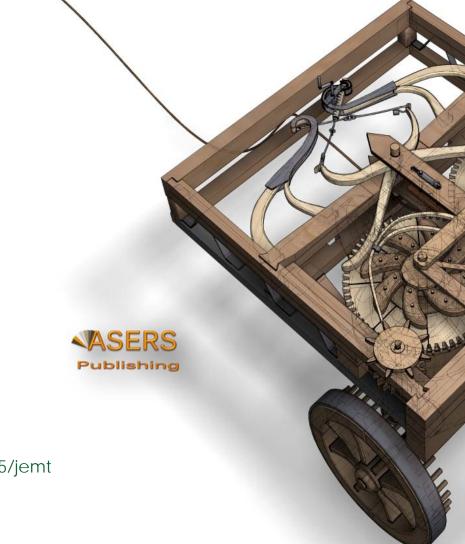
# Journal of Environmental Management and Tourism



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### SPRING 2018 Volume IX Issue 2(26)

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## Contents:

1	Federation. The Financial Aspect  Dmitrii Nikolaevich BERESNEV, Nadezhda Nikolaevna FILIMONOVA, Olga Vasil'evna VERSHININA, Yuliya Aleksandrovna KUVSHINOVA, Gennadii Ivanovich MOSKVITIN	221
2	The Impact of Customer Relationship Management on Tourist Satisfaction - The Case of Radisson Blue Resort in Aqaba City Omar Abedalla ALANANZEH, Ra'ed MASA'DEH, Omar JAWABREH, Ali Al MAHMOUD, Randa HAMADA	227
3	Forming Approaches to Strategic Management and Development of Tourism and Hospitality Industry in the Regions Elena Evgenievna KONOVALOVA, Elena Vladimirovna YuDINA, Irina Viktorovna BUSHUEVA, Tatiana Viktorovna UHINA, Kostyantyn Anatol'evich LEBEDEV	241
4	Investigating English for Specific Purposes Tourism Management Textbooks. Evidence from Iranian ESP Needs Analysis Mahmoud EGHDAMI, Ahamd MOINZAHEH, Hossein BARATI	248
5	Assessing the Perceptions of Local Residents on the Positive and Negative Impacts of FIFA U-17 Women's World Cup in Jordan 2016 Mamoon ALLAN	255
6	Spatio-Temporal Dynamics of the Global Medical Tourism Anatoliy I. CHISTOBAEV, Zoya A. SEMENOVA	267
7	Analysis of Tourism Destination Loyalty of Ragunan Zoo in Jakarta Edy SUPRIYADI	276
8	System Diagnostics and Monitoring of Socio-Economic and Tourist Potential of Peripheral Territories of the Region Mikhail KAZAKOV, Vladimir GLADILIN, Alla MIROKHINA, Elena DRANNIKOVA, Galina NAROZHNAYA	283
9	Batur toward Sustainable Tourism Development - A Community-based Geotourism Case from Bali in Indonesia Ni Made ERNAWATI, Anak Agung Raka SITAWATI, Ni Kadek MULIATI	291
0	Modern Approaches to Assess Tourism Industry - Related Environment Alexey Leonidovich NIKAZACHENKO, Elena Evgen'evna YUDASHKINA, Grigory Vladimirovich VLASOV, Victoriya Valer'evna NOVIKOVA, Kostyantyn Anatol'evich LEBEDEV	298

## SPRING 2018 Volume IX Issue 2(26)

Issue 2(26)	
Editor in Chief Ramona PÎRVU University of Craiova, Romania	1
Editorial Advisory Board	1
Omran Abdelnaser University Sains Malaysia, Malaysia	
<b>Huong Ha</b> University of Newcastle, Singapore, Australia	1
Harjeet Kaur HELP University College, Malaysia	1
<b>Janusz Grabara</b> Czestochowa University of Technology, Poland	1
Vicky Katsoni Techonological Educational Institute of Athens, Greece	1
<b>Sebastian Kot</b> Czestochowa University of Technology, The Institute of Logistics and International Management, Poland	1
Nodar Lekishvili Tibilisi State University, Georgia	
Andreea Marin-Pantelescu Academy of Economic Studies Bucharest, Romania	1
Piotr Misztal The Jan Kochanowski University in Kielce, Faculty of Management and Administration, Poland	1
Agnieszka Mrozik Faculty of Biology and Environmental protection, University of Silesia, Katowice, Poland	
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Journal DOI: http://dx.doi.org/10.14505/jemt

11	Innovation Strategy Role in Tourists Visit Improvement. Context of Man- Made Tourism in Indonesia MUAFi, Taufiq WIJAYA, Awan Kostrad DIHARTO, Bagus PANUNTUN	304
12	Tourist Industry Development Prospects in Vladivostok under the Launch of "Primorye" Integrated Entertainment Zone Natalya MARTYSHENKO	310
13	Ethno-Cultural Aspects of Tourism Development in the Republic of Kalmykia S. B. BOLDYREVA, Z.O. KEKEEVA, O. I. KEKEEV	318
14	The Development of Halal Ecotourism Destination. Context of Business Collaboration and Mutual Trust MUDOFIR, Priyo SUSILO, Awan Kostrad DIHARTO, MUAFI, BADAWI	325
15	Risks of the Tourism Industry in Ukraine Kateryna SOFIICHUK	334
16	Marketing Tools for Development of the Tourist and Recreational Area Irina Ivanovna SKOROBOGATYKH, Anatoly Viktorovich SHISHKIN, Taira Velimagomedovna MURTUZALIEVA, Boris Ivanovich POGORILYAK, Anna Evgenievna GOROKHOVA	343
17	Determining the Factors Attracting the Tourists to Visit Kedah State, Malaysia Abdelnaser OMRAN, Hafiz Waqas KAMRAN	355
18	Partnership Schemes - A Solution to Sustain Raw Materials of Plywoods in Lombok Island, Indonesia Etty SUSILOWATI, R. Maulana Aliif AKBAR	365
19	Economic and Environmental Marketing in Establishment of Tourist Territories. Exemplified by the Republic of Altai Toskanaj Ajtmukanovna KUTTUBAEVA, Ljudmila Viktorovna ISHHUK, Andrej Vladimirovich GLOTKO, Evgenija Olegovna CHERNOVA, Marija Gennad'evna SUHOVA	376

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## Batur toward Sustainable Tourism Development - A Community-based Geotourism Case from Bali in Indonesia

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#### **Abstract**

This paper discusses contemporary issues in developing Batur toward a sustainable geotourism site. It is a result of a qualitative study using a combined method of document review, observation and direct participation as data collecting methods. Natural conservation is one of the vocal points of Batur geotourism, as it uses natural environment as attraction and venue. Tourism brings benefits to people in Batur who used to have farming as the only major occupation; since tourism was introduced in this area people's profession diversified. In general, the benefits of tourism reasonably reinforce a better living in Batur, these such as better economic, infrastructure and landscaping; more appreciation and attention to natural environment and culture; broader social interaction and wider perspective and horizon of the people. Nonetheless, more efforts need to be exerted for better tourism development results. Currently, Batur tourism management operates in fractions, to maximize the benefits from tourism, a systematic and integrated management needs to be devised with the collaboration of stakeholders that enables the provision of quality tourism products and services, an integrated promotion, the availability of tourism facilities and infrastructure that harmoniously coexist with nature, the establishment of network, and the application of regulations that support sustainable tourism.

Keywords: geotourism; sustainable tourism; community-based tourism; natural environment; conservation

JEL Classification: Z32.

#### Introduction

Batur geotourism is reasonably developed, and has become an additional occupation besides farming, and significantly supports the economy of the local community (Arjana, Ernawati and Astawa 2018). Batur as a tourist area has emerged, from the quiet Batur in 1973s (Danandjaja 1994), to date has received an average of 300 tourists/mount-climbers per day (Sarda 2017). Economically, tourism brings benefits to Batur community; however, the socio-cultural, environmental impacts and the sustainability of tourism are still an issue (Ernawati, Sudarmini, Sukmawati 2018, Voda, Torpan and Moldovan 2017). Batur has changed significantly, tourists are even surprised to see the development that happened in 7 years (McGowan 2000), who describes these developments as follows (McGowan 2000, 46):

When I finally went back to Toyabungkah after seven years, I was struck by how dramatically the landscape had changed. There was a new paved road all the way to the hot springs. All the lime trees formerly near the lake had either died or been cut down. New homestays and food-stalls had sprung up everywhere. There was talk of sectioning off a part of the hot springs and building a cement enclosure where the tourists could bathe privately. Then it would be possible to charge the tourists admission. Batur stones had become a lucrative business on the side at

Currently, tourism activities are more organized, and receive more attention from the government, community participation, and even Batur has become a member of Global Geopark Network (GGN). Tourism brings particularly economic benefits to Batur. However, tourism in Batur still encounters some issues that need to be managed, these include land conversion for tourism purposes, over-limit of natural environment and community carrying capacity, structures built for tourism purposes that overlooked regulations, conflict between tourism service providers which is a common issue encountered when developing CBT (Ernawati, Sudarmini and Sukmawati 2018, Ernawati *et al.* 2018, Ernawati, Sanders and Dowling 2017, Singh, Timothy and Dowling 2003). Therefore, Batur tourism still needs further development, more efforts are required to make Batur a sustainable tourism development (Ernawati, Arjana and Astawa 2018). Stakeholders including academics are expected to take a part in the process. It is expected this study could contribute in providing input for the development of sustainable tourism in Batur.

#### 1. Geotourism

Batur has geotourism as a main tourist attraction theme. Newsome and Dowling (2010) point out that geotourism is a form of nature tourism that focuses on geology and landscapes to promote geotourism sites and the conservation of geological diversity and understanding of the earth sciences through appreciation and learning by visiting geological sites, geo-trails and view-points; participating geological activities; and sponsoring geosite centers. These authors further explain that geotourism attractions consist of landscape, landforms, fossils, rocks and minerals, and the appreciation of the shaping and the shaping process. Hose (2008) highlights the industry element and describes geotourism as the provision of facilities, and interpretations together with other services that enable tourists to gain knowledge and understanding of the geology and geomorphology of a geotourism-site, which is not solely for the purpose of appreciating beauty. Therefore, geotourism encompasses all activities including products and services provision as well as attractions and site management in order to deliver quality tourist experiences wherein visitors could enjoy the aesthetic of geological sites, thus appreciate them.

The recognition of the importance of geological heritage is lacking, regardless of its important role in human life, geology shapes life and affects society, civilization and culture (UNESCO 2008). Nevertheless, geotourism evolved and received much attention from both scientists and tourists in the last decade (Mamoon 2011). The existence of Geotourism in Indonesia is relatively new, the first geopark registered in 2012 into the Global Geopark Network (GGN) is Batur Geotourism (Igan *et al.* 2012). As in the case of Maros, a geosite located in South Sulawesi in Indonesia, geosite lovers are concerned over the damage of the natural heritage caused by karst mining (Sodventure 2013), Batur also is not free from sand mining activity (Dowling 2014). This kind of nature exploitation issue and tourism becomes an alternative solution are discussed by Voda, Torpan and Moldovan (2017), Voda, Moldovan, Torpan and Henning (2014).

Apart from the issues related to the environment aspect, geotourism management should also considered the other two aspects of sustainable tourism; as the UNWTO (2013) outlines the assessment of three elements in regard to sustainable tourism development which include: economic, socio-cultural and natural environment. In addition, Dowling (2014) points out that a credible management for Batur geotourism is required to ensure the goals of tourism development are achieved with minimum negative impacts, thus Batur tourism needs a work.

#### 2. Research method

This case study is developed base on a study conducted earlier by the author on geotourism products in Batur, a document review covering the assessment on the existing publication on Batur. The discussion covers the earlier Batur before tourism, a coverage on current tourism in Batur, and some insights on tourism approach in future. This article is a result of a qualitative study using a combined method of literature study, observation and direct participation as data collecting methods.

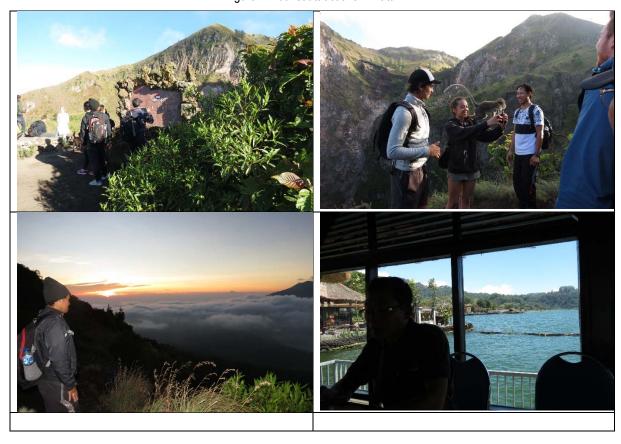
#### 3. Batur toward Sustainable Geotourism

Tourism has been existed in Batur, Bali, Indonesia in 1973 (Danandjaja 1994); which is much later from the starting of tourism in Bali. Agung (2010) points out that tourism in Bali has occurred since 1924 with the 'Weekly Steamship

Tour to Bali' organized from Java (Valois, n. d). The onset of the tourism industry in the 1960s (Wall 1996) creates a significant number of job opportunities that provide a new occupation option in addition to farming (Agung 2010). Contemporary, Batur farmers live on and manage small farms sometimes as small as 200 m2; the field is a wide shallow hole created by lava flow, which farmers fill with organic fertilizer, thus their vegetables could grow. Batur covers an area of 11,787 ha, wherein 10 villages are located. The distribution of land use includes: Mooring -49.35% for the cultivation of vegetables and food crops, Plantation - 4.59%, Public forest - 5.38%, Housing/yard -2,22%, State forest - 27.84% of protected forests and natural tourism parks, Others - 10.62% of critical land resulted from the former eruptions of the mountain (LIPI, n. d.). Batur has 2 seasons: the dry season and the rainy season in December up to May; a cool temperature during the day and cold at night with temperatures ranging from 22-26°C. Batur landscape is very unique with karst 'clinker' formed during the eruptions (Igan *et al.* 2012), where the Gum trees grow, slightly similar to the landscape of Australia. The lake is 1000 m above sea level and Mount Batur is at 1717 m.

Besides geotourism attraction, Batur also has other tourism assets, these such as: a strong cultural attraction, spectacular view, great temperature around 22-26 °C. These are supported by the keen hospitality and the friendliness of the people. Today tourism in Batur has reasonably developed and receives about 300 tourists every day whose major purpose is to climb Mount Batur (Sarda 2017). Most of the tourists come to Batur at 4 a.m. and climb to watch the sun rise from the top of Mount Batur. A small number of the climbers stay overnight so they can enjoy the environment around Batur before climbing. When the majority of tourists making a one-day visit (Saputra 2015), it is easy to assume that Batur has limited attractions. In fact, Batur is rich with tourist attractions (Figure 1), these such as: Batur natural hot spring; Toya dePasya which is a hot water bath overlooking the lake combined with restaurant and accommodation (Arjana, Ernawati and Astawa 2017). The area is rich with hot water springs managed by some developers and the Batur communities as tourist attractions. The floating restaurant not only features luscious lake-based fish dishes but is an attraction, enjoying meals in a floating gazebo that has a stunning view around Lake Batur. For the archaeologists, Trunyan village can be an attractive destination for having a unique burial quarter. For local people of Bali, to pray in Ulun Danu temple located in the upper reaches of Lake Batur in Songan village can be an authentic pilgrimage. Many visitors from surrounding areas such as Denpasar came to Batur to bathe in the hot water pool.

Figure 1. Tourist attractions in Batur



Similar with Batur community members, an American artist Kaja McGowan thinks Batur is a 'magical land', the ambiance is emitted through the lake and its mountain (McGowan 2000). McGowan is an American artist who could perform Balinese traditional dances well, and is impressed with Batur's nature with its lakes and mountains. Batur caldera was formed by mountain eruptions that have occurred approximately from the last 29,300 years. It is recorded that there were 26 eruptions, the most powerful eruption occurred in 1926. At the time of a big eruption in 1917 which destroyed the old Batur Village, the *Desa* (village) and Pura Batur (Batur temple) were moved up to a higher position which is Batur village current location. Pura Batur which is the abode of Dewi Danu Goddess has existed since the time of a reverend Hindu Priest Empu Kuturan in X century until the beginning of XI century (KBRI Den Haag 2012).

Around the year 1973, a famous Indonesian artist, writer and poet, Sultan Takdir Alisjahbana built his Toya Bungkah Art Center in Batur. The place was intended to be a center of art where writers from Indonesia and around the world gathered and traditional art especially traditional dancing was performed, the local youths studied and practiced traditional dances. Famous artists of the time include Ibu Reneng, Wayan Dibia and an American artist Kaja McGowan were invited and danced Balinese traditional dances (McGowan 2000). The center flourished in the 80s up to the 90s, nowadays the center died out.

Batur still has tourist attractions that need to be developed, for example a public viewing point on the side of the lake as a place to enjoy the lake view, which could be arranged in a specific design blended with nature landscaping. With the establishment of a geology museum and the registration of Batur as a GGN member, Batur has more variations of tourist attractions. As outlined, Geopark integrates the concepts of conservation, education and sustainable development in a single geological area, which are manifested by three activities: conservation, education and geotourism (Oktariadi 2016, UNESCO 2006). Batur could follow this principle in establishing itself as a sustainable geotourism site.

It is clear that tourism positively impacts Batur communities. With tourism activities, the existing volcanic sand mining in Batur (Dowling 2014) can be controlled and reduced; the transportation of the volcanic sand out of Batur uses special lanes so as not to disrupt the tourism routes. The activities of souvenir vendors that used to be very active and insistent in offering the products to tourists, currently have been conducted in a more orderly manner with the establishment of special souvenirs shops which yet need to be managed more effectively (Figure 2).



Figure 2. The still empty souvenir shops before Batur Caldera

The positive aspect is most of the land in Batur does not belong to the village people, this limits the possibility of land transfer ownership. However, Batur still faces various obstacles in developing tourism. The existing building and facilities and their functions need to be maintained, developed and managed (Figure 2 - 4). With regards to the construction of facilities to meet visitors' needs, it is necessary to establish zoning system, so that certain facility can be built in a particular location. This will prevent an excessive transfer of land function, enable an aesthetic spatial layout, and also as a means to ensure the availability of a public space to enjoy the lake environment which is a sharing area between locals and visitors. In this way, the spatial of Batur area could be methodically allocated so as to create comfort, safety for visitors to enjoy the beauty of the region and for the sustainability of Batur nature, the communities, and tourism.

The other aspects which require management and arrangement, these such as: providing employment opportunities for locals at a wider scale or becoming tourism entrepreneurs; assigning contribution to the village institution for common use out of tourism earning; ensuring all stake holders are included during the process of decision making which leads to an open and impartial opportunity; cultivating an open and fair competition base on customer focus by offering quality tourism experiences instead of price competition which leads to unsustainable

business practices. The United Nations World Tourism Organization (UNWTO) identifies four stakeholder elements in a tourism destination that consist of: tourism businesses, local communities, governmental elements, and tourism organizations (UNWTO 2002). The parties should work hand in hand for Batur tourism.

The existence of 4 starting points for Batur climbers enables the dispersion of the loads on the environment, so as not to exceed its carrying capacity at 1 starting point that will affect tourists' experiences of the Batur climbing. This will also address the issue of fair chance and opportunities for all people live around the Mount and Lake Batur to participate in tourism and encourage positive competition by improving quality and offering better products and services rather than creating price wars. Thus, implementing the second pillar of Sustainable Tourism Development which is 'Social Inclusiveness, Employment and Poverty Reduction' (UNWTO 2013).

The designation of building/structure standards suitable for community base tourism purposes which is economical, minimalist, functionalist, and aesthetic so as not to give the impression of slums with many hovels but accentuate the beauty. The standard is required for lodging, food and beverage outlet, shops, gazebos and other physical structures. Whilst, the transfer of land use is an imperative to be regulated, therefore it is vital to be communicated and introduced together with the other aspects of healthy living, cleanliness, safety and hygiene.

Batur trekking is an excellent product, with local guides who provide excellent services: communicative, caring and attention to safety. Daily, an average of 80 trekking guides escort climbers to the top of Mount Batur, which is a major source of employment for locals. Nevertheless, tourism products need to be diversified, for example by promoting art and pilgrimage tourism, developing viewing point on the lake side, combining various attractions in packages.

Figure 3. A hovel atop mount Batur for tourism purposes



Figure 4. One of the well built structures in Batur

Whilst Lorio, Corsale, (2013) highlight the importance of networking during the initiation stage of tourism development, and MacDonald, and Jolliffe (2003) consider partnership and cooperation as the final stage of CBT development which is one of the indications of a well-established CBT. This indicates the importance of networking, partnership and cooperation in all development stage, in which Batur needs to engage.

#### **Conclusions**

Tourism generally, contributes positively to people living in Batur economically and socially, and to the preservation of the natural environment. Tourism fosters economic development in the area and creates job opportunity. It also promotes appreciations of the locals toward cultural and natural heritage which lead to the conservation of the resources. It promotes social interactions; tourists who climb Mount Batur mainly come from Europe, America, India, Australia; thus, provides opportunities for locals to meet and interact with people from all over the world which in turn broadens their horizon and perspective.

Nevertheless, many still need to be addressed and managed for optimum development results as extracted by the UNWTO in the five pillars of Sustainable Tourism Development. Similar to other tourist places, tourism in Batur also potentially creates problems. These for example, over-limit of the environment and the community carrying capacity which in turn will affect tourists' experiences, social issues; therefore, it is vital to maintain and develop social cohesiveness, e.g. by providing a fair chance for people in Batur to participate in tourism. At one point of time tourism and mining activities occurred at the same time; big trucks full of volcano sands mixed with tourists' transportations on the slopes roads. These condition is dangerous and far from comfortable for tourism fun activities. Even Batur being the member of Global Geopark Network (GGN) was evaluated in 2016. Currently the mining activities is reduced and regulated, which allows tourism activities occur naturally, and Batur is still a GGN member. The current situation still could be improved, and Batur having a GGN brand should be maximally used.

Further development still needs to be endeavor in order for tourism to become a sustainable development project. These include: encouraging a positive and fair competition among the providers of tourism products and services. This would mainly be a customer focus and quality based competition instead of price base competition. Infrastructure and facility development is required that observes sustainable concepts and incorporates a blended

to nature design for buildings and structures. Batur has excellent trekking guides, nonetheless some managerial and operational skills need to be enhanced these include: administration, off and online promotion, tourism product development and delivery. Human resource skill is a common weakness for small and medium enterprises (Havierniková and Lema 2017), similar with Batur, training on hospitality fields need to be provided for the community members to improve human resources competency in support to tourism; these such as: cooking base on local recipes using local produce, as well as housekeeping. The Local government, the Village (the formal village authority) and the Adat (the traditional village authority) and other related authorizes need to endorse regulations to maintain sustainable development, prevent pollution and environmental damage. These include: the setting of zoning system for physical structures in Batur area such as: restaurants, souvenir shops, housing, amenities and other facility schemes as required. For the government to develop infrastructure such as roads, a viewing point on the side of the lake and one atop Mount Batur, and banking facility including the ATM. Predominantly, an integrated management and promotion of Batur, as well as developing building standards suitable for community based tourism within the context of nature tourism are required to reinforce Batur becoming sustainable geotourism site.

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