TECH, the same that has led to innovations, which have been more linked to the development of technologies and robotics, with a low impact on tourism activity. Currently, SENESCYT continues to support innovation projects through its web portal “Banco de Ideas” that promotes calls for proposals. However, so far there have been no emblematic innovative projects directly linked to tourism activity.

Further, it seems that the importance of innovative decisions in businesses or public planning is still somewhat underestimated. Nonetheless, in some tourist SMEs (Small and Medium Sized Enterprises) – the predominant number of establishments in Ecuador in this sector- incremental innovation without R+D is being seen as a tool of growth, in contrast, radical innovation is a quasi-non-explored field.

On the other hand, when it comes to the reality of tourism in Ecuador, the lack of innovative ideas in the academic, social, political, organizational, technological, cultural, entrepreneurial, environmental, and infrastructural dimensions is easily visible. Indeed, as a result of the misconception of the relationship between TI & ICT (Information and Communication Technology) because of its versatility to be implemented in any of those dimensions, has made people term any change as innovation. Despite the existence of incipient guidelines to steer the course of innovation in the country, no cantons in the province of Manabí have implemented a successful innovative strategy to attract visitors; actually, in their rural localities tourism is not observed as an alternative for local development yet, and lacks of technological infrastructure. For that reason, it is important to evaluate the current and potential application of innovative ideas to foster the activity in those areas by conceiving TI under the lens of systematization and defining procedures and tools that facilitate its implementantation and evaluation.

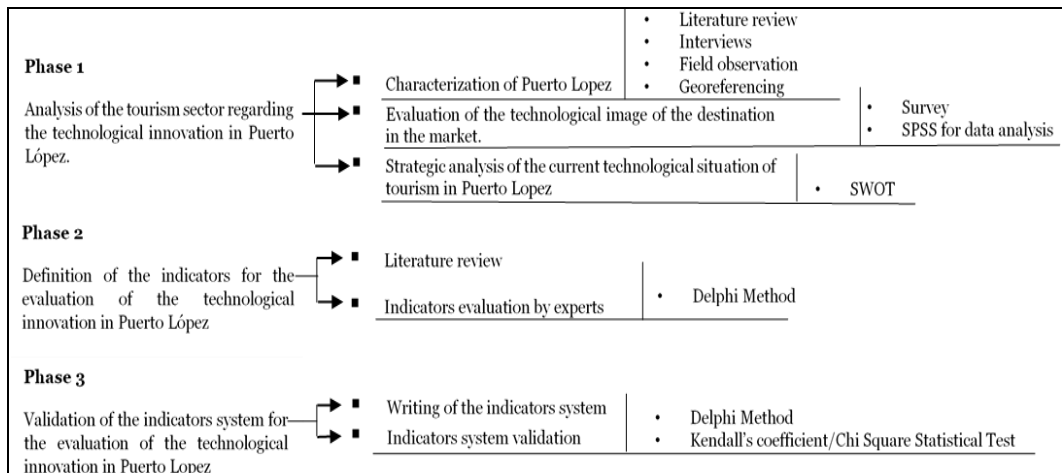
Moreover, Manabí is now experiencing an infrastructural, social and economic recovery from a devastating event. On April 16, 2016 an earthquake of magnitude 7.8 on the Richter scale shook the northwest coast of Ecuador, the event caused great losses to the tourism sector (Garcia et al., 2018), the total cost of reconstruction is estimated at 3344 MM USD, the sector hotel, food and entertainment in the province of Manabí was destroyed by 80%. In the tourism subsector, a total reconstruction cost of 97 million USD

(9.4% of the productive sector) was estimated, which includes (Reinoso et al., 2019) the cost of the immediate response to the event, the reconstruction of assets and the lost flows. In consequence, the tourism activity in Manabí after the earthquake, must be reformulated, so it requires the new reality, it is necessary to analyse the (...) problems and their causes that motivate the stagnation in tourism management, learn the needs and the requirements of tourism service providers, redesigning new products aimed at motivating demand and implementing strategies that motivate the reactivation of tourist activity through the improvement of tourist offers, and communication (marketing) of the destination (Garcia, et al., 2016). At this time, it is necessary for Puerto López to take care of innovation to keep tourists motivated to visit the destination.

With this in mind, it is time to start planning from a renewable perspective that greatly affect in the face of tourism in the medium to long term. For this reason, it is viable to state the idea that the evaluation of the technological innovation will allow planners to establish better conditions to improve the tourist supply in the territory. The evaluation must be performed by the application of an indicators system. According to Alfaro & Gómez (2016) for the construction of any indicators system, the need to establish the characteristics of the incoming information is key so that the data provided by the different official information sources are related to the dimensions of the previously selected evaluation. In the end, TI in tourism has been studied in Ecuador just in the hotel area, so it is evident that it is still an emerging issue in tourism destinations, since instruments for the evaluation in this field are dispersed, complex and difficult to define. Therefore, this research embodies the design of an indicators system for the evaluation of TI in Puerto López from the destination perspective as a pioneering reference.

## MATERIALS AND METHODS

This qualitative study was based on an analytic-synthetic approach. The revision of previews methodologies for the definition of indicators was considered as a starting point for the research. The methodology for the study was structured in three phases (Figure 1).



**Figure 1.** Procedure for the research development

In the first phase, scientific observation with field visits were performed to raise information for the analysis of the current situation regarding TI in tourism in Puerto Lopez. Interviews to officials of the local government and departments linked to tourism

were fundamental techniques to get information as well as the survey run over visitors to the canton to learn about their perception of the destination on TI. Georeferencing of the tourist areas in the destination was done, and the participative tourist strategic analysis with the application of the SWOT matrix provided the main problem and the strategic solution on this issue. For the collection of data, the sampling procedure was defined, information collection instruments were designed, quantitative techniques were applied and the statistical package SPSS version 29 was used. To determine the sample size, the methodology proposed by Alatorre & Pérez (2011) was used but following a statistical criterion and assuming an infinite population. The variability of the population is estimated at 50% ( $p = q = 0.5$ ), a widely used value in social research (Meiriño et al., 2016) 191 valid surveys were collected, representing a sampling error of 7.2% with a confidence level of 95%. In the second phase, the literature review for the identification of indicators allowed to get a preliminary list of possible and / or potential ones to address each of the adjacent problems and policy issues of the destination.

Those that best fitted the needs of the territory were considered in the context of the potential and existing technological reality. The Manual of Bogota prepared by Jaramillo, Lugones & Salazar (2001) was considered as a key tool for the identification of innovation indicators in relation to the measurement dimension and the types of indicators, this manual is an adaptation of the Oslo Manual (RICyT, 1997), to the Latin American context; this, in turn, was compared to its latest edition (OECD, 2005).

However, none of these manuals presents an approach - albeit partially - touristy but fully entrepreneurial, so the indicators proposed in the Operational Manual for the Configuration of Smart Tourism Destination (STD) by the Agencia Valenciana del Turisme [Invat.Tur], (2015) of which those that are directly related to technological innovation were extracted to merge with the sectors, dimensions, and stages of the potential evaluation. Finally, the third phase consisted of the writing of indicators for the evaluation of TI which were developed from their validation through the application of the experts' method, analyzing their criteria by the Chi-square statistical test to verify if there is a coincidental coincidence in the criteria issued by the experts. Within this, a value of the Kendall concordance coefficient ( $W$ ) was obtained. The mathematical expression for its calculation is (Badii et al., 2014; Márquez & Márquez, 2018):

$$W = \frac{S}{\frac{1}{12}k^2(N^3 - N)} \quad (1)$$

**Where:**  $W$ = Kendall concordance coefficient;  $S$ = Standard deviation;  
 $N$ = Number of criteria;  $k$ = Number of experts.

## RESULTS DISCUSSIONS

### Tourist zoning of Puerto López

According to the Spatial and Territorial Development Plan, Municipality of Puerto López (PDOT) prepared by the Municipality of Puerto López [GAD Puerto López] (2015), this is one of the 22 cantons of the province of Manabí, located in the southwestern part of the province, strategically crossed by the Spondylus Route (road artery E-15), in the Machalilla National Park (MNP) which is a protected area that covers about 60% of its territory, the canton has an area of 429.36 km<sup>2</sup>, it borders on the north and east with the canton of Jipijapa, to the south with the province of Santa Elena and to the west with the Pacific Ocean, it is between the coordinates 01°10' and 01°40' of south latitude and

between 80°25 'and 80°52' of Western longitude. The georeferencing of the zones of the canton shows the areas where tourism affects directly and those in which it does not but belong to the MNP and therefore integrates a protected area (Figure 2).

In Figure 2, the territory of Puerto López is divided in three main zones:

1. Tourist use zone
2. Tourist operations zone (urban zone)
3. Zone of the Machalilla National Park (Protected area)

The tourist zone of the canton is constituted by the most visited sites; those are the naturally and culturally rich. Among the sites of the tourist zone are:

- Agua Blanca Community
- Los Frailes beach
- And the beach of Puerto López town center.



**Figure 2.** Different tourism affected areas (Source: Processing on topographic map Google Earth)

The Agua Blanca Community is located in the MNP, in the parish of Machalilla. This site receives more than 16.000 visitors every year (Agua Blanca Comunidad Ancestral, n.d.). It has plenty of cultural and natural supply. Here, visitors can see archaeological remains of the Manteños Tribe (500-1532 A.C.). This activity is complemented by the existence of a hot spring lagoon where people can have a thermal water bath and wildlife observation. Likewise, Los Frailes beach is an important site located within the MNP where most of the visitors to Puerto López come. It is one of the most visited protected beaches in Ecuador which is surrounded by dry forest and lacks any human construction on the seaside to keep it in a natural state.

The tourist use zone in town center is the place where public access to the beach at any time and tourist facilities such as accommodation, restaurants as well as tour operators' service merge, since the tourist operations zone is in the same area. Another relevant tourist site in Puerto López is Salango, this little town runs activities like boat trips, snorkeling by the Salango Island, and sea life observation. Despite the fact that it is not the most visited site in the canton, it is a place of remarkable tourism importance due to its natural wealth complemented with an archaeological museum. MNP is the biggest zone drawn in the map. This protected area owns a wide variety of flora and fauna.

Due to the fact that it covers the larger part of the territory of Puerto López, environmental management is strictly regulated by the Environmental Ministry of Ecuador (MAE), however, as a result of its various forms of production, there are other ministerial posts which directly or indirectly intervene in the management of the territory such as the Ministry of Tourism (MINTUR) and the Ministry of Agriculture, Livestock (MAG), Aquaculture and Fishing (MAP) among others governmental offices. Despite all the efforts, for the GAD Puerto López (2015) there are natural resources that have been degraded by the intervention of the human being and its causes such as: deforestation and pollution, among them the deterioration of the flora and fauna as well as those of the rivers' basins.

### **Characterization of Puerto López**

Its population is of 20,451 inhabitants of whom the predominant number reaches a secondary level, followed by elementary level of schooling, most of them are involved in the tertiary sector, but not directly linked to tourism but to the administrative and teaching functions (INEC, 2010). Puerto López is politically made up of three parishes (Machalilla, Salango and Puerto López [urban area]). Within these three parishes there are 31 villages of which 4 are communes (Agua Blanca, El Pital, Las Tunas and Ayampe) that have their own organizations from which Agua Blanca is the most visited. In the northern part of the canton the climate oscillates between 26 and 24°C, in the southern part between 22 a 24°C; with an annual precipitation between 0 and 1500 mm. It has several rivers that flow into the sea, excelling as the main basin, the Ayampe River, which shares its route with the canton Jipijapa. Fishing represents the most important source of income for the canton in general and the parishes of Machalilla and Salango - with the exception of the urban parish of Puerto López. The Machalilla parish, is the least benefited by tourism. This reality contrasts with the statistics of the economic active population (EAP) which represents 46.53% of the population of the canton (INEC, 2010) where the majority of them work in the tourism field. In addition to these activities, there are other sources of income such as agriculture, livestock, forestry and poultry farming, especially in the rural area, however, their low level of production plays down their importance in the local economy (GAD Puerto López, 2015).

The strategic location of Puerto López facilitates the access to and from it. Its roads are of second order. The road infrastructure inside the town is deteriorated, which makes transportation and internal mobilization somewhat difficult. One of the most important streets is the waterfront one, which was rebuilt in the last five years and now represents a nice urban landscape unlike the rest of the city. In contrast, access to rural areas is limited. The canton has 44 educational establishments (primary and secondary level), none of them at university level, has three health centers (two sub-centers and one community clinic).

The majority of the population does not have access to basic services. Within the framework of the tourist superstructure, the MAE is the institution that regulates any type of activity, including tourism. MINTUR currently does not have a tourism office in the canton, so the task of promotion and dissemination is carried out by the tourism department of the GAD of the canton, while the community sector assumes its touristic role. There is an association of hoteliers, and also restaurants and operators, however, their

objective is to enhance the achievement of operating permits, so currently they are not leading any project that promotes TI in tourism from the private sector. In addition, there is a lack of interest of these key actors for inter-institutional and intersectoral cooperation and coordinated work for the management of tourism in the territory. Tourism dynamics in the canton of Puerto López is consistent, with a greater influx of visitors between the months of June to September, largely due to the observation season of humpback whales. Tourist facilities consist of 71 accommodation establishments, 25 food and beverage establishments, 32 travel agencies and a tourist transport agency. One of the most outstanding weaknesses that tourism in Puerto Lopez currently faces today is the lack of a strategic plan to direct the processes of tourism management in the territory, followed by administrative instability as department directors are normally changed when a new mayor is elected.

This has caused the lack of firm projects, which promote constant development; as a result of this, the shift managers have mainly directed the management of this activity to promotion especially in national and international fairs, with limited presence in social networks. The results of this management approach affect tourism in the territory, since conflicts among public institutions in charge of the tourism management exist, added to limitations in infrastructure. Further, another of the serious problems affecting tourism development, especially at the business level, is the activity of "hooking" which leaves little profit margin to operators, preventing them from improving their services.

### DATA ANALYSIS

Important information concerning innovation was analyzed to construct the questionnaire for the survey. In this regard, the criteria stated in the White Paper for STD (Blanco, 2015) and the "Tourism destinations report: building the future" (López-de-Ávila et al., 2015) were considered to build the questions. Relying on the manuals revised, the technological interaction between the tourists and the destination must be present in the three stages that make up the process of a visit, they are:

- ✓ **Before the visit:** the raising of awareness of what the destination has regarding its products and services, and the way to provide the right and quick response to the potential tourists' questions for them to make the right decisions on time.

- ✓ **During the visit:** technological facilities to enhance the access to information for visitors while in the destination, is an indispensable feature of a STD.

- ✓ **After the visit:** Public departments must be interested in the tourists' perceptions of the destination, so that it is easy for the tourism managers to learn about the customer's satisfaction and therefore improve the products and services to overcome visitors' complaints.

Set forth below are the results: This analysis of data collected is developed by grouping the qualitative and quantitative questions applied to visitors into two parts.

The first analysis consisting of qualitative yes or no questions, showed that the frequency of people who had informed on the web before the visit is 68.9% and 63.4% of the respondents reported that there are no official virtual tourist information channels where they can ask questions about tourism products and services and get answers in a short time. With regard to the existence of private virtual channels that resolve the concerns of tourists before the trip, 74.3% responded affirmatively. In contrast to the public sector, Puerto Lopez companies are interested in providing quick and timely information to both real and potential tourists through virtual channels. 86.9% reported that there are no technological applications aimed to facilitate the access to information and services in the destination, so that it makes easier for visitors to better interact with the destination, this percentage in turn represents the total of the questions answered.

86.4% of tourists reported that in Puerto López there are no QR modules that contain information on sites and 59.7% of them determined that there are no rental technology devices in the tourist kiosk. In respect with public areas with free Wi-Fi points installed and managed by the official institutions responsible for managing the territory 74.3% of the respondents reported no existence. 66.5% of the visitors reported that they have not received any promotional information about Puerto López after their visit, this shows a weak tracking of the tourist for their loyalty to the destination.

In the second part, the rating of the information about the destination available on the web is at an average of 3.83 ( $\pm 1.67$ ) under the regular parameter. The official use of social networks for tourism promotion and dissemination has a similar average of 3.03 ( $\pm 1.79$ ); the use of ICT for the management of products in the territory shows an average of 2.55 ( $\pm 1.36$ ) under the bad parameter, in a similar way, the technological infrastructure of Puerto López is at an average of 2.02 ( $\pm 1.16$ ) followed of the use of the TIC for the information of the experiences of the tourists after the visit, with an average of 2.0 ( $\pm 0.98$ ). The result of the surveys shows an incipient technological management on the part of the public institutions in charge of the tourist activity. The current perception of the visitor of Puerto López, shows the urgent need to implement a technological infrastructure to boost the interaction of the visitor with the destination, before, during and after his visit, through technological tools and web channels such as social networks.

### **SWOT**

This part of the study was participative. It contributed to the analysis of the current situation of the technological innovation in Puerto López, and provided guidelines for the design of the indicators as the main problems related to this field are stated. For the achievement of this step, experts of the different institutions (MAE- GAD cantonal), academics (ESPAM MFL, Department of Tourism) and entrepreneurs (travel agents, restaurants, transportation and hotels) involved in tourism in the territory took part in the preparation of the analysis. All of the information stated and selected by the participants were compared to the information available in the PDOT of Puerto López and by means of other sources like interviews and direct observation before analyzing and rating them in the SWOT matrix. From the preparatory stage, the following variables were selected and prioritized in accordance to their importance:

#### **Strengths**

1. Territory with a wide variety of natural and cultural resources of national heritage value.
2. Potentiality of the territory for the implementation of technological infrastructure.
3. Destination of tourist interest positioned in the domestic and international market.
4. Strategic location (on the Spondylus route, near two international airports [Manta and Guayaquil])
5. Priority area located within the MNP (protected area).

#### **Weaknesses**

1. Lack of a tourism strategic plan (lack of planning related to technological innovation).
2. Deficient use of ICT for tourism management in the territory.
3. Deficient technological infrastructure.
4. Scarce investment in R+D +i.
5. Limited cantonal budget for tourism management.

#### **Opportunities**

1. Public policies to boost innovation
2. Global access to technology transfer.
3. Economic capacity of the central government to develop R+D+i projects.



4. Presence of institutions for advice in the development of projects (universities, SENPLADES, MAE, MINTUR, etc.)
5. World tourism trend towards the STD.

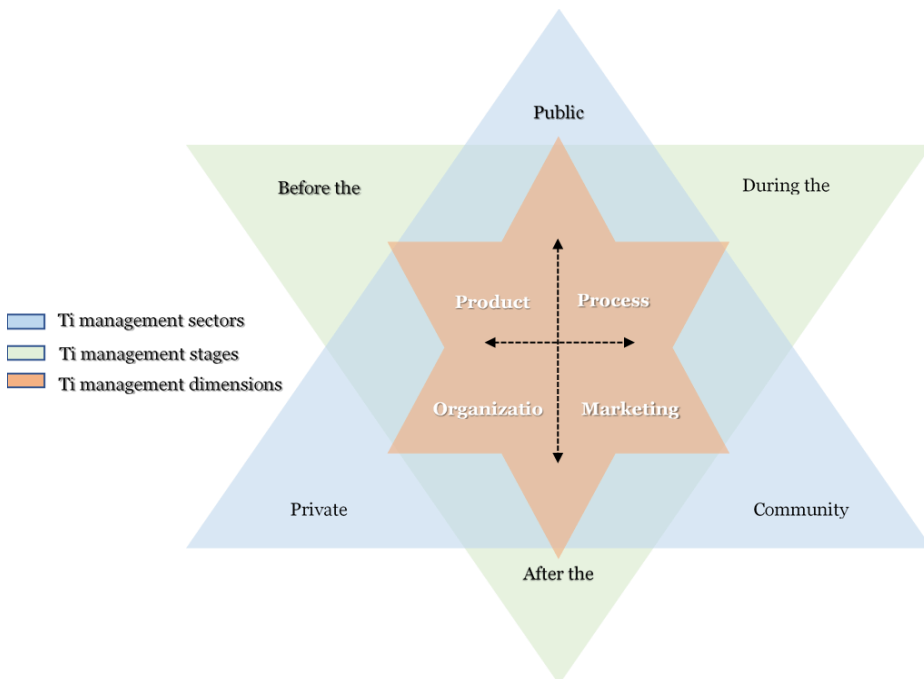
#### Threats

1. Potential competitors with similar natural and / or cultural characteristics.
2. Limitations in the application and monitoring of R+D+i projects.
3. Administrative instability for tourism management in the governmental secretariats.
4. Eventual policies of economic austerity due to crisis in the country.
5. Environmental degradation (flooding, earthquake, landslide).

After rating all the variables in the matrix, it reported that the main problem that the canton has is the scarce investment in R+D+i, but the most outstanding opportunity is the existence of public policies to boost innovation.

#### Indicators system for the TI evaluation in Puerto López

A model named as Star Model for the management of TI was designed with the integration of all the sectors (public, private and community), dimensions (product, process, organization & marketing) and stages (before, during & after the visit) which affect it in order to facilitate its interpretation and reduce the visual impact (Figure 3).



**Figure 3.** Star Model for the management of TI (Source: Self-reported information)

The types of indicators are established according to the classification established in the Bogota Manual which are of impact (I), expenses (E) and dissemination (D). In the matrix (Table 1), it is marked on two important axes (sector and dimension) on which technological innovation intervenes or positively impacts. However, it is important to clarify that by indicating in the quadrant responsibility for the execution of this activity does not completely exclude the other sectors when it is applicable. It is suggested through the relationship with the indicators to establish the minimum requirements for a positive result

in the evaluation of technological innovation. The preliminary list of indicators, was submitted to experts for analysis and subsequent validation. Based on the validation of the indicators, by the experts, 19 indicators were determined with their code and measurement criteria.

**Table 1.** Indicators system for the evaluation of the TI in Puerto López before the visit

Before the visit									
INDICATOR	CODE	CRITERION	SECTOR			DIMENSION			
			G	P	C	p	pp	o	m
Certifications and/or recognitions on products and / or processes related to technological innovation	IN001	Number of recognitions and / or certifications achieved in the last 5 years that reflect the adequate management of technological innovation in the territory	x	x	x	x	x	x	x
Agreements Government-Company-University for the development of technological innovation for tourism	IN002	Number of agreements for the evaluation of the cooperation between these key actors for the promotion of innovation	x	x		x	x	x	x
External investment in R+D	EN003	Number of R & D incoming projects managed by NGOs, universities or government agencies which are not directly linked to the tourism innovation management in the territory				x	x	x	x
Technological innovations	IN004	Number of technological innovations run in the territory in the last 5 years	x	x	x	x	x	x	x
Programs of control and assurance of quality through technology	EN005	Number of programs led by public, private or community companies on quality control and assurance programs	x	x	x	x	x	x	
Updating of social networks	DF006	Frequency of updating information in social networks of official use	x	x	x	x	x	x	X
Programs / projects aimed at promoting ITA	EN007	Number of registered programs or projects linked to technological innovation	x	x	x	x	x	x	x
Tourist website	DN008	Number of attractive, simple and fast web page/s, adapted to all devices that encourage interaction and co-creation processes with the possibility of booking Tourist chat. Virtual call center: Skype, example. Virtual tourist office: Facebook, example	x	x	x		x	x	x
Technological training associated with new and improved processes and products	EP009	Percentage of investment by companies in human capital training for the incorporation of new technologies	x	x	x		x	x	
Use of ICT by tourism companies	IP010	Percentage of companies that manage their tourism products through ICT		x			x		x

It also indicates the sectors in which the indicators intervene in the different stages, as well as their respective dimensions. At the suggestion of experts, another indicator related to the importance of evaluation of technology management on the Triple Helix model (government- business-university) proposed by Castillo et al. (2014) was added to the list. Some of the indicators identified in the previous section were separated from this study due to their scarce relationship with the reality observed in the study area. The indicators which integrate the system were finally framed within the three stages of the visit

and separated according to them for a better interpretation. For each table, in the code column, the first letter shows the type of indicator (I = impact, E = expenditure, D = Dissemination), the second letter indicates the proposed measure of the indicator (N = number; G = degree, F = frequency and P = percentage). In the quadrants corresponding to the sector, they are classified as G = public sector, P = private sector, and C = community sector. With respect to the evaluation of dimension, they are p = product, pp = process, o = organization, and m = marketing. The indicators stated in Table 1 show an overall view of what the canton Puerto Lopez must consider to start planning to improve the innovation in technology oriented to improve the processes of getting in touch with the destination before the visit. Indeed, the indicators selected by experts are in coherence with the current situation of the territory and do not represent excessive costs.

The indicators written in table 2, clearly stated the criteria of experts on the strategic technological things to improve the experience of the tourists while in the destination, it shows the importance of the private and community sectors participation for the implementation of a better technological infrastructure in the canton.

**Table 2.** Indicators system for the evaluation of the TI in Puerto López during the visit

During the visit									
INDICATOR	CODE	CRITERION	SECTOR			DIMENSION			
			G	P	C	p	pp	o	m
Mobile applications developed	INo11	Number of mobile Apps designed to facilitate the interaction of the tourist with the destination for decision making within it.	x	x	x	x	x		
Quality connectivity to the network of tourist companies of the destination with latency	IGo12	Degree of sufficient bandwidth and limited latency to offer agility in the service		x	x	x	x		
Wi-free network with QoS guaranteed in public places of tourist affluence (parks, museums, piers, etc.) as well as in tourist companies (hotels, restaurants, shops, etc.)	INo13	Number of KBPS of available flow per terminal when the area is at 20% of its capacity of regular users	x			x			
Software created and licensed for the tourist and hotel sector	DGo14	Degree of the automation of visitor information	x				x	x	
Existence of NFC, QR, RFID, etc.	DNo15	Number of interpretive panels and promotional material with NFC, QR, RFID or others	x			x	x	x	

Table 3 shows the indicators that must be considered to enhance the keeping-in-touch with the visitors, start working on technological intelligence to virtually know them, learn about their perceptions and keep them loyal to the destination to overcome the limitations that affect the image of the destination. The experts' opinions were analyzed by means of a Chi-Square statistical test, to verify if there is a coincidental coincidence in the criteria issued by the experts. Within this, a value of the coefficient of agreement of Kendall was obtained ( $W = 0.991$ ). It was obtained as a result of the Chi-square test  $124.84 > 3.94 \rightarrow$  Therefore, there is no accidental coincidence among the experts, which leads to the conclusion that there is strong consistency among them. The result of the application of the evaluation instrument (Kendall method with Chi-square statistical test) reported that the vast majority of the answers in the evaluations by the experts are located within the classification: strongly agree or agree and that of the proposed indicators

system which stand out for the evaluation of the Ti in Puerto Lopez are, Certifications / recognitions on products and / or processes related to technological innovation, Technological innovations with R & D, Innovative tourism activities (ITA), Programs / projects aimed at promoting ITA, Use of ICT by tourism companies and Open data (OD).

**Table 3.** Indicators system for the evaluation of the Ti in Puerto López after the visit

After the visit								
INDICATOR	CODE	CRITERION	SECTOR			DIMENTION		
			G	P	C	p	pp	o m
Characterization of the tourist demand satisfaction	IF016	Frequency of online surveys, account of experiences, opinions, complaints and / or suggestions	x	x	x		x	x
Open data (OD)	DGo17	Degree of Information on the platform shared by companies, organizations and institutions to facilitate R & D processes	x	x	x	x	x	x
Brand and media monitoring	IGo18	Degree of technological surveillance to analyze what is said of the destination in social networks, frequency of use, what is the profile of our digital visitor & the study of competitors	x	x	x		x	x
CRM (Gestión de la relación con el cliente) y estrategias de marketing por correo electrónico	DN019	Number of promotions, last minute offers with the profile of the visitor, aimed at inspiring and loyalty		x			x	x

**Table 4.** Result of the application of the Kendall's method

Experts (E)	7
Number of indicators (N)	19
$\sum S^2$	27671.79
$N^3 - N$	6840
$E^2$	49
$E^2 * (N^3 - N)$	335160
$12 * S^2$	332061.48
W	0.991
$X^2$	<b>124.84</b>
$X^2_{0,05;18}$	<b>28.86</b>

## CONCLUSION

According to the importance attributed to the elements of innovation and technology in the literature reviewed for the recognition of a tourism destination, the canton of Puerto López reflects limitations in terms of its technological infrastructure, as well as the need for the development of associative strategic planning and the creation of incentives for its management as an intelligent or innovative tourism destination.

The raising of basic information by the application of empirical techniques and tools reflects the relevance of tourism activity for the development of the study territory.

However, the surveyed tourists, expressed a low perception of the technological management before, during and after their visit and a low investment in projects and applications related to R+D+i. Based on the study and previous practices of internationally recognized references such as the Bogota Manual (Jaramillo, Lugones & Salazar 2001), the Oslo Manual (RICyT, 1997; OECD, 2005) The Operational Manual for the Configuration of STD (Agencia Valenciana del Turisme [Invat.Tur], 2015) the White Paper for Smart Tourism Destinations the White Paper for STD (Blanco, 2015) and the "Tourism

destinations report: building the future” (López-de-Ávila et al., 2015), 19 indicators were obtained (impact, expenses, dissemination) associated with the evaluation of TI in Puerto López, which integrate public, private and community actors, in the dimensions of product, process, organization and marketing. This proposal for evaluation contributes to the planning of TI improvement processes in contact with tourists prior to the visit, during their experience and afterwards, since it becomes the starting point of future research of the subject in this tourism destination. The application of the Kendall method with the Chi Square test, as validation instruments of the proposed indicators, reported that there is no accidental coincidence among experts, so it is concluded that the consistency between their opinions is strong, in relation to the proposed system for the evaluation of the TI in Puerto López. For this reason, based on the application of the validation instrument used, it is confirmed that the main indicators are: Certifications / recognitions on products and / or processes related to technological innovation; Technological innovations with R & D; Innovative tourism activities (ITA), Programs / projects aimed at promoting ITA, Use of ICT by tourism companies and Open data (OD).

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## **COMMUNITY VIEWS ON THE ROLE OF TOURISM IN LOCAL DEVELOPMENT: A SOUTH AFRICAN STUDY**

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**Abstract:** Tourism has received much attention recently as a viable avenue to  
boost local economies and stimulate growth and development in sub-Saharan  
Africa with tourism strategies being adopted by many local authorities in South  
Africa as a major part of their local economic development (LED) initiatives. While  
much focus has been on approaches and strategies to use tourism for LED, minimal  
attention has been paid to the actual views and opinions of community members  
with regard to these approaches and strategies. This study, hence, evaluates  
communities' views on the role of tourism in local economic development. The  
study was conducted in Mnquma local municipality, Eastern Cape Province, South  
Africa, adopted a quantitative research methodology, and used questionnaires as  
data collection instrument. Key results indicate that community members feel that  
the tourism industry is not yet at a stage where it is able to contribute to poverty  
alleviation and create employment opportunities in the local municipality.

**Key words:** Local economic development; tourism resources; South Africa; Mnquma  
local municipality; community perceptions

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### **INTRODUCTION**

Local economic development planning is attracting a growing inter-disciplinary  
scholarship (Rodriguez-Pose & Tijmstra, 2007; Pike et al., 2011). Its core purpose is to  
build up the economic capacity of a local area to improve local economic futures and the  
quality of life for all (Nel & Rogerson, 2005; Pike et al., 2011). It is a process by which  
public, business and non-governmental sector partners work collectively to create better  
conditions for economic growth and employment generation (Ramukumba, 2012).  
Research on local economic development is particularly significant for developing  
countries in order to address critical development challenges (Barberia & Biderman,  
2010). Across sub-Saharan Africa, planning for LED is a critical element in development  
planning and has attracted a growing scholarship (Rodriguez-Pose & Tijmstra, 2007;  
Rogerson & Rogerson, 2010; Rogerson, 2014; Rogerson & Rogerson, 2014; Lawrence &

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Rogerson, 2018; Drummond & Snowball, 2019). In South Africa, LED is one of the main functions of local government and, currently, many of the country's local authorities are focusing on tourism as a catalyst for local economic development (Rogerson, 2013; Nel & Rogerson, 2016; Rogerson, 2019; Rogerson & Rogerson, 2019a). This surge towards using tourism as a strategy for local economic development has been boosted by the South African national government with its promotion of tourism as part of its national development planning strategies (Rogerson & Rogerson, 2018).

Rogerson (2013), in support of the above, stated that national government recognises and acknowledges the critical role of local governments in supporting tourism development and, as such, the national government has started introducing several support initiatives to capacitate these local governments. Indeed, in South Africa, the importance of promoting local development "is increasingly being identified as the strategic enabler for national economic and development objectives" especially of the country's National Development Plan (Van der Merwe & Rogerson, 2018). These same authors went further to state that for many economically declining localities faced with the downturn of resource-based activities (particularly in mining and agriculture), tourism has become a 'last resort' for regenerating these marginalized areas. Much focus in existing scholarship on South Africa is on approaches and strategies to use tourism for LED with limited attention paid to the actual views and opinions of community members on these approaches and strategies. In one study, Mabaso (2010) researched the perceptions of key stakeholders in local communities of tourism and found they had a diverse understanding of the role of tourism in local economic development and what needs to be in place for tourism to be a key driver for local economic development.

The current study was to extend the literature on community views of the role of tourism in local development. This study was conducted in Mquma local municipality which is in South Africa's Eastern Cape province. It is a remote and mainly rural area with high levels of poverty and unemployment. The locality is situated within the underdeveloped and economically distressed areas of the country (Rogerson & Nel, 2016). Arguably, in terms of the national space economy of tourism, the Mquma local municipality is one of the less visited tourism spaces of South Africa (Rogerson, 2017; Rogerson & Rogerson, 2019b). Nevertheless, in common with many peripheral rural municipalities across South Africa, local planning documents for Mquma identify tourism as a key potential sector to advance local economic development objectives and call for its prioritisation in future local development planning.

## **TOURISM AND LOCAL ECONOMIC DEVELOPMENT**

According to Pike et al. (2011: 2), whilst over the past two decades there is recorded a growth in scholarship surrounding local economic development, studies relating to questions of tourism as a driver of local economic development is limited. Indeed, in the most recent high-profile international volume capturing the state of the art of local economic development literature, issues concerning tourism went almost entirely unrecorded (Pike et al., 2011:2). The potential of tourism to contribute significantly to economic development is based on its contributions towards the diversification of the economy, its capacity to attract people to even the most remote locations with unique culture and natural attractions, its labour-intensive nature which supports a range of local skills from low to high skills, and its dominance by small-scale enterprises.

Tourism has, hence, proven on a global scale to be an economic sector that creates opportunities of employment in both formal and informal sectors (UNWTO, 2000), providing opportunities for improvement in quality of life and as a source of foreign income. In this regard, the tourism sector serves as an alternative form of export since it



improves the country's balance of payment and a general increase in economic activities. According to Khalil, Kakar and Malik (2007), most developing countries are focusing on tourism as an alternative for economic growth, and in sub-Saharan Africa, the significance of tourism is of increasing importance for many countries (Rogerson & Rogerson, 2018). The tourism industry is a labour-intensive and allows for relative ease of entry into the market with limited barriers. Tourism can be an important lever for reducing poverty through both its direct impacts, such as wages, employment and training, and through its indirect impacts such as value chains from sub-sectors including food, construction, transportation, and many other sectors (Ashley et al., 2007; Rogerson & Saarinen, 2018). Lastly, tourism exerts a range of dynamic impacts which can contribute positively to livelihood strategies for households, through infrastructure development (Ashley et al. 2007). Ramukumba (2012) noted that tourism has been seen to be a key driver for local economic development objectives such as sustainable employment, poverty alleviation and economic growth.

Kimbu & Tichaawa (2018) suggested that it will be 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 or actions to adopt, because factors that are mainly linked to efficiency and effectiveness of regional development are influenced by a range of institutions and processes. As discussed above the major focus in existing scholarship concerning tourism as a lead sector for LED is upon strategies and implementation. The existing literature has limited studies which explore the actual views and opinions of community members of the approaches and strategies for tourism and LED. This knowledge gap is addressed in the empirical study that was conducted in Mquma local municipality, Eastern Cape Province, South Africa.

## **MATERIALS AND METHODS**

Primary data for this research came from structured questionnaires completed by hundred and fifty (150) members of the community and the study adopted a quantitative research methodology. To identify insights and differences in perceptions between the respondents, a question regarding whether the respondent has a tourism qualification was included. The proposed contents of the questionnaire were discussed with key tourism stakeholders in the municipality that included the manager of tourism and local economic development, tourism officer, three tourism business owners and two local community members involved in tourism in the municipal area prior to data collection. Minor adjustments were made according to their comments and views of the questionnaire. The study adopted the convenience sampling non-probability technique in selecting participants in the survey. The views of Fox and Bayat (2007:59) are that, although units of analysis of non-probability sampling do not have an equal chance of being included in the sample, it still is frequently used because of its convenience and inexpensiveness. Convenience sampling, also known as availability sampling, is a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in study.

Tashakkori and Teddlie (2003:280) describe it as a technique where elements of a sample are drawn from a group or sub-population which is readily available. According to Welman and Kruger (2001:62) it is a more opportune method, as the population is more easily accessible to participate in the research. Field workers were used to distribute the questionnaires and targeted both community members, tourism business owners and the employees within the tourism industry. The field workers that managed the completion processes of the questionnaires briefed the respondents first

about the purpose of the study and established the willingness of the respondents to participate in the study. It was only those respondents who were willing to participate in the study that were given the questionnaires to complete. The Statistical Package for the Social Sciences (or SPSS) was used to analyse the results.

The study also analysed statistical significance on certain factors. Sarantakos (2007:63) defines statistical significance as *the probability that a test result has occurred by chance. It is then expressed in terms of the level of significance and the researchers work within these levels by computing the p-value. The test value is significant if a p-value smaller than 0.05 is determined.* For this study a p-value smaller than 0.05 was of significance.

## RESULTS DISCUSSIONS

The data collected for the study came from one hundred and fifty (150) respondents from the Mquma local municipality. Of the hundred and fifty respondents, 40% were males whilst 60% were females. The age distribution of the respondents shows that 54% were between the ages 21 – 30, 36% were between 31 – 40, 8% between 41 –50 whilst 2% were 51 years and above respectively.

The results further show that 4% of the respondents had primary education, 45% had secondary education whilst 51% had tertiary education qualifications. The section that follows will detail the respondent's views on various issues relating to the role of tourism in local economic development. The results in Table 1, reflects respondents' reported awareness of tourism activities in the municipal area. Most respondents (74.7%) indicated that they were aware of tourism activities taking place in the municipal area whilst 25.3% indicated that they were not aware.

**Table 1.** Respondents views on the awareness of tourism activities in the municipal area

Are you aware of tourism activities in the area?		Frequency	Percent
Valid	Yes	112	74.7
	No	38	25.3
	Total	150	100.0
Do you have a tourism qualification?			
Valid	Yes	68	45.3
	No	82	54.7
	Total	150	100

The results in Table 2, above gives an insight into respondents' views on the state of the tourism industry in Mquma local municipality. The results generally indicate that respondents believe the current state of the tourism industry is not well suited to help the area with local economic development. If the results of those who **disagreed** and those who **strongly disagreed** are combined for all the statements, the results then indicate that more than half of the respondents disagreed with the statements. Standing out from these results is where respondents, in majority (91.3%), disagreed with the notion that the infrastructure and superstructures available in the municipal area are in good state to support the growth of the tourism industry.

These results are in contrast with the views of Rogerson (2013: 13) who pointed out that the competitive position of any destination is determined by to an extent by the diversity and quality of its resources, availability of infrastructure and services. Given the above, it is clear that the tourism industry in the municipal area is not in a state where it can assist the tourism industry to be a strategy for local economic development. The results further infer that most respondents (70% and 60.7%, respectively) are is

disagreement that the municipality has prioritised the tourism industry as a key driver of economic growth to create employment opportunities and reduce poverty levels in the area, as well as the statement that tourism is contributing towards the improvement of the standard of living for community members in the municipal area.

These results are in contrast with the views of Ashley et al. (2007) who pointed out that tourism, could reduce poverty and improve standard of living in a specific locality in various ways. Respondents are of the view that the municipal area does not have enough tourism attractions and activities to encourage sufficient tourist spending to contribute to economic growth in the area with 62% in disagreement.

**Table 2.** State of the tourism industry in the municipal area

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The municipality has prioritised the tourism industry as a key driver of economic growth to create employment opportunities and reduce poverty levels in the area	7.3%	9.3%	13.3%	43.3%	26.7%
Tourism is contributing towards the improvement of the standard of living for community members in the municipal area	4.0%	12.7%	22.7%	40.7%	20.0%
Community members take advantage of opportunities in the tourism industry by starting their own businesses because they understand the potential the industry has to reduce poverty	2.7%	15.3%	20.7%	36.7%	24.7%
There are enough tourism attractions and activities in the municipal area to encourage tourist spending that contribute to economic growth in the area	5.3%	11.3%	21.3%	38.0%	24.0%
The municipality has training programs to train the unskilled and semi-skilled to enable them to work in the tourism industry	3.3%	7.3%	14.7%	40.7%	34.0%
The municipality is creating conditions for businesses in the tourism sector to grow in order to create more employment opportunities	6.7%	6.7%	8.7%	42.7%	35.3%
Tourism has created enough employment for community members in the municipal area.	6.7%	8.0%	10.7%	40.0%	34.7%
Tourism provides opportunities for business value chain that creates indirect employment	0.0%	3.3%	6.7%	38.7%	51.3%
The infrastructure and superstructures available in the municipal area are in good state to support the growth of the tourism industry	3.3%	4.0%	1.3%	53.3%	38.0%
The tourism industry has contributed positively to poverty reduction in the municipal area	6.7%	9.3%	3.3%	39.3%	41.3%

The results also indicate that the local community considers that the municipal area does not have enough tourism resources to enable tourism to be a driver for achieving local economic development goals. The results of the study further suggest that most respondents (73.7%) consider that tourism has not created enough employment opportunities for community members in the municipal area. The views of the respondents are that the tourism industry is not creating employment opportunities for the local community members in the municipal area. The results further indicate that the

majority (74.7%) community members feel that the municipality does not have sufficient training programs to train the unskilled and semi-skilled to enable them to work in the tourism industry. It can therefore be inferred that if Mngquma local municipality is to use the tourism industry as a strategy for local economic development, they should invest in training of the unskilled and semi-skilled members of the community who show desire to be in the industry. Finally, the results of the study reveal that just more than half of the respondents (61.4%) did not agree that community members are taking advantage of opportunities in the tourism industry by starting their own businesses because they understand the potential the industry has to reduce poverty.

Table 3 provides respondents views on the availability of support structures and services for the tourism industry to function optimally to contribute to local economic development. It is evident that respondents feel that there is not enough support services and infrastructure in the municipal area to support tourism industry.

**Table 3.** Availability of support services for the tourism industry

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
There are small shopping centre facilities available in my area to allow tourists to spend	4.0%	11.3%	19.3%	43.3%	22.0%
Health centres in my area are in good state to cater for tourist needs	8.0%	14.0%	24.0%	32.0%	22.0%
There are enough attractions available for the use and enjoyment of tourists	6.7%	18.7%	14.7%	33.3%	26.7%
Roads in my area are in good state to support the growth of tourism economic activities	10.7%	23.3%	14.0%	24.7%	27.3%
The quality of electricity supply in my area is in good state to support tourism economic activities	7.3%	14.7%	21.3%	26.0%	30.7%

For all the statements, more than half the respondents disagreed with the statements which effectively show that they feel that the tourism industry is not supported enough to prosper to contribute to local economic development. The highest amongst these statements is where respondents do not agree that there are small shopping centre facilities available in their area to allow tourists to spend.

This result reveals limits in the ability of small businesses to make money and provide for employment opportunities in the area as alluded by Mabaso (2010) who indicated that tourism industry can bring in foreign income to a destination and therefore supports local businesses. Overall, most respondents (52%) also felt that the roads in their area are not in a good state to support the growth of tourism economic activities, whilst 56.7% felt that the quality of electricity supply in their area is in good state to support tourism economic activities. Table 4 shows results of whether respondents feel that the municipality has prioritised tourism as a key driver for economic growth to allow for employment creation in the municipal area.

**Table 4.** Tourism for economic growth to create employment opportunities

Municipality prioritise tourism as key economic driver	Tourism qualification	Disagree	Neutral	Agree	Total
	Yes	56	7	5	68
	No	49	13	20	82
Total		105	20	25	150

The results are presented based on whether the respondent has a qualification in the tourism field or not and show that most respondents (56) who have a tourism qualification believe the municipality is not prioritising tourism as a key economic driver for economic growth to allow for employment opportunities.

A similar scenario prevails where 49 respondents who do not have a tourism qualification also feels that the municipality is not prioritising tourism as a key economic driver for economic growth to allow for employment opportunities.

**Table 5.** Chi-Square tests for the prioritisation of tourism for economic growth

	Value	df	Asymptotic significance (2-sided)
Pearson Chi-Square		2	0.007
Likelihood Ratio		2	0.005
Linear-by-Linear Association		2	0.002
N of Valid Cases	150		

A Chi-square test of independence was conducted between those with tourism qualification and those who do not have the qualification and how they viewed the prioritisation of tourism as a key driver for economic growth to create employment opportunities in the municipal area. The results revealed that there was a statistically significant association between those with tourism qualification and those who do not have the qualification in their views of the prioritisation of tourism as a key driver for economic growth to create employment opportunities in the municipal area.

The results confirm a Pearson Chi-Square of  $X^2(2) = 9.925$ ,  $p < .0007$ . The association was moderately strong with Cramer's  $V = 0.257$ . The results of the study, as shown in Table 6, indicate that the majority (59) who have a tourism qualification and (53) who do not have a tourism qualification does not agree that the tourism industry is creating employment opportunities in the municipal area. Only a few respondents (6) with a tourism qualification and (16) without a tourism qualification agreed that the tourism industry is creating employment opportunities in the municipal area.

**Table 6.** Results on employment creation by the tourism industry the municipal area

Employment creation by tourism industry	Tourism qualification	Disagree	Neutral	Agree	Total
	Yes	59	3	6	68
	No	53	13	16	82
Total		112	16	22	150

This observation is in contradiction with Khalil, Kakar and Malik (2007) who noted that tourism has proven on a global scale to be an economic sector that creates opportunities of employment in both formal and informal sectors.

**Table 7.** Chi-Square tests for creation of employment by tourism industry

	Value	df	Asymptotic significance (2-sided)
Pearson Chi-Square	9.896 <sup>a</sup>	2	0.007
Likelihood Ratio	10.468	2	0.005
Linear-by-Linear Association	7.457	2	0.006
N of Valid Cases	150		

These results, therefore, imply that whilst tourism is recognised globally for its impact on employment creation, especially in developing countries, such is not the case at

the Mngquma Local Municipality. It therefore suggests that the municipality still has a lot of work to do to advance the tourism industry to be the key driver of economic growth for employment creation. A Chi-square test of independence was conducted between those with tourism qualification and those who do not have the qualification regarding their views on creation of employment by the tourism industry in the municipal area.

The results of the study infer that there was a statistically significant association between those with tourism qualification and those who do not have the qualification regarding their views on creation of employment by the tourism industry in the municipal area, with a Pearson Chi-Square of  $X^2(2) = 9.896, p < .0007$ .

The association is moderately strong with Cramer's  $V = 0.257$ . The research results as shown on Table 8 indicate that of the sample of community members in the study area, the majority (57) who have a tourism qualification and (80) who do not have a tourism qualification does not agree that infrastructure and superstructures available in the municipal area are in good state to support the growth of the tourism industry.

**Table 8.** Availability of infrastructure and superstructure to support the tourism industry

		<b>The infrastructure and superstructures available in the municipal area are in good state to support the growth of the tourism industry</b>			Total
		Disagree	Neutral	Agree	
<b>Do you have a tourism qualification?</b>	Yes	57	2	9	68
	No	80	0	2	82
Total		137	2	11	150

Only a few respondents (9) with a tourism qualification and (2) without a tourism qualification agreed that infrastructure and superstructures available in the municipal area currently are in good state and adequate to support the growth of the tourism industry the tourism industry. This reinforces the challenges that confront South African local governments in leveraging tourism as a vehicle for LED (Rogerson, 2013).

**Table 9.** Chi-Square tests for availability of infrastructure and superstructure to support the tourism industry

<b>Chi-Square Tests</b>			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.088 <sup>a</sup>	2	0.011
Likelihood Ratio	10.162	2	0.006
Linear-by-Linear Association	7.908	1	0.005
N of Valid Cases	150		

Finally, a chi-square test of independence was conducted between those with tourism qualification and those who do not have the qualification regarding their views on availability of infrastructure and superstructures to support the tourism industry. The results disclose there was a statistically significant association between those with tourism qualification and those who do not have the qualification regarding their views on availability of infrastructure and superstructures to support the tourism industry with the Pearson Chi-Squared at  $X^2(2) = 9.088, p < .011$ .

The association was moderately small with Cramer's  $V = 0.246$ .

## CONCLUSIONS

Tourism has proven on a global scale to be an economic sector that creates opportunities of employment in both formal and informal sectors (UNWTO, 2000). In sub-Saharan Africa, there is much interest by national governments in the promotion of tourism for achieving national development objectives (Rogerson & Rogerson, 2018). The critical importance of tourism, also, for local economic development is gaining widespread attention. Tourism has been viewed as a key potential driver for local economic development objectives, which are sustainable employment, poverty alleviation and economic growth. South Africa must be regarded as one of the leaders in the application of tourism as a vehicle in local economic development planning in the continent of Africa (Nel & Rogerson, 2005; Rogerson, 2014).

This paper addresses modestly a knowledge gap in the existing debates around tourism and LED initiatives in South Africa, where tourism is a priority sector in local development planning across the country (Nel & Rogerson, 2016). The focus was upon the perceptions of local community towards the role of tourism as a driver for local development. The study was conducted in a remote area of Eastern Cape province, South Africa. The results clearly indicate that the local municipality faces many challenges for tourism to achieve the objectives for LED in the area and, most especially, to address the problems of unemployment and poverty. The findings reveal that community members consider that using tourism as a strategy for economic development does not necessarily results in positive results in terms of employment creation and improvement of their standard of living. The results suggest that in the South African context, where much policy focus is upon tourism and LED, more research is required on community views of the usage of tourism as a strategy for attaining the objectives for local economic development especially in the country's distressed areas with the highest levels of recorded poverty and unemployment.

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## GEOGRAPHICAL ANALYSIS OF SUMMER HOUSES BY THE LAKE HAZAR IN TERMS OF THEIR LOCATION OF CONSTRUCTION (PROVINCE OF ELAZIĞ-TURKEY)

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**Abstract:** The factors related to the location of the second houses are commonly related to geography and tourism geography. The second houses diversify according to time and place in terms of their location of construction and the distribution of these houses varies according to the physical and human geography elements. The discipline of geography has an important place in the identification of these elements and in the analysis of the location of the second houses. The aim of our study is to evaluate the summer houses situated in and around Lake Hazar in terms of their location and analyze their suitability in the sense of sustainability. Suitability of the summer houses were obtained with the help of Geographic Information Systems, the maps by using the “Multi-Criteria Decision Making” method and land use suitability classes by using “weighted overlay” and summer houses were classified as not suitable, moderately suitable and suitable. According to the suitability map and the field studies, since it lacked faulted steep slopes, the excess of the alluvial cone, and the presence of wide shores and beaches, the northern shores of the lake was more suitable for settlement and construction of the southern coast in comparison to the southern coasts. These suitable locations were the Güney Village of the town of Sivrice, and Cevizdere and Gölardı Villages of the Central district. Some of the holiday sites-houses in the north of the lake were built along the stream and within the stream. Even though these areas were dry streams, they suffered from floods in the past and therefore, are not suitable for settlement.

**Keywords:** Elazığ, Turkey, Lake Hazar, Tourism, Secondary Homes, Suitability Analysis

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## INTRODUCTION

People who escaped from the uncertainties and threats of the natural environment initially built the cities. The people who have built the cities now prefer to go back to nature by escaping from the crowds of the cities, the busy work tempo, heaps of gigantic buildings and all the processes brought about by the phenomenon of urbanization. The rapid destruction of the cities and the surrounding natural areas and the rapid growth of the artificial environment with industrialization revitalized the theme of a natural return in the human mind. In order to meet this requirement, the human longing for the unspoiled natural environment has returned to nature in certain periods and days of the year. At the same time, the population congested with the industrial revolution and the existence of a stressful life brought about by this population rise have also increased the needs of people to relax. Consequently, the people who are tired of this environment, seeking a more tranquil environment have begun to build second homes in an area close to where they have lived. The second homes are very attractive for people who want a holiday that is close to their own habitat and spend more reasonable prices for it.

The mobility encouraged by the tourism activities, rigorous construction on the coasts which are the most important attractive element of tourism, exceeding the transport capacity in different touristic destinations and the deterioration in the natural and cultural environment as a result of intensive demand increased the importance of geographical research in tourism (Richards, 2017: 169). While the recent increase in the tendency to own second homes has gained importance in the research of these regions, it is equally necessary, at the same time, to investigate where these houses are constructed on the site and the necessity of investigating these places has emerged.

The concept of second home is defined in different ways and the functions of the second homes are diversified according to the location. The second homes, defined as a kind of private property investment utilized during the holiday times and sited outside the urban living areas, are situated in areas that have high recreational qualities such as sea, lake, stream edges, plateau and mountain but need to be protected in terms of ecosystem. Since these houses are temporarily used in a different way from the houses that are utilized permanently and have priority of use, and left empty for most of the year, they are called as “second homes”. With the concept “second” in the housings mentioned by the terms such as holiday homes, weekend houses, cottages, country house, summer house and chalet, it is not which housing, but the function that is granted in use is explicated (Arkon, 1997: 40-42). The concept of second home can be defined as fixed structures which are used in delimited time periods for people to rest and have fun, which are purchased or rented in places preferred due to their natural and human attractiveness, and which affect the natural environment, economy and social life of their geographical location (Küçük, 2016: 6). The recent increase in the intensity of the second housing has augmented the importance of researches.

Even though the second housing tourism is an important notion of tourism, it has attracted only limited academic interest (Müller 2004: 387). However, the rapid recent increase in the number of second homes worldwide has revealed the tendency of many disciplines to explore this area; the concept of second housing has become important in the researches of tourism professionals, city and regional planners, architects, economists, business managers and legal experts. While a significant part of the researches conducted in the world are conducted on the basis of “second homes and tourism” 2008 (Hall & Müller, 2004; Marjavaara, 2008; Roca, 2013; Adamiak et al., 2015), another part of them deals with “the effects of second homes” (Hiltunen, 2007; Hoogendoorn & Visser, 2010; Rye, 2011; Roca et al., 2011; Long & Hoogendoorn, 2013).

Even though the locations where the second homes are built deliver economic benefits, some negative consequences may arise. The second homes, along with the developments in tourism, provide various economic benefits. However, even though the second home owners bring a new source to the community, it is suggested that the second home population can lead to economic, social and cultural conflicts and controversies in the local communities (Rye, 2011: 263). Second housing, parallel to industrialization and urbanization movements, emerged as a result of factors such as the increase in economic opportunities, the development of transportation, augmented leisure time and the effect of fashion (Özgüç, 1977). In our country, as in the world, the number of second homes increased in recent years, this increase was observed not only on the sea coasts but on the lake coasts as well. Those seeking a peaceful place to have fun and relax built second homes by taking advantage of the lake coasts. In the developed and developing countries, the number and location of the second homes, which are built by the high-income segment of the society in the rural areas and situated mostly in close-range, and utilized for leisure time in short-term period have been increasing.

Their owners use these houses for small-scale activities such as going for swimming in the sea-lake, fishing and the like. These expensive houses have become a huge industry in economically developed countries where many people can participate in different activities. In the province of Elazığ, both around Lake Hazar and the village settlements corresponding to the vineyard garden areas, and around main road are the spaces where summer houses are increasingly seen more and more.

The summer houses around the province of Elazığ are traditionally the second houses with vineyards and gardens, and these houses are still widely used today and still being built. The second houses with vineyard and garden around Kuzova, Uluova, Harput and Lake Hazar, that is the summer houses are quite common. Apart from the summer houses with traditional vineyards and gardens, the second houses, which are used for holiday in summers, have started to be built around Lake Hazar after 1980. The summer houses on the coasts of Lake Hazar were mostly built in the form of housing estates.

In the Eastern Anatolia region, which is closed to the ocean effect and consists of high mountainous areas and where there is very little forest vegetation, the coasts of rivers and lakes are of great importance as recreation areas. The coasts of Lake Hazar have a special characteristic among such places. The lake coasts not far from the provincial centers (22 km away from Elazığ, 100 km from Diyarbakır, and 125 km from Malatya), where there is a large population (Elazığ, Diyarbakır and Malatya), has become an important recreation area of these three cities with its natural beauty as well as the ease of transportation (Yiğit, 1994: 163). The fact that coasts of the Lake Hazar were cooler than the city center during the summer months, the forest areas that were formed as a result of the forestation efforts allowed the summer houses to be built on the coast of the lake because of the many tourism potentials. After the 1980s in Turkey, it is observed that the demand for second homes began to increase rapidly. According to the digital data prepared by the General Directorate of Population and Citizenship Affairs, as of 2008, there have been 546 thousand 454 summer-seasonal homes in Turkey.

Number of Second Homes by Regions Second in Turkey

1- Black Sea Region 169 282, 2- Marmara 110 495, 3- Aegean 87 106, 4- Mediterranean 79 480, 5- Central Anatolia 71 708, 6- East Anatolia 22 643, 7- Southeast Anatolia 5 740 (Kozak & Duman 2011: 230).

While ignoring the natural environment characteristics of the locality causes some problems today, it is not a coincidence that a significant portion of the second houses are collected on the coasts, and that they are spread in strongly attractive places

such as mountains, highlands, rivers, lakes and forests. These houses appear as points that require analysis of spatial characteristics. Therefore, the second houses are related to the geography of settlement, economic geography, cultural geography, tourism geography as well as the physical geography in terms of land allocation and natural environment characteristics that affect the selection of the construction location and governs the price policy. This not only indicates the necessity of examining the geographical environment characteristics, but also explicated the reason for the misuse and out of purpose use of the land (Emekli, 2014: 29). 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 (Rogerson, 2018: 835).

As a result of the changes in the welfare level and in the social structure in the world, especially in the last 30-40 years as in the system of timesharing, the issue of second homes has started to make its mark. In term of meeting the recreation needs of those who are currently employed and have the economic power, on the one hand, and the elderly groups that have earned the right to retire and have plenty of leisure time despite economically not powerful, on the other hand, the second homes have been cast a significant role to play (Kozak & Teoman, 2011: 228). In the *Second Housing Symposium* held in London in 1974, it was emphasized that the location of the second houses in Europe and North America was based on three important choices:

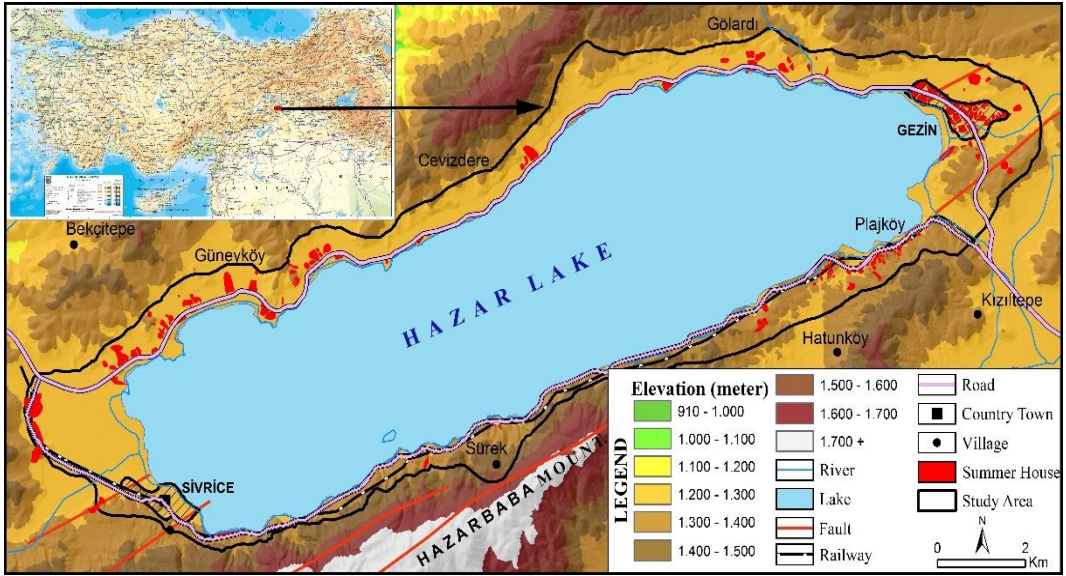
- The rural areas that can provide easy access to large urban centers,
- Coasts and immediate vicinity,
- High areas with attractive and great view (Emekli, 2014: 26).

The purpose of our study is to evaluate the summer houses located in and around the Lake Hazar in terms of their location and analyze their adequacy in terms of sustainability. Therefore, taking into consideration the geographic factors, determining the location of summer houses and making plans constitute the main objectives of our study. Geographic planning is obtained not by a single geographic criterion but by taking into consideration multiple geographic criteria and making separate evaluation. Either the misuse of the land resulting from the relationship between the natural environment and the human environment, or the desire to live in a well-ordered environment makes planning a necessity. Planning land use signifies planning the future of people (Dağlı & Çağhyan 2016: 84). The geographers have an important role in the planning process by applying the geographical criteria. Therefore, in our study, the adequacy of the houses built in and around the Lake Hazar with the help of GBS was analyzed by using the multi criteria decision making method. In this manner, identifying the adequacy of the houses existing in the study area will guide the summer (second) homes to be built.

## **STUDY AREAS**

In the Upper Euphrates Section of the Eastern Anatolia Region, the Lake Hazar, which is located within the boundaries of the province of Elazığ in the Southeastern Taurus section, is 22 km away from Elazığ and 100 km away from Diyarbakır. The Lake Hazar, which occupies the base of a sediment trench extending in the direction of the SW-NE, has a length of 20 km and a width ranging from 3-5 km. Even though the lake area varies depending on the changes of level, today it has altitude of 1240 m. and covers an area of approximately 80 km<sup>2</sup> (Yiğit, 1994: 289). Lake Hazar, which has the characteristics of a natural park, occupies the base of a depression trench located between the masses of the Çelemlik-Mastar mountain range in the south and the masses of the Hazarbaba-Yaylım Mountains in the north. These mountains descending into the

lake with steep slopes, do not allow the formation of extensive level area around the lake. The main level areas of the lake are composed of the Kürk (Fur) delta formed in the Kürk (Fur)-water mouth in the west and of the Gezin delta formed in the mouth of the Zikkım stream in the east (Figure 1). Even though the touristic facilities could not be established due to the marshy soil on the Kürk (Fur) delta, the Gezin delta is one of the most densely populated areas. Apart from these deltas, the alluvial cones and fans formed by the small streams on the lake coast descending along the steep slopes of the mountains and bringing the water of a fault source to the lake constitute the main areas to be able to establish the facilities. In fact, most of the facilities located on the north and south coast of the lake were established in such places (Yiğit, 1994: 289).



**Figure 1.** Location and Physical Map of Lake Hazar

The Caspian Lake trench corresponds to the Eastern Anatolian Fault Zone (EAF) and possesses a basin characteristic of "Pull-Apart" type. The depth of the lake is high due to this basin development model. The southern coast of the lake (Hazarbaba mountain slopes) is steeper than the north coast due to the EAF; therefore, the beach areas are very narrow and limited. This situation has also affected the transportation system. There are the Elazığ-Diyarbakır railway which is narrow on the south coast and a narrow highway which is not used much and the main highway connecting Elazığ to the SE Anatolia Region on the stretched north coast (Figure 1-2).

### STUDY DATA AND METHOD

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 (Kabiyev et al., 2019: 645). In the study, maps were obtained from the basic data derived from the Provincial Land Assets (1997), Topography Maps (25.000) and Corine Land Use (2006) and Mineral Research Exploration (MRE). Numerical elevation model (NEM) was created by the digitization of topography maps and maps were generated

with this data for slope, geomorphology, aspect and elevation criteria. A general land use map was created from the Corine data and field observations. Soil and land use capability maps were obtained by Elazığ Provincial Land Assets (1997) data.

The geological map (100.000) was generated with the data obtained from the MRE. The base data obtained related to the study area was mapped in the ArcGIS program with the geographic information systems. The “Multi-criteria decision-making method (M-DMM)” was used in order to determine the location adequacy of the summer houses. The geographical information systems based multi-criteria decision-making analysis was performed using the ArcGIS 10.3.1 programs. The resulting maps were brought to the same pixel size and converted to a grid format.



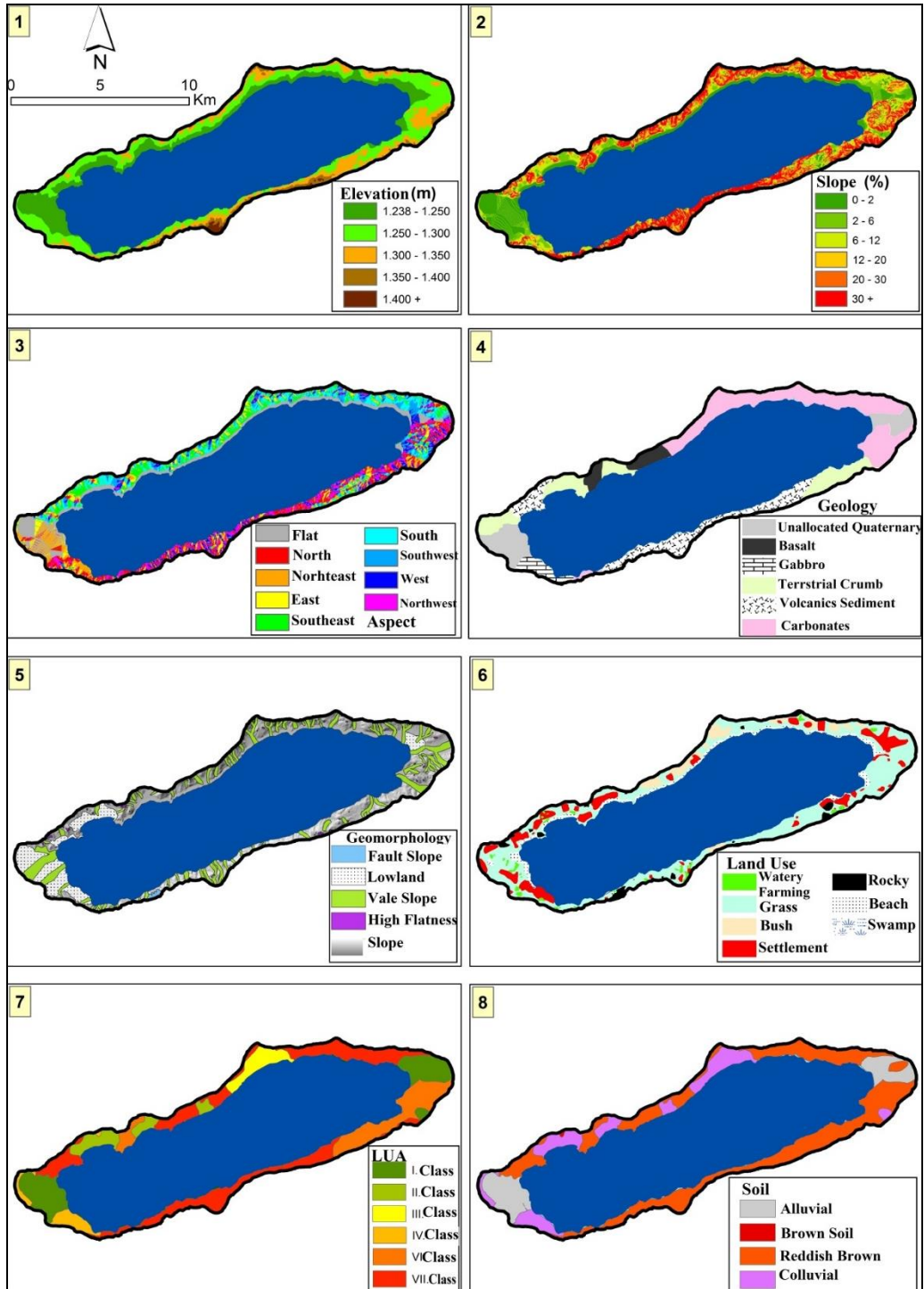
**Figure 2.** View of the South and North Coast of Lake Hazar

The converted maps were subjected to the “Weighted Overlay” analysis in order to obtain land use adequacy classifications and the summer houses were classified as not adequate, slightly adequate, moderately adequate and adequate. In order to obtain the information on the location of the houses where they were built, interviews were made with the authorized persons during the field study, and photographs were taken regarding the study area and the subject. Especially in order to assist with the analysis, problems and solutions in these areas were discussed and synthesized. Consequently, decisions were taken on the most adequate possible locations for the summer houses. Correspondingly, it was discussed whether the previously constructed housing estates or the individually built second houses were built in most adequate location.

## RESULTS DISCUSSIONS

The factors affecting the location of the second houses and the characteristics affecting the usage time and duration are related with geography and tourism geography. Geography plays a key role in the analysis of the second housing-tourism-environment relations. Analyzing the relations of geography and tourism geography in the studies related to the second housing provides data for other disciplines. Second homes in Turkey vary by time and location, and the economic, social, political and technological reasons affect the distribution, usage patterns architectural characteristics of these houses. The discipline of geography has an explanatory function in revealing these relations (Emekli, 2014: 27). Therefore, the discipline of geography has an important role in making location selection analysis of the second homes. Geographical elements have an important role to play in the construction of summer houses.

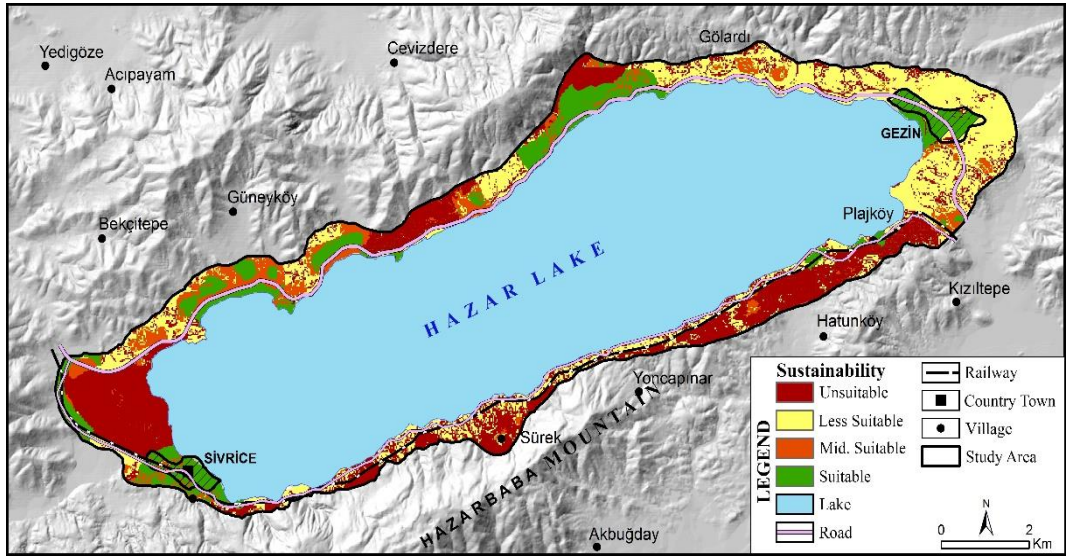




**Figure 3.** Criteria used in the analysis; 1) Elevation 2) Slope 3) Aspect 4) Geology 5) Geomorphology 6) Land Use 7) Land Use Capability 8) Soil

The adequacy of the land can be determined using the geographic elements. In the present study, eight criteria were determined in order to make geographic analysis of the summer house locations around Lake Hazar. These criteria were elevation, slope, aspect, geology, geomorphology, land use, land use capability and soil (Figure 3). By combining these criteria, we tried to reveal the locations which were adequate and not adequate for the selection of summer houses around Lake Hazar.

In the resulting map, the degree of adequacy was divided into four classes and presented as “adequate”, “less adequate”, “moderately adequate” and “adequate places” (Figure 4). The present distribution of summer houses around Lake Hazar is concentrated in two areas: The first is the northern coasts of the lake and the second is the east and SE coasts of the lake. These areas administratively correspond to the villages of the Central, Sivrice and Maden districts. Summer houses were concentrated in the Güney village of the Sivrice district, Cevizdere and Gölardı villages of the Central district and Gezin and Plajköy villages of the Maden district (Figure 4).



**Figure 4.** Land Adequacy Map of the Summer Houses in and around Lake Hazar

### 1. Güney Village Summer House Location

Güney village is a village settlement on the Elazığ-Diyarbakır highway in the north of the Lake Hazar, affiliated with the town of Sivrice. Güney village is the densest residential area for summer housing in our study area. The main village settlement was established within the valley on the southern skirts of the Çelemlik Mountains. However, the village, over time, began to move from its main center towards the coasts of the Lake Hazar (Dervişali mountain house). Summer houses were first established with the Beyaz Evler (White Houses) housing estate in this village (1984).

Only the Beyaz Evler and the Turquoise housing estates were located between the highway and the lake. Other housing estates were located on the north of the highway, not on the lake coast; that is, outside the housing estate area and in areas without planning permission. Nevertheless, it was the beginning of the 1990s that the construction of the housing estates or single houses started to develop rapidly. There are a total of 632 summer houses in this area, consisting of 27 holiday estates and



individual houses concentrated in 4 different areas (Figure 4). This area is still under construction in terms of summer houses. These houses are almost very intermittently, sometimes adjacently distributed, from the western edge of the Lake Hazar to the SHW (State Hydraulic Works) Training Facilities (Figure 5). While the winter population of the village is 162 persons (2017), it is around 10 000 in summer.



**Figure 5.** Housing Estates on the Elazığ-Diyarbakır Highway Roadside in the Güney Village

According to the field studies carried out in the Güney village and the Multi Criteria Decision Making method, the location of the summer houses generally had the suitable conditions (Figure 3). This area is generally on the Yüksekova Complex consisting of andesite, basalt and gabbro. Therefore, even though this area is located within the earthquake zone, it has a solid feature in terms of soil mechanics and the summer houses were built probably in the most adequate place in terms of soil if they were not built on the stream bed. With this present situation, we can even say that the vicinity of Güney village is the most adequate place in terms of the soil around the coasts of Lake Hazar. Even though the Güney village was generally adequate for the construction of summer houses, as a result of the field observations, it was observed that the people built summer houses individually or as housing estates.

There is a risk of floods and overflow in summer houses built especially on the edge of dry river beds and in the valley (Figure 6). Since these coastlines also have large and long beaches, the houses, camps that belong to the state institutions and organizations, and commercial enterprises were also concentrated in this area (Figure 7).



**Figure 6.** Inadequate for settlement a) Çiçekçiöğlü Holiday estate within the valley  
b) Yakup Bey's House built on the Stream Bed



**Figure 7.** A View of a private resort and beaches of SHW  
located on the extensive north coastline of Lake Hazar

## 2. Gölardı-Cevizdere Summer House Locations

There is an area that administratively belongs to the Cevizdere and Gölardı villages on the southern outskirts of Mastar Mountain. Summer houses and housing estates were built in the neighborhoods of these villages near the coastline of Lake Hazar. These houses were generally constructed at the adequate places sloping hillsides away from the lake coast. In a way, the inhabitants of the housing estate had a bird's eye view the Lake Hazar. There are two housing estate locations with two different densities on the coastline. In these areas, there are a total of 13 housing estates with 8 houses in the area between Fırat University and Highways Training Facilities, 5 houses up to the border of Gezin village and Highways Directorate facility and 200 residences.

According to the multi-criteria decision making method and the field studies carried out in these villages, the summer houses generally had the suitable conditions for their establishment (Figure 4). The Lower Eocene aged Simaki formation consisting of sandstone, mudstone, limestone and shale is observed in this area. This area which has medium strength in terms of soil mechanics is adequate or moderately adequate for summer houses. However, considering the risk of earthquake, attention should be paid to the foundation of the houses. Moreover, due to the high degree sloping and narrow coastline, there are no dense summer residential areas as in the Güney village (Figure 8).





**Figure 8.** Summer Housing Estate in Gölardı-Cevizdere, Commercial Enterprise and Beach Areas

### **3. Gezin-Plajköy Summer House Locations**

While the Gezin village affiliated with the district of Maden is located on the coast of the Lake Hazar in the east of our study area, Plajköy is located in the southeast of our study area. There are also summer residences concentrated in the villages of Gezin and Plajköy, located within the boundary of Maden district. There are 20 housing estates and 2000 homes in the village of Gezin, and 500 of these homes are used as summer houses. The winter population of Gezin is 1147 people (2017), and it reaches 20 000 in the summer season especially by an increase at the weekends; the highest number of this increase is composed of people coming from the province of Diyarbakır. The fact that it is located in the furthest east part of the lake and the temperature conditions are compatible with that of Diyarbakır increases the attractiveness of Gezin in the summer season.



**Figure 9.** Visual Pollution around the Gezin Village Beach

While it formerly had the status of town municipality, but due to the amount of population, it receded back to the village status, the Gezin village started to have some problems related to service delivery and reception in the summer season. Solid waste, sewage, irregular and unplanned housing, infrastructure problems, lake pollution and the disuse of the lake for the purpose of beach together with visual pollution all have adverse effect on tourism. Since tourism planning is not done, tourism activities are carried out only with the crowd (Figure 9). The Gezin delta, which consists of alluviums

carried by the Zıkkım stream, is adequate for the establishment of touristic facilities in terms of both geomorphological and other physical geographic factors (beach, cafeteria, camp site, etc.). According to the land adequacy map, which is generally formed by considering the geographical criteria, Gezin Village is adequate except for the delta area for the construction of summer houses-housing estates (Figure 4). The housing estates in Gezin located on the east coastline of the lake, which is situated in a tectonic basin, were generally built on the slopes because the flat areas were restricted (Figure 10). Since the delta area is an alluvium, it is not solid and is not very adequate for the construction of houses. As in the Güney village, even though the land adequacy map in the Gezin Village as well is considered adequate for summer houses, there are summer houses within the narrow valley where there is a risk of floods (Figure 11).



**Figure 10.** Summer Houses around Gezin, Especially on the Slopes of Güney Village



**Figure 11.** Houses Unsuitably Built on the River Bed in the Gezin Village

Plajköy, located in the southeast of Lake Hazar, has 14 housing estates and around 400 houses. Apart from the housing estates and houses, there are also variable number of tents and containers on the coastline (100 units). While the winter population of Plajköy is 82 (2017), it, as it is the case in Gezin, increases to 5 000 people during the weekdays and 8 000 people at the weekends. The coastlines of Plajköy are the longest beach of Lake Hazar (7 km). With this characteristic, the first public institution camp site on the lake was established here (Etibank).



At the same time, since Plajköy also has camping sites and convenient beach areas, the camping site, which was established under the name of “Kamp 21” in the 1980s, expanded and became a holiday resort (Figure 12). Even if the Plajköy beach is long, it is not adequate for the expansion of the residential areas since the village settlement is morphologically inclined and located in a high place. Therefore, the number of tents and containers on the coast camps is high (Figure 13). The Lower Eocene aged Simaki formation, consisting of sandstone, mudstone, limestone and shale, is observed in this area as well. Since the beach is established on DAF, this formation, which is earthquake-sensitive, is risky in terms of the soil. The constructed housing estates are currently at risk since they were built on unstable foundations without considering the earthquake. Furthermore, according to the adequacy analysis performed, the area around Plajköy is inadequate and less adequate for accommodation building.



**Figure 12.** Length of Coastline in Plajköy and a Housing Estate on the Coast



**Figure 13.** Images of Summer Houses, Containers and Tents in Plajköy

#### 4. South Coastline of Lake Hazar

While the summer houses in the present study area were concentrated in the north-east-southeast parts of the lake, the southern coasts of the lake corresponded to the areas with the lowest density in summer houses. Since the slope and elevation in the southern coasts of the lake along the faulted steep slope of the Hazarbaba Mountains was high, the depth of the lake from the coast increased unexpectedly, that the

transportation network was not very busy and almost non-existent and the beach areas had confined space prevented the development of summer houses (Figure 14).



**Figure 14.** The Steepness of the Coastline on the South Coast

In this area, on the coasts close to Sivrice district center, there are mostly the one-day picnic and recreation areas, and camping areas which belonged to some public institutions in the past, but later were privatized and are in use today commercially.

There is also a summer community site on the conglomerate cones formed by small streams in this narrow shore and a neighborhood settlement that belongs to the Sürek village (Figure 15). The southern coasts of the lake are not geomorphologically adequate for summer houses. The results of both the field observations and the geographic criteria that we have used, as can be seen on our map, the northern skirts of the Hazarbaba Mountain are risky areas and not adequate for the development of summer houses due to both geological factors and soil mechanics and the fact that they are located within the DAF Zone (Figure 1 and 4).



**Figure 15.** Yeşil Çınar community site located and Former Facilities of State Railways on the south coast of Lake Hazar

## CONCLUSION

The maps obtained in the ArcGIS program and the maps converted to the same pixel size and transformed into the raster format were subjected to “Weighted Overlay”

analysis, and were classified as not suitable, less suitable, moderately suitable and suitable land use for summer houses. In order to access the information regarding where the houses were built, whether they were suitable for the location, the analysis map was evaluated together with the field observations and the results were obtained. The following results were obtained in this study which attempted to make a synthesis by discussing the problems of and solution suggestions to the location of the houses / holiday sites located on the shores of the Lake Hazar and the solutions of the solutions.

The first place where summer houses are densely located around Lake Hazar is on north coast of the lake, the second is on the east and southeast coasts of the lake. These areas administratively correspond to the villages of Central, Sivrice and Maden districts. The summer houses were concentrated in the villages of Güney affiliated with the Sivrice district, of Gölardı and Maden affiliated with the Central district, and of Gezin and Plajköy affiliated with the Maden district. The northern shores of the lake, which is the route that the Elazığ-Diyarbakır highway rides, are the most adequate places for the development of summer houses considering the lithology, slope and elevation factors. This area is also the place where commercial facilities (Turpol and Mavigöl) and training and recreation facilities of public institutions and organizations are concentrated. The fact that there exist the state and private businesses on the coasts with wide beaches restricts the use of the lake by the summer house vacationist and daily visitors.

Administratively, since the lake is located in three different districts (Merkez, Sivrice and Maden), there is no common view about the lake in terms of tourism planning. Furthermore, since the services are provided in different ways by the Special Provincial Administration and the Municipality of Sivrice, there has been disharmony in the provision of services. In order to prevent this chaos, an urgent planning should be made for the coastlines of the Lake Hazar and the management should be made singular.

In this study in which we analyzed the adequacy of the summer houses around the Lake Hazar in terms of their location, clearly there is a similarity between the result map and the present-day outlook. When we look at the adequacy map, the northern shores of the lake are more adequate for the settlement and second housing development than the southern shores. The lack of faulted steep slopes and the high accumulation of conglomerate cones enabled the creation of spread-out coasts and beaches, and made the northern coasts advantageous in terms of transportation and settlement, unlike the southern coasts of the lake. Housing started with the second residential-summer community houses on the coastlines of the naturally existing village settlements. This is because these areas are both advantageous and adequate in terms of soil together with the presence of transportation network. Even though the northern parts of the lake seem to be adequate for development, some of the summer community sites are located along the creek and within the creek. Although these areas are dry streams, they were subject to floods in the past and therefore are not adequate for residential areas. Around Lake Hazar, it is observed that summer houses were, in general, built in adequate places, apart from the exceptional cases according to the adequacy map and field observations made with the help of GIS.

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## **THE IMPORTANCE OF TOPONYMY OF MUGALZHARY MOUNTAIN PLOTS AND ADJACENT TERRITORIES TO THE DEVELOPMENT OF GEOTURISM**

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**Abstract:** The article discusses the importance of the geographical names of the physical-geographical region - the Mugolzhary mountains in the Aktobe region, for the development of tourism in this region. Nomination of place names in the area for landscape features was based on geological, natural-geographical, historical and linguistic data. The origin and etymology of the name Mugolzhary is studied by actual data. It is identified that toponyms associated with plants, fauna and with features of the natural environment prevail, their range of distribution is revealed. Space images of sites that can become tourist sites are given, with justifications for the origin and characteristics of their name.

**Key words:** toponyms in tourism, oronyms, hydronyms, oikonyms, landscape, geographic terms, geotourism

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## INTRODUCTION

The definition of a geographic space, a part of the planetary geospace where active population functioning takes place is of paramount importance for any country, territory or region. The inclusion of a toponymic unit into the Mugalzhar tourist guidebook may be accompanied by a statement containing etymological and linguistic and culturological information about the toponym (onym). Geographical proper names are of different nature. So the most common names in the region are those based on the properties reflecting the natural geographic dependence of the name.

Geotourism or geological tourism is a type of innovative tourism that has been developing rapidly in recent years (Ilieş & Josan, 2009). Kazakhstan in the most successful way enters a potential region in the international tourist market to develop this activity. In the context of heightened competition, tour operators are forced to constantly expand the range of tours and excursions offered. Taking into account many physiographic factors it is difficult for Kazakhstan to compete, if not at all, with the countries who provide comfort on warm sea beaches with a mild subtropical climate. Therefore Kazakhstan in principle may be positioned with almost all alternative forms and types of tourist services which in many aspects are natural forms for Kazakhstan. According to analysts the most successful position for Kazakhstan in international tourism could be the field of ecotourism for the development of which it has almost all types of natural and recreational resources. The purpose of this work is to reveal the role of the toponyms of Mugalzhar Mountains in the formation of the tourist product. Place names are a specific information resource for the formation of tourist routes. The scientific explanation of a modern name should be presented in an entertaining and popular way. The scope and complexity of the toponymic competence for the route depends, first of all, on the degree of the toponymic study of the territory.

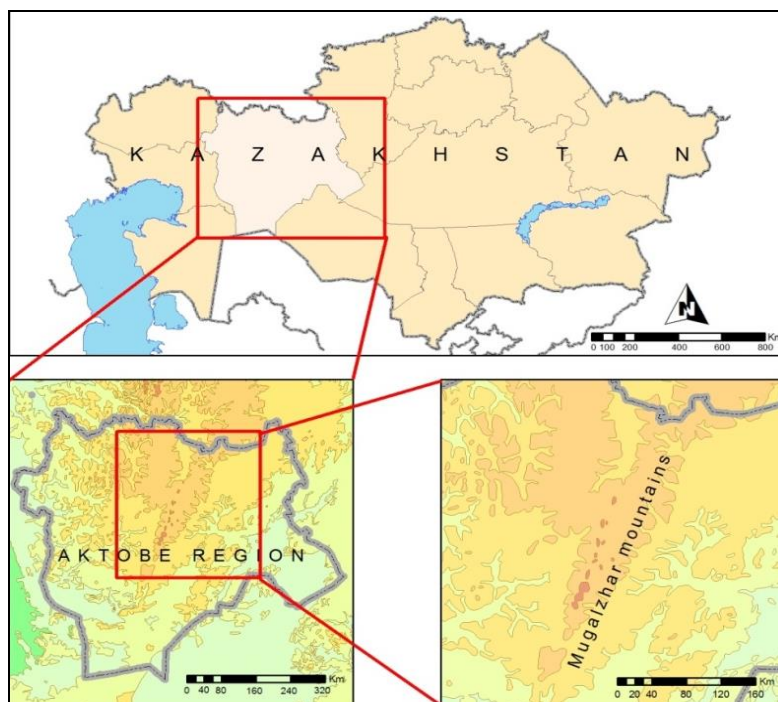
Toponymy is a science that studies geographical names, their origin, semantic meaning, development, current state, spelling and pronunciation. The basic and main role and purpose of a geographical name is fixation of a location on the Earth surface. In this regard the justification and the assignment of geographical names to such geographical objects as the Mugalzhar Mountains seems to be quite currently topical toponymic and therefore historical-geographical problem.

In the toponymic aspect the Mugalzhar are little studied. Mugalzhar present the southern closure of the Ural highland-and-plain country. The territory of Mugalzhar is within the geographical coordinates of  $47^{\circ} 00' / -50^{\circ} 10' / N$  and  $57^{\circ} 10' / -60^{\circ} 30' / E$  extending in the meridional direction for 360 km, and in latitude - for 240 km. They are separated from the South Urals by a transverse lowering along the latitude of the city of Aktobe – to the south of Khromtau town - Bogetsay settlement - Araltobe settlement. Mugalzhar serve as a watershed of the Emba and Irgiz rivers, and in the north the Or river takes off. The average height of Mugalzhar is 250-350 m, and they reach the maximum height in the Berchogur mountain group (Bolshoy Boktybai) - 657 m above sea level, and also in the double-peak Airyk mountain - 634 m above sea level located to the north (Verbitskaya, 1974). Mugalzhar Mountains rise predominant over the adjacent plains only 150-200 m high. It is mostly a hilly terrain with smooth rounded outlines but with a large spread of rocky protrusions on the tops.

## RESEARCH METHODS AND STUDY MATERIALS OF RESEARCH

The object of study is the territory of the Mugalzhar mountain adjacent area. Mugalzhar Mountains stretch in the middle part of the Aktobe region (the highest point is Mount Baktybay, 657 m) (Figure 1). The major part of the territory of Mugalzhar is

occupied by such large landforms as hills, bald peaks, plains (Baimagambetov, 2012). This feature led to the functioning of many orographic names in the toponymy of the region.



**Figure 1.** Location of the research territory

#### Research methods

During the study a descriptive method for comprehensive disclosure of the topic was used as well as a set of complementary methods: information retrieval, analysis and systematization of scientific publications and media materials on the object and subject of research, comparative method, cartographic method (using satellite imagery). The analysis of publications on the subject of the research enables us to define the concept of locality oronyms to be used in tourism. As it was noted most researchers mainly review theoretical problems of toponymy (Murzaev, 1974; Konkashpayev, 1970; Kaymuldinova, 2010; Yeginbayeva et al., 2016; A., Ilies et al., 2016, 2018), some scientists analyze various aspects of toponymy in general (Khanmagomedov & Gebekova, 2011; Abdrakhmanov, 2012; Saparov, 2015; Saparov et al., 2017; Wendt et al., 2016; Wendt, 2017). Scientists have a long history of studying both tourism and geographical names, but rarely related to each other. Some researchers consider the use of toponyms in the interest of the tourist (Pospelov, 1988), as a tourist attraction (Light, 2014), as a potential factor of tourism development (Lemmi & Tangheroni, 2011). The main analysis tools used were system analysis, qualitative and quantitative methods for collecting and processing information.

#### RESULTS AND DISCUSSION

Mugalzhary, like the whole of the Urals, is a folded region, the geosynclinal development cycle of which completed at the Early Mesozoic (Chupakhin, 1968). Mugalzhary represent the southern end of the Ural folded structure and have many

features of the structure of the latter. From west to east within the region there are: Pre-Ural marginal trough; West-Ural outer folding zone; Central Ural uplift, Tagilsko-Magnitogorsk trough, East Ural uplift (Mugalzhar anticlinorium); East Ural trough (Irgiz trough); Trans-Ural uplift (anticlinorium); Berchogur-Chelkar periclinal trough (Shakirov, 2012). Mugalzhar are mainly composed of heavily stationed Precambrian gneisses and crystalline schists, as well as shale, limestone, sandstone and Paleozoic conglomerates crumpled into folds (Abdullin, 1981). They are typically characterized by a sharp predominance of the meridional strike of the folds and disjunctive disorders. The presence of various intrusive and effusive igneous rocks: granites, diorites, diabases, gabbros and porphyrites is characteristic of all folding stages (Segedin, 2002). Tectonic movements in the Mesozoic and Cenozoic differed with little intensity. Epeirogenic uplift of the entire Southern Urals in the Quaternary period contributed to a certain revival of erosion processes in the Mugalzhar.

The natural originality of the Mugalzhar physiographic region is determined by the general immersion of tectonic structures in the southern direction especially observable in the extreme south, where the belt of ultrabasites developed in contrast to the more northern regions of the Urals goes within the greenstone synclinorium under the expanding periclinal trough occurring on the geosynclinal basis. In general, it can be stated that from the west to the east the thickness of volcanogenic complexes as well as the amplitude of troughs considerably decreases. The composition of depositional sequences and the age of the rocks composing them also change. So, if the Western greenstone zone is composed almost exclusively of diabasic-spilitic composition of Silurian-Devonian age, the Irgiz trough is characterized with much more developed thicks of Devonian and Lower Carboniferous sedimentary-volcanogenic rocks of various composition. Formation of the Mugalzhar's modern relief took place over a long time under the influence of various exogenous processes - marine abrasion, denudation and erosion, the intensity and direction of which at different stages of geological history was not the same and was determined by climatic conditions, the position of erosion bases, and different amplitudes and directions of tectonic movements. It resulted in the formation of a residual plain in a number of regions. The most important role was played by the diverse petrographic composition of rocks, repeatedly changing from east to west, strong physical weathering, intensive migration of weathering products from the slopes, and distance from the main local erosion bases. The highest parts of the ridge are composed of especially resistant greenstone effusive rocks like porphyry. The tops represent almost continuous bedrock exposure in the form of rocky ridges.

Modern relief preserved relics of the primary marine abrasion-accumulative surfaces in the highest parts of the watershed plateau between the basins of large rivers. The formation of these surfaces was due to repeated transgressions of the seas in the Cretaceous and Paleogene periods. Subsequently in the Neogene period the primary abrasion-accumulative surface was eroded in the places where subsequent erosion and denudation processes did not have a significant impact on it and slightly changed its original relief. The relief of central Mugalzhar clearly stands out against the background of flat steppe and territory, scrubland thicket - 5%, open grassy landscapes - 70%, rocky areas, bedrock exposures - 10%, wetlands - 5% (Chibilev & Debelo, 2006).

Mugalzhar mountain is included in the specially protected areas of the Aktobe region on a large azonal landscape complex, characterized by diversity (Koshim et al., 2014). According to scientists, the Kazakh word *mugajar* means "sharp ledges located on tops" (Biyarov, 2013), others associate this name with the Turkic *Mughan* tribe that lived in the 10th — 11th centuries in Central Asia and the Caucasus. From Mugand-zhar (zhar,

jar - “precipice”, “rock”) Mugadjar arose (“n” fell out) (Koichybayev, 1974: 172). And A. Abdirakhmanov (2010) connects this name with the name of the tribes of Magyar (Wenger), who inhabited the Southern Urals in the 5th-9th centuries. A.K. Matveyev (1990) makes an assumption about the possibility of preserving the ethnonym “Mongol”, “Mongul”, “Mogul”, “Mogul” as part of this name. In explaining the oronym Mugodzhary it must be taken into account that in Russian sources of the 18th century these mountains are called Mugulzhar, Mugalzhar, Magulzhar, Mugaljar (Rychkov, 1887), Mangaldirskie or Magaldir Tau, Malgazir. The “Book of the Great Drawing (1627)” introduces some information about the southern continuation of the Ural Mountains - Mugodzhary; in the source they are called the mountain Uruk or Urak: “And from the Blue (Aral) sea 300 miles off is Uruk Mountain; along Uruk there are mountains 90 miles. Three rivers flowed out of the mountain: the Vor River (Or) flows into the Yaik River ...” (Yastrebov, 1979).

**Table 1.** Toponyms of parts of the Mugalzhar mountain and its adjacent territories  
(Source: compiled by the authors on the basis of topographic scale 1: 500,000 maps)

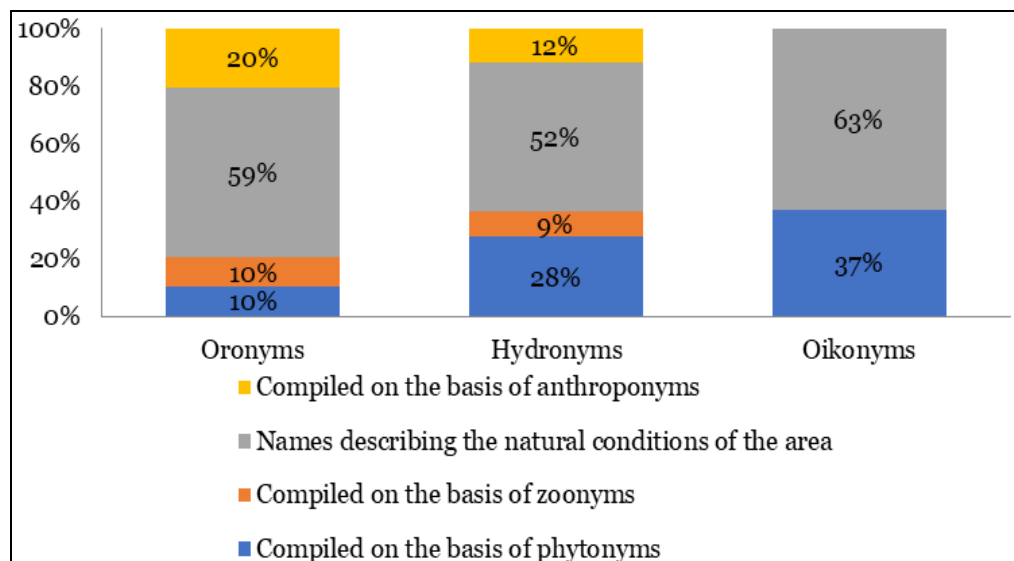
Types of toponyms	Formation of toponyms	Toponymic activity
Oronyms	Phyto-oronyms	Saralzhyndysai, Shibulak, Kokpektisai, Karagansai, Shagyrai
	Zoo-oronyms	Tekelitau, Shoshkakol, Tulkiliadyr, Donyztau, Zhylandy
	Oronyms characterizing the peculiarities of natural environment of the area	Shukyrtau, Zhamantau, Aktasty, Kenkuys, Sarytau, Dautau, Zhalpak, Airyk, Alabas, Muzbel, Karatau, Karaoba, Obaly, Akshoky, Bestobe, Koskzylyshoky, Kokzharlyasha, Zhamanorkash, Alatau, Bakyrtau, Kursai, Saryoba, Birshogyr, Shymyldyktau, Kurasha, Kumsai, Tassai, Karashatau, Batpakshagyl
	Anthropo-oronyms	Auliemola, Baimentau, Kushikbai, Shortai, Ulken Boktybai, Akkarpyk, Darigershoky, Namaztau, Akkebek, Sarybaimola
Hydronyms	Phyto-hydronyms	Zhosa, Ashy, Belkopa, Kyzylkaiyn, Karaagash, Kuagash, Kokpekti, Olenti, Shili, Kaiyndy, Torangyly, Shagan, Kamystykol, Ashykol, Shiliktikol, Karabutak, Tabantal, Terisbutak, Tiekbutak, Zhosaly, Ashysai, Kiaktysai, Kyzylasha, Saralzhyndy, Kaiyndy, Tikbutak, Karabutak, Uzyn-Karagandysai
	Zoo-hydronyms	Esekzhal, Tyshkanbulak, Shoshkakol, Shoshka, Zhaiyndy, Kundyzdy, Zhaksy Kargaly, Oisylkara, Aksholak
	Hydronyms characterizing the peculiarities of natural environment of the area	Or, Tikasha, Akzhar, Zhamansu, Aksu, Kulasu, Aktasty, Kairakty, Shuylak, Syntas, Kosestek, Shandy, Koskol, Milysai, Zhinishke, Dauyl, Araltobe, Tuzdykol, Sorkol, Solenoe, Karakol, Ulkenkol, Kishkenekol, Batpakkol, Milybulak, Tastybulak, Tuzbulak, Zhaltyrbulak, Bylyldak, Bogetbulak, Bala Tal dyk, Uly Tal dyk, Kokkudyk, Karabulak, Kurashasai, Akungirkudyk, Akbulak, Kiya, Karasai, Kumkudyk, Kyzylespe, Tikasha, Aidarlyashasai, Aktastykol, Koksui, Borly, Yrgiz, Shetyrgiz, Zhem, Tamdy, Akshat, Kauylzhyr
	Anthropo-hydronyms	Akkebek, Shot, Zhusip, Bakai, Aulie, Sadyksai, Syrlybai, Borte, Kiyaly Borte, Zhezdibai, Murgelenbulak, Kilysanbulak
Oikonyms	Phyto-oikonyms	Kokterek, Kosterek, Tal dybulak, Tal dysai, Zhosaly, Kamystykol, Miyalykol, Basshili, Olenti, Kopa, Terisbutak, Kaiyndy, Shiliktisai, Terekti, Shilisai, Torangyly, Boztobe
	Oikonyms characterizing the peculiarities of natural environment of the area	Koktau, Araltobe, Zharbutak, Sarysai, Tassai, Kairaktysai, Kairakty, Ashylsai, Borly, Kumsai, Altynydy, Kotyrtas, Korganzhar, Birshogyr, Bogetsai, Kyzylzhar, Aktasty, Uitas, Tasotkel, Kulama, Kyzylsaz, Mugalzhar, Airyktas, Syntas, Kiyaly, Bulakty, Akzhar, Ashylsai

The toponym Mugodzhary, or Mugodzhhar Mountains (Levshin, 1996) comes into use only in the 19th century. Today the name Mugalzhar is entered on the State Catalog of Geographical Names of the Republic of Kazakhstan (2012, 2016), and on the physical map of Kazakhstan. Linguistically the name of the geographical object Mugalzhar consists of two words. The first half of the word means in the Kazakh language “muk / mok> mokal-komalyi (tukyl, mukyl)”, “mukalghan, muzhilgen”, destroyed, and the second half is zhar, jar - “precipice”, “rock” (Zhanuzak, 2011: 185; Biyarov, 2012: 48). This designation defines the physiographic feature of Mugalzhar.

Analyzing these opinions and taking into account that according to geological data Mugolzhary is an ancient mountain, the name “mukalghan, muzhilgen” meaning “destroyed”, and “zhar, jar” meaning “precipice”, “rock” - are the basis of this name.

Based on the topographic map of 1: 500,000 of the Mugalzhar Mountains and their adjacent territories a total of 197 oronyms, hydronyms and oikonyms were collected and systematized according to their nomination principles (Table 1). Over the course of the study it was revealed that more than 50% of the group of toponyms characterize features of the environment, terrain, and nature (landscapes) of a geographical object (Figure 2, 3).

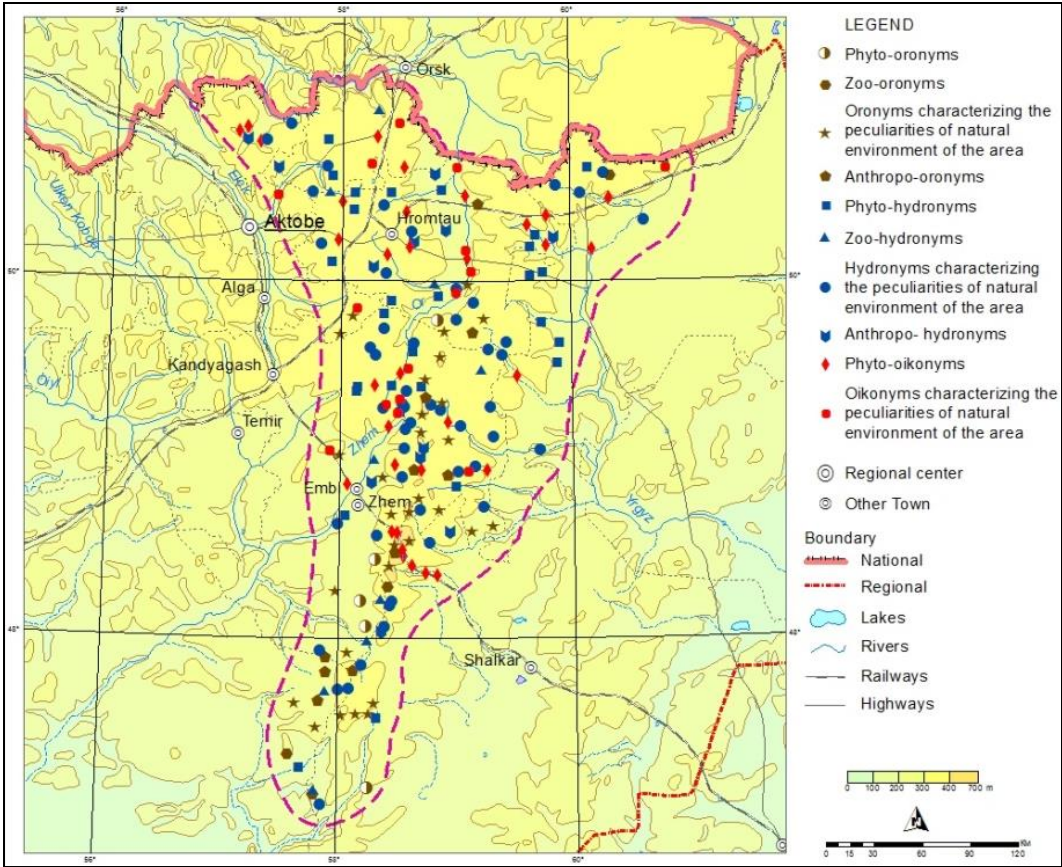
Herewith in the name group there are more toponyms of popular geographic terms “tas”, “zhar”, “sai”. Names with such terms are common in Saryarka with similar geological mountain orogenesis (Gorbunov, 2005; Maloletko, 1992).



**Figure 2.** Features of the nomination of toponyms  
of the Mugalzhar mountain sites and its adjacent territories


In the world scientific sphere of Earth sciences (geosciences: geology, geomorphology, physical geography, geotectonics, etc.) Kazakhstan is positioned as a country with a rich geological (geochronological) history, which is of great interest to the scientific community. This fact provides potential opportunities for the development of scientific tourism in the Aktobe region of the Republic of Kazakhstan represented by geotourism which in particular includes geological tourism, geomorphological tourism, and geographic tourism itself at the very beginning of the development of tourism as an industry. In the 2d-table we consider the objects of geotourism in the Mugalzhar Mountains.








**Figure 3.** Map of the distribution of the toponyms of the Mugalzhar mountain sites and the adjacent territories



**Table 2.** The main objects of geotourism of Mugalzhar Mountains  
(Source: Space photography of 2015 from Sasplanet resource)

Objects of geotourism of Mugalzhar mountains		Features and role
		<p>The southern end of the Ural Mountains and the Mugalzhar Mountains belong to the erosion-tectonic hilly area and low mountains, denudation plains of the Trans-Urals and Mugalzhar. This is the most elevated region of Western Kazakhstan.</p> <p>The low mountains of the most elevated part of the Western Mugalzhar are elongated in the meridional direction and consist of a set of sporadically located small elevations connected by upfolds with weakly expressed saddles.</p> <p>The Or-Irgiz upland or the peneplain of the Eastern Mugalzhar is a vast meridionally extended flat-low-slope surface.</p>

The Importance of Toponymy of Mugalzhar Mountain  
Plots and Adjacent Territories to the Development of Geotourism

	<p>Among the many ancient volcanoes of Kazakhstan which in the overwhelming majority have been preserved as separate fragments, a special place is occupied by the Shuyldak river area in the South Mugodzhary. Volcanic structures were born in the early - middle Devonian (more than 350 million years ago) at the bottom of the Ural paleocean, under the water layer not less than 3000 m. The source of the eruptions was the deep detachment of the lithosphere on both sides of which the ocean floor moved apart. Shuyldaksky paleovolcanic region - fragments of paleovolcanic structures in the southeastern part of Mugalzhar, in the valley of the Shuyldak river (for 20 km) in the wintering area of Arstanbai, Dongelek, Aktogay. It was named after the Shuyldak river, the Shet-Irgiz tributary (Kazak <i>shuyldak</i> – «noisy»).</p>
	<p>The name Airyk comes from the word "ayr." Aiyr (Turk.) - openings of the mountain, watershed. The basic meaning is "split", "branch", "fork". Hayrik, arak (Mong.) - small hills, rows of low mountains or hills, located randomly and cut by parallel ravines stretched in the same direction (Murzaev, 1984). There are also mountains with such a name in Southern Altai and in Zailiysky Ala-Tau. Since it is at Mount Ayruk that the highest part of Mugalzhar begins and they are divided into two branches - western and eastern, this name seems justified.</p>
	<p>The Shili Dome has been erosion-faceted and is well expressed in relief forming a round hill which 10–15 m elevates steplike above the surrounding plain, with a slope of ~ 10–12°. The Shili Dome is a maritime eroded astro problem of Eocene age. The name Shili occurs on the basis of a phytanim, i.e. associated with the spread of shea vegetation.</p>



	<p>The eolian relief in combination with the water-accumulating properties of sands contributes to the formation of birch-wood light forest occupying various relief elements. The tree-shrub and grassy cover plays the role of partial “conservation” of sand from further deflation. The current morphology of the tract indicates that this territory has previously experienced a significant anthropogenic influence in the form of grazing pressure.</p> <p><i>Zhamanurkesh</i> tract (from Kazakh <i>Zhaman</i> - “bad, ill”, <i>urkesh</i> - “camel's hump”). The tract is located in the central Primugadjariye southeast off Emba, on the right bank of the r. Ushkattysay (left-bank tributary of the river Zhem). The tract is the most elevated part (363 m) of the asymmetric interfluvium of the Ushkattysay river (Pavleichik, 2014: 57).</p>
	<p>The basic section of the boundary between the Carboniferous and Permian systems, the location of the fauna of ammonoids, fusulinides, conodonts (Seyitov &amp; Zhunisov, 2002). The section is located on the right steep bank of the Aidarlyash river, 10 km west off Akzhar settlement in Khromtau district. They are important for stratigraphy of Carboniferous and Permian deposits. Aidarlyash began to be studied in the 1950s. In 1991 to the 150th anniversary of the discovery of the Permian period scientists conducted research on all geological faults dating back to this period. The wonder of Aidarlyash is that the study of the cross-cut of the section makes clear the features of the development of each stage of the earth's crust. The valley of the Aidarlyash river is a unique location of fossil organic remains characterized with unique preservation. The cut of the Carbon and Permian boundary layers provides the information about the sedimentary environment. The toponym <i>Aidarlyash</i> consists of the words “<i>aidarly</i>” and “<i>asha</i>”. <i>Aidarly</i> is a prominent hill with a pile of stones on the top (literally crested). In geography: “elevation, usually with a large pile of stones erected at the very top in the form of a cone” (Turk.). <i>Asha</i> – forked point, bifurcation, place of confluence of two rivers; branch point (Konkashpayev, 1951).</p>

One of the promising areas of diversification of tourist services in Kazakhstan may also be the development of such a new direction in the world as geological tourism. As it is known, in terms of mining and geology Kazakhstan is a storehouse of minerals. And in the geomorphological context Kazakhstan is characterized with almost all forms and types of Earth's surface relief. The main idea of geological tourism is familiarity with the

geological and mineralogical places of interest of a region, geomorphological monuments of nature and landforms, unique landscape structures, tectonic faults, rift zones and more.

## CONCLUSION

Summing up it should be said that the unique natural landscapes of Mugalzhar provide opportunities to create geo-routes and develop geotourism in the Aktobe region. And the unique geological and geomorphological objects and natural monuments of Mugalzhar Mountain are potential resources for creating and opening here a network of geoparks that have scientific, applied and educational significance for the Earth sciences, and this in turn will contribute to the development and strengthening of geotourism in the Republic of Kazakhstan.

Toponymatically prepared in this way tourists have excursions where they will consciously perceive the encountered names and also be able to verify directly on the ground whether those natural features that at one time caused the appearance of one or another name have been preserved.

In whole the geographic analysis aimed at toponymic detailing of the Mugalzhar mountain and its adjacent territories may result in the actualization of a general profound and long-term interest in Kazakhstan territories, problems and prospects for the development of tourism. At the present stage toponymic science is focused on a full and in-depth study of geographic space, the real prospect of all toponymic research in this regard is an integrative description of both structural and cognitive aspects of the toponymic situation.

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