

ASERS

Journal of Environmental Management and Tourism

Quarterly

Volume XII

Issue 2(50)

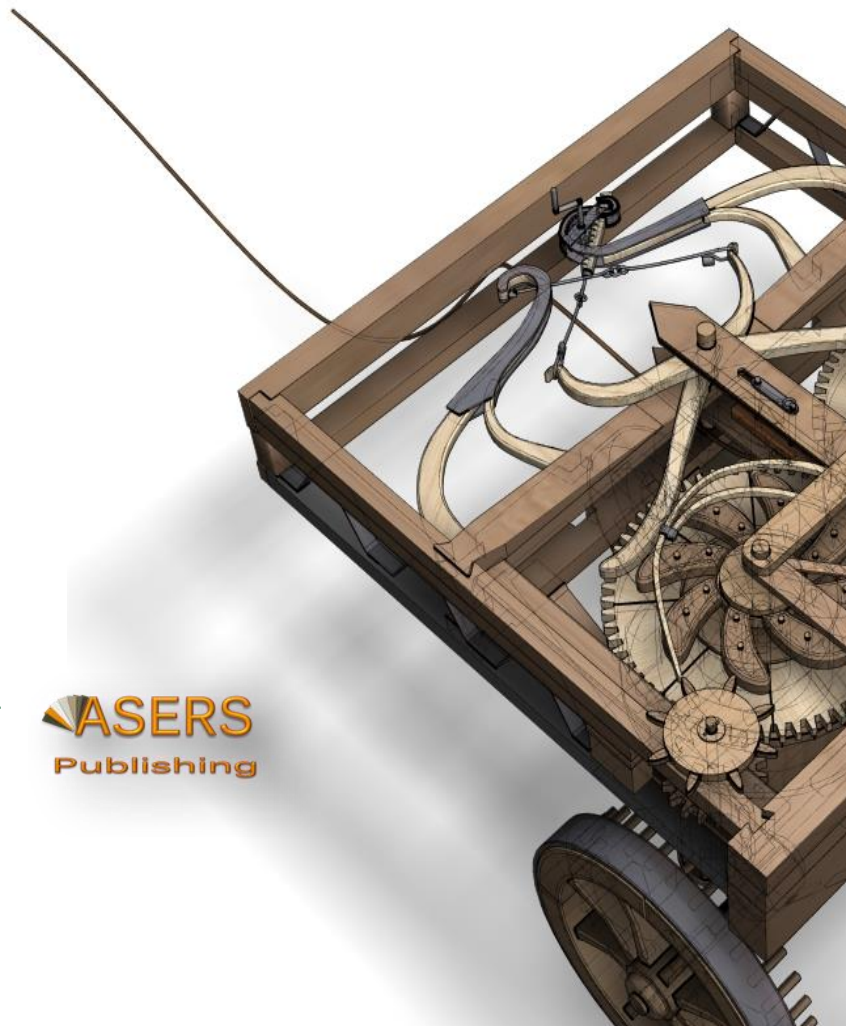
Spring 2021

ISSN 2068 – 7729

Journal DOI

<https://doi.org/10.14505/jemt>

 **ASERS**
Publishing



Editor in Chief

Ramona PÎRVU

University of Craiova, Romania

Editorial Advisory Board

Omran Abdelnaser

University Sains Malaysia, Malaysia

Huong Ha

University of Newcastle, Singapore,
Australia

Harjeet Kaur

HELP University College, Malaysia

Janusz Grabara

Czestochowa University of Technology,
Poland

Vicky Katsoni

Techonological Educational Institute of
Athens, Greece

Sebastian Kot

Czestochowa University of Technology,
The Institute of Logistics and International
Management, Poland

Nodar Lekishvili

Tbilisi State University, Georgia

Andreea Marin-Pantelescu

Academy of Economic Studies Bucharest,
Romania

Piotr Misztal

The Jan Kochanowski University in
Kielce, Faculty of Management and
Administration, Poland

Agnieszka Mrozik

Faculty of Biology and Environmental
protection, University of Silesia, Katowice,
Poland

Chuen-Chee Pek

Nottingham University Business School,
Malaysia

Roberta De Santis

LUISS University, Italy

Fabio Gaetano Santeramo

University of Foggia, Italy

Dan Selişteanu

University of Craiova, Romania

Laura Ungureanu

Spiru Haret University, Romania

Table of Contents:

1	Research on the Effectiveness of Black-Faced Spoonbill Bird Tourism and Conservation Strategy. A Case Study of Shifen Community at Chi-Gu District of Tainan City Chih-Jan HUANG, Yung-Nane YANG	313
2	Environmentally and Socially Oriented Investments on Sustainable Development of Rural Areas Valentyna ARANCHIY, Oleksii ZORIA, Ilona YASNOLOB, Svitlana ZORYA, Oleg GORB, Inna MYKOLENKO, Olha DYVNYCH, Valentyna CHUMAK, Liudmyla BRAZHNYK	321
3	Development of the Organizational and Economic Mechanisms of Greenhouse Industry in the Republic of Uzbekistan Akmal DURMANOV, Khavakhon RAKHIMOVA, Sukhrob R. UMAROV, Shakhida KHODJIMUKHAMEDOVA, Akhmedov A. KAMILOVICH, Mirzayev S. ARIPOVICH	331
4	Evaluation of Import Substitution Potential of Products from Secondary Raw Materials of Animal Husbandry Oxana DENISSOVA, Zhadyra KONURBAYEVA, Alfiya ZAKIMOVA, Madina RAKHIMBERDINOVA	341
5	An Exploration of Environmental Practices in the Hospitality Industry: Evidence from Hotels in Addis Ababa, Ethiopia D.K. LAMMI, Z. TESFAYE	357
6	Environmental and Legal Regulation of the Handling of Chemicals Assiya KUDERINA, Ilyas KUDERIN, Dauren BEKEZHANOV, Bolat AITIMOV, Dana NURBEK, Indira AMREEVA	371
7	Analysing Waste Management and Recycling Practices for the Hotel Industry Tercan TANSEL, Gaukhar YESHENKULOVA, Ulbossyn NURMANOVA	382
8	Environmental Problems of International Legal Regulation of Transboundary Pollution Dauren BEKEZHANOV, Gulnura KOPBASSAROVA, Ainur ZHUNISPAYEVA, Talgat URAZYMBETOV, Roza SEILKASSYMOVA	392
9	The Impact of Ecology on the Economic Development of Vinnytsia Region Oksana SAMBORSKA	406
10	Antecedents of Green Consumption Attitudes and Consequences for Intentions and Buying Behavior of Non-Pesticide Vegetable and Fruit Products Titik KUSMANTINI, Heru Tri SUTIONO, Rini Dwi ASTUTI, Terstina EKAWATI	420
11	Sustainable Economic Development and Environmental Performance of Developing and Developed Countries Chee Leong TAN, Tze San ONG, Wei Ni SOH, Norhuda ABDUL RAHIM	429
12	Quality of Tourism in World Heritage Sites: A Way towards Sustainability Bipithalal Balakrishnan NAIR	444
13	Financial Performance of Tourism Businesses in Labuan Bajo Tourist Area, Indonesia Edhie B. YUDHOYONO, Hermanto SIREGAR, Noer Azam ACHSANI, Tony IRAWAN	458
14	Methods of State Support of Innovative Entrepreneurship. The Example of Rural Tourism Maral S. ISKAKOVA, Maira K. ABENOVA, Lyazzat N. DZHANMULDAEVA, Aigul Z. ZEINULLINA, Marzhan S. TOLYSBAEVA, Zaure A. SALZHANOVA, Ayagoz ZHANSAGIMOVA	466

Editor in Chief

Ramona PÎRVU

University of Craiova, Romania

Editorial Advisory Board

Omran Abdelnaser

University Sains Malaysia, Malaysia

Huong Ha

University of Newcastle, Singapore,
Australia

Harjeet Kaur

HELP University College, Malaysia

Janusz Grabara

Czestochowa University of Technology,
Poland

Vicky Katsoni

Technological Educational Institute of
Athens, Greece

Sebastian Kot

Czestochowa University of Technology,
The Institute of Logistics and International
Management, Poland

Nodar Lekishvili

Tbilisi State University, Georgia

Andreea Marin-Pantelescu

Academy of Economic Studies Bucharest,
Romania

Piotr Misztal

The Jan Kochanowski University in
Kielce, Faculty of Management and
Administration, Poland

Agnieszka Mrozik

Faculty of Biology and Environmental
protection, University of Silesia, Katowice,
Poland

Chuen-Chee Pek

Nottingham University Business School,
Malaysia

Roberta De Santis

LUISS University, Italy

Fabio Gaetano Santeramo

University of Foggia, Italy

Dan Selişteanu

University of Craiova, Romania

Laura Ungureanu

Spiru Haret University, Romania

- 15 **The Role of Small and Medium-sized Enterprises to Promote Halal Tourism: The Case of Indonesia** 473
Roozbeh BABOLIAN HENDIJANI, Lim SANNY
- 16 **A Cross Sectional Analysis of Tourism Development and Social Development** 487
Tauseef AMAN, Mussawar SHAH, Humera JAMAL, Younas KHAN, Muhammad ARIF, Rubina NOOR
- 17 **The Impact of Literature on Tourism** 495
Alberta TAHIRI, Idriz KOVAČI, Fari BUSHI
- 18 **Legal Regulation of the Agreement on Provision of Tourist Services during the Pandemic Covid-19** 501
Stepan LYTVYN, Olena ZINCHENKO, Olha BASARAB, Valentyna GONCHARUK, Uliana ANDRUSIV, Iryna RYZHUK
- 19 **Determinants of Tourist Attraction of the Heritage Tourism** 507
KAHARUDDIN, Junika NAPITUPULU, JULIANA, Rudy PRAMONO, Elza Leyli Lisnora SARAGIH
- 20 **Problems of Legal Regulation Tourism Safety Problems and Ways to Solve Them** 515
Valerii TATSIIENKO, Ivan MIROSHNYKOV, Volodymyr KROITOR, Alevtina BIRIYKOVA, Elvira ORZHYNSKA, Vitalii OPERUK
- 21 **Tourism, Governance and Economic Growth in India** 521
P. K. MISHRA, Himanshu B. ROUT, S. R. CHAINI
- 22 **Sustainable Development of the Region. Case Study - Kazakhstan** 529
Sergey Vladimirovich BESPALYY
- 23 **Advances in Tourism Education: A Qualitative Inquiry about Emergency Remote Teaching in Higher Education** 538
Kevin FUCHS
- 24 **Labor Productivity as an Indicator of Efficiency Interaction of Higher Education and Tourism Business** 544
Tatyana P. DRAKH, Zaure A. SALZHANOVA, Sholpan E. ALPEISSOVA, Maral K. KOZHAKHMETOVA, Aigul KAZKENOVA, Rysty SABIROVA, Zhibek M. OMARKHANOVA
- 25 **Cost Optimization of the Medical Tourism Market Research Project in Poland and Turkey** 552
Mariusz CHMIELEWSKI, Sylwia KUCZAMER-KŁOPOTOWSKA, Monika BOGUSZEWICZ-KREFT, Ali AYCI
- 26 **Economic and Tourist Effects of External Migration in Kosovo** 567
Hazer DANA, Tomor ÇELA, Addhe KRASNIQI, Vloran CENAJ
- 27 **Crisis Management Strategies in Jordanian Hotel Industry** 578
Maisoon ABO MURAD, Abdullah AL-KHARABSHEH, Abdulrahman AL-KHARABSHEH
- 28 **Community Involvement and Sustainable Cave Tourism Development in Tulungagung Region** 588
M. Nilzam ALY, Nur HAMID, Novianto Edi SUHARNO, Nor KHOLIS, Elvara Norma AROYANDINI
- 29 **The Contribution of Tourism to Economic Growth: The Case of Qatar** 598
Ozcan OZTURK, Maryam AL-KUWARI

Call for Papers Summer Issues 2021 Journal of Environmental Management and Tourism

Journal of Environmental Management and Tourism is an interdisciplinary research journal, aimed to publish articles and original research papers that should contribute to the development of both experimental and theoretical nature in the field of Environmental Management and Tourism Sciences.

Journal will publish original research and seeks to cover a wide range of topics regarding environmental management and engineering, environmental management and health, environmental chemistry, environmental protection technologies (water, air, soil), pollution reduction at source and waste minimization, energy and environment, modeling, simulation and optimization for environmental protection; environmental biotechnology, environmental education and sustainable development, environmental strategies and policies, etc. This topic may include the fields indicated above, but are not limited to these.

Authors are encouraged to submit high quality, original works that discuss the latest developments in environmental management research and application with the certain scope to share experiences and research findings and to stimulate more ideas and useful insights regarding current best-practices and future directions in environmental management.

Journal of Environmental Management and Tourism is indexed in SCOPUS, RePEC, CEEOL, ProQuest, EBSCO and Cabell Directory databases.

All the papers will be first considered by the Editors for general relevance, originality and significance. If accepted for review, papers will then be subject to double blind peer review.

Deadline for submission:	24 th May 2021
Expected publication date:	June 2021
Website:	https://journals.aserspublishing.eu/jemt
E-mail:	jemt@aserspublishing.eu

To prepare your paper for submission, please see full author guidelines in the following file: [JEMT Full Paper Template.docx](#), then send it via email at jemt@aserspublishing.eu.



DOI: [https://doi.org/10.14505/jemt.v12.2\(50\).28](https://doi.org/10.14505/jemt.v12.2(50).28)

Community Involvement and Sustainable Cave Tourism Development in Tulungagung Region

M. Nilzam ALY
Faculty of Vocational Studies
Airlangga University, Indonesia
nilzamsvarna@gmail.com

Nur HAMID
Department of Islamic Community Development
State Islamic University of Walisongo, Indonesia
elnur.hamid@walisongo.ac.id

Novianto Edi SUHARNO
Faculty of Vocational Studies
Airlangga University, Indonesia
novianto-edi@vokasi.unair.ac.id

Nor KHOLIS
Department Interdisciplinary Islamic Studies
UIN Sunan Kalijaga Yogyakarta, Indonesia
annurkholis24@gmail.com

Elvara Norma AROYANDINI
Faculty of Mathematic and Natural Science
Yogyakarta State University, Indonesia
elvarazakiya@gmail.com

Suggested Citation:

Aly, M.N., Hamid, N., Suharno, N.E., Kholis, N., Aroyandani, E.N. (2021). Community Involvement and Sustainable Cave Tourism Development in Tulungagung Region. *Journal of Environmental Management and Tourism*, (Volume XII, Spring), 2 (50): 588 - 597. DOI:[10.14505/jemt.v12.2\(50\).28](https://doi.org/10.14505/jemt.v12.2(50).28)

Article's History:

Received 5th of January 2021; Received in revised form 8th of February 2021; Accepted 3rd of March 2021; Published 29th of March 2021. Copyright © 2021 by ASERS® Publishing. All rights reserved.

Abstract:

The model was focusing on the community involvement of tourism activities based on rural collaborative-construction with the different ways to utilize at Tenggar Cave, Tenggarrejo Village, Tulungagung region in order to ensure the sustainability of heritage tourism development in that area. A qualitative approach through participating observation, indepth interviews, study of document and focus group discussions were obtained to reliability and validity data. Interviews were conducted to informants of the development planning agency at sub-national level, tourism government reGENCY, Indonesian State Forest Company, the members of the local tourism community, local entrepreneur, tourist, archeology and researcher. The results indicated that local communities and other stakeholders have participated in management, conservation, tourism development of the site, solved social problems and benefit in that area such as poverty, lack of job opportunity, and corncob waste. This research suggested that collaboration model which was developed within the tourism planning must implement principles of sustainable and involve full role of the local community. Community Based Heritage Management (CBHTM) is an ideal model in the development of tourism in the Tenggar Cave area.

Keywords: community involvement; sustainable tourism; tulungagung region; tenggar cave

JEL Classification: R11; Z32.

Introduction

Tourism is one of the largest and fastest growing industries in the global world (WTO 2015). The World Travel and Tourism Council ranks Indonesia's tourism growth as the 9th fastest in the world, number three in Asia and number one in Southeast Asia. In the next five years, the tourism sector is predicted to become the core of Indonesia's economy. Until 2019 the tourism sector has contributed foreign exchange at Rp 280 trillion and absorbed a workforce of 13 million people (Kemenparekraf 2016).

The type of tourism that is currently being targeted throughout the world as part of economic resources, especially for many developing countries, is geotourism (Cigna 2016). Indonesia is a country that has this potential as an asset to create sustainable tourism. One part of geotourism that is directed to support tourism, namely cave tourism. This type of tourism is expected to improve the character of the geographical environment, cultural heritage, aesthetics, culture, and the welfare of local residents (Gordon, 2018)

However, the potential of the cave as a tourist destination has not been matched by good management (Tutik et al. 2018). The impact of cave damage by tourism activities in general in Indonesia has never been evaluated. Whereas management that is only seen from an economic standpoint can cause damage to caves. Therefore, stakeholders need to carry out evaluation and good management (Ma'ruf, Kurniawan, and Pangestu 2017). In addition, tourism management must also consider social problems in the community, such as the occurrence of horizontal conflicts within community (Wibawa, Sujarwo, and Hiryanto 2017).

This is where the importance of community involvement in geotourism management as part of a cultural heritage to ensure the sustainable development of tourism activities (Chami 2018). Collaboration between local authority stakeholders, government agencies, businesses and communities is urgently needed (Vernon et al. 2005). Collaborative policies in tourism planning need attention to be more proactive in managing growth and development in various tourism destinations (Byrd 2007).

With this collaboration, it is expected to be able to reduce the negative impacts that occur and be able to optimize the potential for sustainable tourism that exists in each region. There has been a paradigm shift from centralization to decentralization, Regional Government through regional autonomy authority based on Law no. 32/2004 can explore and empower all the potential that is owned for development capital and increase community welfare.

This research will look at the management model of potential cave tourism destinations in Tenggarejo Village, Tulungagung, East Java Provinces. This regency is adjacent to the Bromo Tengger Semeru National Tourism Strategic Area and its surroundings. Most of the previous research focused on the potential for ecotourism (Kurniawati, Sumarni, and Aliman 2020; Sumarni, Kurniawati, and Aliman 2020; Saputri, Soemardiono, and Sulistyarto 2019) and agro-tourism (Kurnianto et al. 2013). Meanwhile, the potential for geotourism tourism has not been studied.

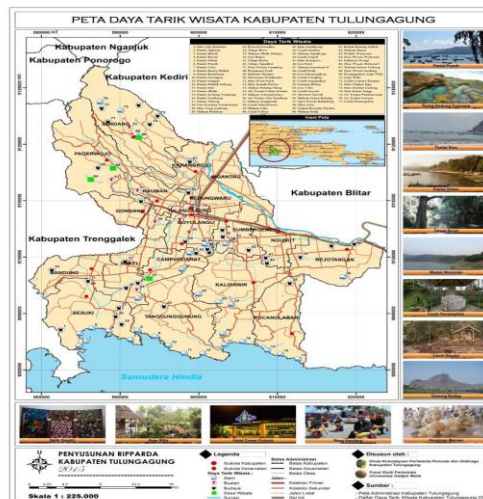


Figure 1. Map of Tourist Attraction in Tulungagung

Whereas geographically the Tulungagung region, especially the southern part, is in a limestone mountain area where there are many natural features in the form of limestone caves in the southern region. Besides the rich potential of natural caves, Tulungagung Regency also has several artificial caves which are closely related to the history of Tulungagung Regency (Izza 2015). With the large number of tourism potentials in Tulungagung and tourist visits that have been increasing every year, an in-depth study is needed to continue to develop the existing potential.

Based on the above background, this research has three main objectives. First, identify the characteristics of tourism resources in Tulungagung Regency, especially Tenggarrejo Village. Second, identify the role of stakeholders and the community in tourism development in Tenggarrejo Village. Third, find a cave tourism development model that has been applied in the area. The results of this study are expected to be the first step in making policies that are oriented towards the principles of sustainable tourism development and community empowerment.

1. Literature Review

Ismail (2013) states that the terms community involvement and community participation in sociology are usually used interchangeably. There is no significant difference in the meaning of the two words in English. Therefore, the word involvement or participation is interpreted as an action or process involving something, including someone, or the fact that is involved about something (Ismail 2013).

Tourism has another way to become an instrument for building economic development and poverty alleviation. Therefore, in this sector the local community needs to be fully involved because they are the hosts in the tourism area (Scheyvens and Russell 2012). Several case studies show that there are many challenges faced during the community empowerment process in developing tourism, especially heritage tourism (Li et al. 2015). For conservation purposes, community involvement around cultural heritage areas is needed. Many cases of damage to cultural heritage objects are caused by people's ignorance and passivity (Firmansyah and Fadlillah 2016).

Community involvement in the context of this study is determined in the management of cave tourism which observes that a share of the economic and social benefits can be achieved with the active participation of all related parties (Aas, Ladkin, and Fletcher 2005; Robinson, Shaw, and Davidson 2005). The literature review concluded that participation is defined as an approach to empower local communities to be actively involved in the management of cultural heritage objects and conservation, especially those related to the management of heritage tourism (Sodangi et al. 2014). This suggests that the community must become a pillar in the management of heritage sites and the tourism development process because it is directly affected (Choi and Sirakaya 2005).

Specifically, cave tourism resources are based on intrinsic values such as scientific, aesthetic, recreational and cultural values (Tongkul 2005). Scientific value shows that the geological record, the history of cave formation, and mineralogy (the science of fossils, rocks and minerals) are of great importance. The aesthetic value is related to the mystery and wonder of the geological landscape which is quite unique, the geomorphological features in the cave and the surrounding landscape. Recreational value is associated with those who enjoy exploring deep caves, boating in caves, camping around caves which are generally in valleys, mountainous terrain, or limestone areas. Cultural values are related to superstitious rituals, people's beliefs and habits, traditional meanings, and historical and archaeological records (Kim et al. 2008).

2. Materials and Methods

Study Setting

This research was conducted at the Tenggar Cave site and Tenggarrejo Village Tulungagung in 2017. Based on observations made by the research team, Gua Tenggar (Coordinate: 8 ° 12'2.36 "S 111 ° 52'28.07" T) had previously become a tourist attraction and was developed by the Tenggarrejo village community through a regional tourism organization (pokdarwis). Pokdarwis was formed to support the development of Tenggar Cave as a tourist attraction (Figure 2). Decree (SK) related to pokdarwis institution was issued by the Culture and Tourism Office of Tulungagung Regency and chaired by Arif and the Village Head in one of the hamlets in Tenggarrejo Village. This Pokdar actively promotes and manages Tenggar Cave as a tourist attraction. Pokdarwis is also actively promoting the Tenggar Cave tourist attraction by using more social media. As a result, several tourists came to enjoy the scenery around the Tenggar Cave.

This area holds various resources that can be packaged to accommodate the interests of tourists. Tourism development is still in its infancy due to poor host-guest relations. Government initiatives that have been carried out to identify tourist attractions in rural areas that are expected to be able to support tourism development. People in the Tenggar Cave area still face conditions of poverty, inclusive education, migration and a lack of inward investment opportunities. It is at this time that tourism development based on community empowerment seems to be an ideal strategy to strengthen the local economy at large. The promotion of community-based tourism in the region can provide value to local natural and socio-cultural resources, simultaneously (Gupta, Rout, and Tyagi 2019).

Figure 2. Map and zoning of Tenggar Cave Site



Data Collection And Collection of Sample Data

Primary data was carried out through in-depth interviews, participatory observation, and focus group discussions. Meanwhile, secondary research data were collected through study of published and unpublished documents. Informants as sources of interviewed data include members of the Local Tourism Community (abbreviated as pokdarwis), the Regional Development Planning Agency (abbreviated as Bappeda), District Tourism Government (abbreviated as Disparada), Perhutani, local entrepreneurs, tourists, archeologists and researchers. In addition, sufficient knowledge of the informant's location is considered in the purposive sampling technique to produce reliable and valuable data. Lastly, categorical data types from in-depth interviews, participatory observation.

Table 1. Background Characteristics of Informants

Characteristics	Categories	Frequency	Percent
Sex	Male	15	71
	Female	6	29
Marital Status	Married	17	81
	Unmarried	4	19
Age	<20	4	19
	20-29	6	28.5
	30-39	5	24
	>40	6	28.5
Religion	Islam	20	95.2
	Christianity	1	4.8
Education	Non-degree	2	9.5
	Junior school	3	14.2
	High school	10	47.6
	First degree	1	4.7
	Post Graduate	5	23.8

3. Results and Discussion

Tenggar Cave Sites: Past and Present

The tourism resources and situation of the Tenggar Cave in the Tenggarrejo area are described in this section as follows. The land status in and around the Tenggar Cave belongs to the Indonesian State Forestry Company (Perhutani). Apart from the cave, there is a corn plantation and a large pond in the area. However, the existence of Tenggar Cave is a special attraction that attracts many tourists to visit.

The results of the interview with pokdarwis, Perhutani as the land owner had made a concession with the village government to lend 12 hectares of land to develop the community into a tourist area. Some residents who have worked on the land also agreed to give some of their land to support this. Before limiting tourist visits, Tenggar Cave has been treated in such a way by residents so that it is considered worthy of being visited. Several facilities such as self parking, substation, seating, etc. have been provided by a group of residents. Village roads have been cast and are of good quality. Unfortunately, the access to the Tenggar Cave from the

village road is still in the form of a trail ground. There is no asphalt roads or paved roads to access this site from the village.

In terms of natural appearance, Tenggar Cave is located in a hilly area that is planted with corn by the local community. This site is visited by many young tourists who like to challenge and seek experiences. Tenggar Cave has an important meaning for the life of the local people. At the location of this cave, there are clear and clean springs that never dry up even in the dry season until now. Some of them believe that holly spring can cure several diseases.

Around the beginning of 2018 a joint team of researchers from various universities carried out the first excavation activities in Tenggar Cave. Various findings of the quality of fauna fossils deposited in Tenggar Cave were also obtained. The degree of quality is related to the taponom process and its deposition. The fossils (figure 3) originating from the sediments on the cave walls include various terrestrial fauna. These fossils contribute to the paleoecological understanding of Tenggar Cave and its surroundings. The fossils observed included the remains of various parts of the bones and teeth of mammals. In connection with these excavation activities, the local community, government and research team agreed to limit tourist visits to the Tenggar Cave to date.

The Potential of Tourism Development from the Perspective of Host Communities

In this analysis, potential tourism activities have been identified that will help develop the concept of a tourist attraction in the Tenggar Cave further. In general, the informants stated that the initiative to manufacture local products by the Tenggarrejo Village community was appropriate. In this case, the informants also emphasized innovation that involves the community to protect conservation areas that have business value that can foster sustainability. Especially when viewed from the increasing trend of tourism in Tulungagung Regency which has increased every year.

Table 2. Number of Tourist Visits to Tulungagung Regency

Years	Tourist		Total	Growth (%)
	Domestic	Foreign		
2014	222163	65	222228	-
2015	218251	0	218251	-1.78
2016	275104	0	275104	26.0
2017	729060	2192	731252	165.8
2018	1250702	69	1250771	71.04

Source: (Badan Pusat Statistik Kabupaten Tulungagung 2019)

Therefore, in striving for sustainable development, the division between planning, implementation, and actual reality must be properly controlled and evaluated by involving all stakeholders. Based on the analysis and input from the informants, the following section describes some of the potential for tourism development in Tenggar Cave and its surroundings, namely; Edutourism, Special Interest Tourism, Agro-tourism and Events.

▪ Edutourism

Apart from being a tourist activity, the discovery of fossils in Tenggar Cave can also be an attraction for students, lecturers and academics both from within and outside the country to carry out excavation and research activities. From the aspect of scientific utilization, Tenggar Cave and its surrounding environment are ideal natural laboratories for students and teachers in the fields of history and natural sciences, because in that place the potential for finding fossils is relatively high. The location of paleontological and paleoanthropological findings around the Tenggar Cave has increased. Previously most of the fossils were only found in Wajak and Song Gentong Villages, Tulungagung. Therefore, the fossils found in the Tenggar Cave and the track records of early human life and the surrounding environment which are reflected in the process of cave formation, river flow and fossil findings can be used as tourist attractions including researchers and students who come as part of geography, history, archeology and anthropology classes as well as become learning materials for the surrounding community, especially the younger generation. Therefore, strengthening edutourism is important by strengthening sustainable tourism.

▪ Special Interest Tourism

Interesting natural appearance in the form of hills can be used as a special interest tourist object. Facilities such as canoes, kayaks, etc. can be provided to "revive" the reservoir near Tenggar Cave. Suspension bridges and flying fox rides can also be built to connect the hills to the Tenggar Cave area. Special interest tourism market segmentation here is provided for tourists who have a particular interest or purpose and motivation in

traveling. At a minimum, tourists have an interest and / or talent related to special interest tourism activities in a tourist attraction, such as caving, trekking, rafting, tubing, and downhill trails.

These various activities can be carried out in the tourist area of the Tenggar Cave. An important note in activities in this cave is the effort to continue the preservation of resources in the Tenggar Cave while still paying attention to the safety and security aspects of tourists. Thus, it is hoped that more tourists will be interested in trying it. Sunaryo (2013) claims that the promotion and sale of special interest tourism products can be packaged in a series of interesting events and festivals. Such activities must be held regularly and scheduled in the Calendar of Events and promoted widely and systematically (Sunaryo 2013).

Figure 3. Tourism Resources of Tenggarrejo Village



Apart from corn and rice, there are actually still some dominant plantation products in Tenggarrejo Village that can support the development of agro-tourism as well, such as cassava, cocoa and dragon fruit. Even processed products made from cassava, in the form of crackers, are also produced by residents. Unfortunately, there are still many people who still sell garden products in the form of raw materials that are deemed less

valuable. If all of these potentials can be maximally developed, it can support the development of agro-tourism in Tenggarrejo Village.

- Agrotourism

The observation technique also looks at the profession of the people of Tenggarrejo Village as corn farmers. Therefore, many harvested maize crops which are processed in the form of dry corn kernels are sent out of town to be used as corn flour. Unfortunately, the community's processed corn products still leave unused corn stalks scattered about. Corn cobs waste that has just been discarded and burned even though it has more use value for the cultivation of oyster mushrooms and mushrooms or crafts. This is the hope of the local community to develop corn cobs waste so that it has more value.

Table 3. Land conditions and commodities in Tenggalrejo Village

Territory	7.50 Km ²
Field area (dry area)	81.9 Ha
Field rice area (wet area)	749.7 Ha
Corn commodity	2649.45 Ton
Rice commodity	16 Ton

Source: (BPS Kabupaten Tulungagung 2019)

- Event

According to the head of the pokdarwis, Tenggarrejo Village, in the near future there will be a kite festival in the village. It is quite interesting to promote Tenggar Village as a tourist village. Several other tourism events are held such as cultural events, music events, photography, etc. There are positive impacts that are felt as follows:

- Encourage regional development and the formation of new economic zones.
- Increased demand for local agricultural products.
- Encourage the development of less productive locations or lands.
- Stimulate interest and demand for exotic and unique products for a region or country.
- Avoid population concentration and spread of economic activity.
- Distribution of infrastructure to remote areas.
- Management of resource management as a source of revenue for local governments (Pitana and Diarta 2009; WTO 2015).

Stakeholder Collaboration

The process of developing tourism in the Tenggar Cave area shows a very close relationship between stakeholders such as experts, government and the surrounding community. All of them have a very positive role in it (Purnawibowo and Koestoro 2016). The engagement practices applied in Tenggarrejo village are divided into two aspects which are contained in the collaborative relationship between stakeholders:

- Tourism Development
- Cave Conservation

The results of the interview show that stakeholder support for economic growth through tourism has a significant effect on positive empathy attitudes towards the development of host communities. This shows that people who support economic growth through tourism resources with local wisdom are also more likely to support the development of the quality of life of the host community. People who support economic growth through tourism also want to ensure the trickle down effect of the benefits of economic growth for people who save nature reserves. Profit sharing or sharing of tourism management with local residents has the potential to reduce conflicts between hosts and tourists.

Table 3. Collaboration activities of stakeholders

Field of Activities	Stakeholders		
	Experts	Government	Local Community
Tourism Development	1. Tourism Institutional Training	1. Research funding and service	1. Establish tourism institutions
	2. Develop zoning tourism areas	2. Legalization of Pokdarwis Organizations	2. Creating local products to support economic activities
	3. Conduct tourism research		
Cave Conservation	1. Conduct and provide training for fossil excavation	1. Research funding	1. Participating in fossil excavation training activities
	2. Prepare recommendation documents	2. Supports saving the Tenggar Cave heritage area	2. Forming a safeguard excavation team

It can also serve as an incentive to increase support for local community welfare and community participation in conservation activities. Here there is community involvement in the management of heritage tourism which strengthens the sustainability of tourism from, by, and for the community. So, a tourism development model like this is applied in East Java.

Furthermore, stakeholder collaboration adopts the concept of democracy. This collaborative process is fairer than conventional approaches because the views of stakeholders are as valid as those of the experts (Wisansing 2004). This can add value by building a shared ethic in strengthening knowledge, insight, and capabilities related to sustainable tourism development (Kilipiris 2005). Pokdarwis and the companion team need to be synergistic with applicable science-based programs that can be developed in the midst of society as the main actors of the subject and not the object carefully and play a full role in tourist objects (Ramsey et al. 2017).

Community Involvement in Conservation, Management and Development of Tenggar Cave Tourism

The results showed that the tourism management that has been applied in the development of Tenggar Cave in Tulungagung, East Java is Community Based Sustainable Heritage Tourism Management (CBSHM). The details of its implementation, the local community has participated in many contributions related to management, conservation, development of site tourism and participation in benefit retribution. This result is not in line with previous research (Chami 2018; Marzuki 2008; Aly et al. 2019; Suharto et al. 2020). Community participation tends to be interpreted only as a contribution to planning, implementation, control and evaluation of tourism development and little participation in receiving benefits (Chami 2018).

In this study, the balance of participation in receiving benefits is a necessity. Here tourism can produce all forms of sustainability through an integrated CBSHTM model approach. Sustainable development as stated in the United Nations World Tourism Organization Global Code of Ethics for Tourism article 3 is through the concept of sustainable tourism. This concept is directed to respect the natural heritage and local communities and are in keeping with the carrying capacity of the sites (United Nations World Tourism Organization 2001).

The regional government through the regional autonomy law has the bureaucratic power to realize sustainable development consistently. With the economic planning of tourism destinations in Tulungagung Regency, especially the Tenggarrejo Village Government, it can develop in a more sustainable manner and ultimately avoid quality degradation. So, the government can quickly respond to negative factors that can affect the management of tourist objects.

Conclusion

This study proposes and empirically tests a model that explains the relationship between stakeholders to support tourism development and heritage conservation. Therefore, the heritage preservation model that is in line with harmonious tourism development is believed to be able to build sustainable development. The implications of this model can enrich current understanding of heritage conservation and tourism development which paves the way for new ideas for further research. Thus, the potential for tourism and cultural heritage based on this research can open up job opportunities by being more involved in Tenggarrejo in the future supported by a comprehensive government approach to the development of the tourism industry for the welfare of the local community.

Acknowledgments

This work is supported by Staff and Management of Bappeda Tulungagung, also supported by Mrs. Toetik Koesbardiaty and teams from Universitas Airlangga Surabaya, Indonesia.

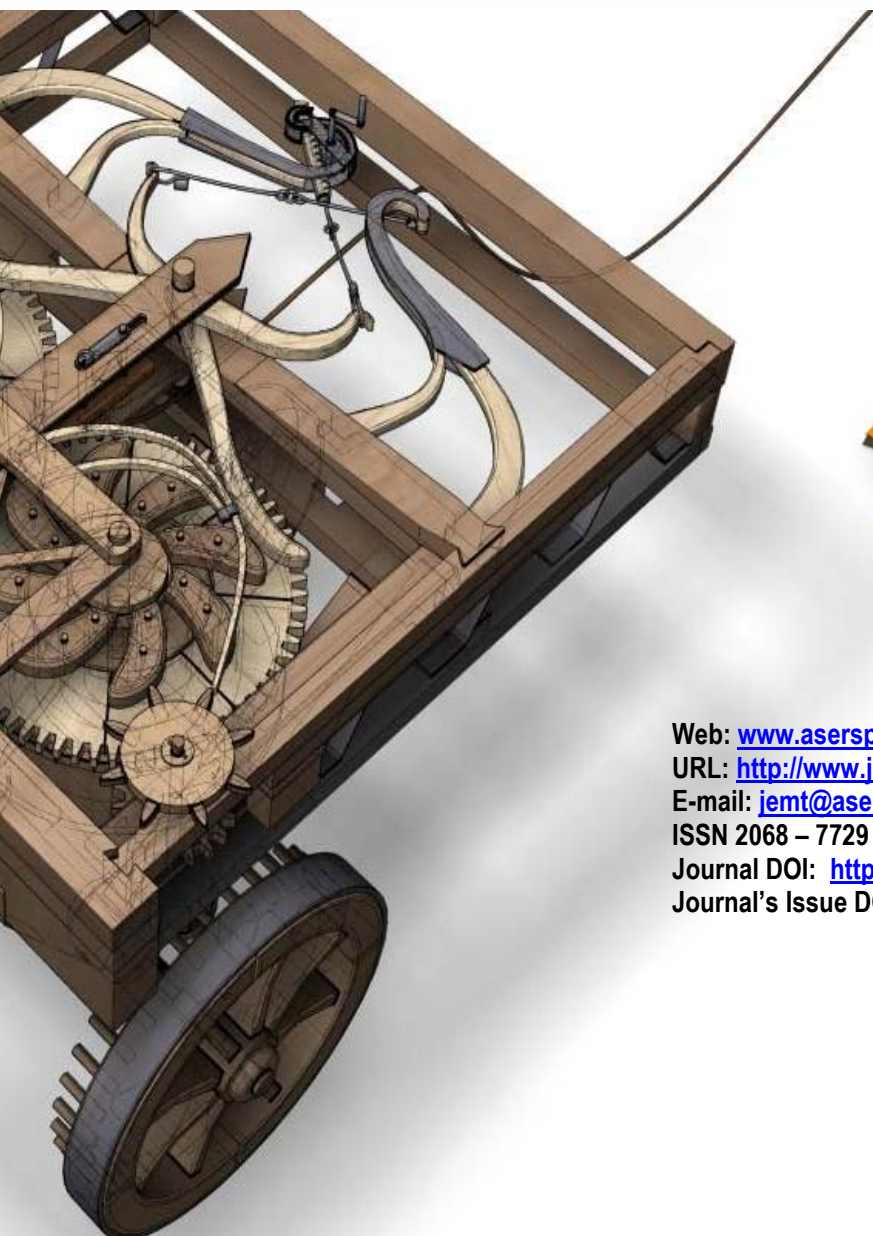
References

- [1] Aas, Christina, Adele Ladkin, and John Fletcher. 2005. "Stakeholder Collaboration and Heritage Management." *Annals of Tourism Research* 32 (1): 28–48. DOI: <https://doi.org/10.1016/j.annals.2004.04.005>
- [2] Aly, M. Nilzam, Rahmat Yuliawan, Upik Dyah Eka Noviyanti, Aji Akbar Firdaus, and Ari Prasetyo. 2019. "Public Policy and Rural Tourism Development in East Java Province, Indonesia." *African Journal of Hospitality, Tourism and Leisure* 2019 (Special Issue): 1–8.
- [3] BPS Kabupaten Tulungagung. 2019. "Kecamatan Tanggunggunung Dalam Angka 2019." Tulungagung.
- [4] Byrd, Erick T. 2007. "Stakeholders in Sustainable Tourism Development and Their Roles: Applying Stakeholder Theory to Sustainable Tourism Development." *Tourism Review* 62 (2): 6–13. DOI: <https://doi.org/10.1108/16605370780000309>

- [5] Chami, Maximilian F. 2018. "Community Involvement and Sustainable Tourism Development in Heritage Management: Amboni Limestone Caves, Tanzania." *African Journal of Hospitality, Tourism and Leisure* 7 (2): 1–13.
- [6] Choi, Hwan Suk Chris, and Ercan Sirakaya. 2005. "Measuring Residents' Attitude toward Sustainable Tourism: Development of Sustainable Tourism Attitude Scale." *Journal of Travel Research* 43 (4): 380–94. DOI:<https://doi.org/10.1177/0047287505274651>
- [7] Cigna, Arrigo A. 2016. "Tourism and Show Caves." *Zeitschrift Für Geomorphologie* 60 (2): 217–33. DOI:https://doi.org/10.1127/zfg_suppl/2016/00305
- [8] Firmansyah, Fendy, and K. Ummi Fadlilah. 2016. "Improvement of Involvement Society in the Context of Smart Community for Cultural Heritage Preservation in Singosari." *Procedia - Social and Behavioral Sciences* 227. Elsevier B.V.: 503–6. DOI:<https://doi.org/10.1016/j.sbspro.2016.06.107>
- [9] Gordon, John E. 2018. "Geoheritage, Geotourism and the Cultural Landscape: Enhancing the Visitor Experience and Promoting Geoconservation." *Geosciences* 8 (136): 1–24. DOI:<https://doi.org/10.3390/geosciences8040136>.
- [10] Gupta, S. K., Prakash Chandra Rout, and Pankaj Tyagi. 2019. "Community Based Tourism Development amid Complex Mountain Issues: A Strategic Analysis of Chakrata Region of Uttarakhand." *International Journal of Hospitality and Tourism Systems* 12 (1): 47–55.
- [11] Ismail, Mohd Hafizal. 2013. "Local Community Involvement in Cultural Heritage Management: A Case Study of Melaka Heritage Trail, Malaysia." University of Portsmouth.
- [12] Izza, Nainunis Aulia. 2015. "Situs-Situs Gua Di Tulungagung : Sebuah Jejak Warisan Budaya Dalam Lintasan Sejarah." *Jurnal Studi Sosial* 6 (1): 41–46.
- [13] Kemenpar. 2015. "Ranking Devisa Pariwisata Terhadap 11 Ekspor Barang Terbesar, Tahun 2011 - 2015." 2015.
- [14] Kemenparekraf. "Ranking Devisa Pariwisata Terhadap 11 Ekspor Barang Terbesar, Tahun 2011 - 2015." *Kemenparekraf*. Jakarta, 2016. <http://www.kemenpar.go.id/userfiles/devisa2011-2015.pdf>
- [15] Kilipiris, Fotis. 2005. "Sustainable Tourism Development and Local Community Involvement." *Tourism and Hospitality Management* 11 (2): 27–39.
- [16] Kim, Samuel Seongseop, Miju Kim, Jungwoong Park, and Yingzhi Guo. 2008. "Cave Tourism: Tourists' Characteristics, Motivations to Visit, and the Segmentation of Their Behavior." *Asia Pacific Journal of Tourism Research* 13 (3): 299–318. DOI:<https://doi.org/10.1080/10941660802280448>.
- [17] Kurnianto, Bambang Tri, Sugiyanto, Kliwon Hidayat, and Keppi Sukesi. 2013. "Agrotourism Development Strategies Based on Institutional at Wonorejo Reservoir, Tulungagung, East Java, Indonesia." *Journal of Environment and Earth Science* 3 (8): 11–18.
- [18] Kurniawati, Elya, Sumarmi Sumarmi, and Muhammad Aliman. 2020. "Participation of Green Environmental Group and Ulur-Ulur Local Wisdom on Buret Lake Ecotourism Management in Karst Area of Tulungagung, Indonesia." *Geojournal of Tourism and Geosites* 30 (2): 889–95. DOI:<https://doi.org/10.30892/qtg.302spl15-519>.
- [19] Li, Yulong, Caroline Hunter, Yulong Li, Caroline Hunter, Azizul Hassan, Mizan Rahman, Dousa Daneshdoust, et al. 2015. "Community Involvement for Sustainable Heritage Tourism: A Conceptual Model." *Journal of Cultural Heritage Management and Sustainable Development* 5 (3): 248–62.
- [20] Ma'ruf, Muhammad Farid, Badrudin Kurniawan, and Rizky Purna Aji Galih Pangestu. 2017. "Desa Wisata: Sebuah Upaya Mengembangkan Potensi Desa Dan Meningkatkan Pendapatan Asli Desa (Studi Pada Desa Wisata Bejiharjo Kecamatan Karangmojo Kabupaten Gunungkidul)." *Dinamika Governance* 7 (2): 193–203.
- [21] Marzuki, Azizan. 2008. "Decision Making and Community Participation : A Case Study of the Tourism Industry in Langkawi." *Tourism* 56 (3): 227–41.
- [22] Pitana, I Gede, and I Ketut Surya Diarta. 2009. *Pengantar Ilmu Pariwisata*. Edited by Sigit Suyantoro. Yogyakarta: Andi Offset. (in Indonesian)

- [23] Purnawibowo, Stanov, and Lucas Partanda Koestoro. 2016. "Analisis Stakeholders Dalam Pengelolaan Sumber Daya Arkeologi Di Kota Cina, Medan." *Amerta* 34 (1): 65–80. DOI:<https://doi.org/10.24832/amt.v34i1.77>.
- [24] Ramsey, Doug, Christopher D Malcolm, Doug Ramsey, and Christopher D Malcolm. 2017. "The Importance of Location and Scale in Rural and Small Town Tourism Product Development : The Case of the Canadian Fossil Discovery Centre, Manitoba, Canada." *The Canadian Geographer* 1 (xx): 1–16. DOI:<https://doi.org/10.1111/cag.12409>.
- [25] Robinson, Fred, Keith Shaw, and Gill Davidson. 2005. "'On the Side of the Angels': Community Involvement in the Governance of Neighbourhood Renewal." *Local Economy* 20 (1): 13–26. DOI:<https://doi.org/10.1080/0269094042000313584>.
- [26] Saputri, Diyah Ayu, Bambang Soemardiono, and Haryo Sulistyarso. 2019. "Rearrangement of Tulungagung Sidem Beach Area Based on Sustainable Coastal Tourism." *International Journal of Engineering Research and Advanced Technology* 5 (7): 43–54. DOI:<https://doi.org/10.31695/ijerat.2019.3473>.
- [27] Scheyvens, Regina, and Matt Russell. 2012. "Tourism and Poverty Alleviation in Fiji: Comparing the Impacts of Small- and Large-Scale Tourism Enterprises." *Journal of Sustainable Tourism* 20 (3): 417–36. DOI:<https://doi.org/10.1080/09669582.2011.629049>.
- [28] Sodangi, Mahmoud, Mohd Faris Khamdi, Arazi Idrus, Dabo B. Hammad, and Abdullahi Ahmedumar. 2014. "Best Practice Criteria for Sustainable Maintenance Management of Heritage Buildings in Malaysia." *Procedia Engineering* 77. Elsevier B.V.: 11–19. DOI:<https://doi.org/10.1016/j.proeng.2014.07.017>.
- [29] Suharto, Bambang, Sri Endah Nurhidayati, M. Nilzam Aly, Aji Akbar Firdaus, and Damar Kristanto. 2020. "Mobility of the New Class in the Tourism Industry in Bali." *African Journal of Hospitality, Tourism and Leisure* 9 (2): 1–10.
- [30] Sumarmi, Elya Kurniawati, and Muhammad Aliman. 2020. "Community Based Tourism (Cbt) to Establish Blue Economy and Improve Public Welfare for Fishing Tourism Development in Klatak Beach, Tulungagung, Indonesia." *Geojournal of Tourism and Geosites* 31 (3): 979–86. DOI:<https://doi.org/10.30892/gtg.31307-530>.
- [31] Sunaryo, Bambang. 2013. *Kebijakan Pembangunan Destinasi Pariwisata Konsep Dan Aplikasinya Di Indonesia*. Yogyakarta: Gava Media. (in Indonesian)
- [32] Tongkul, Felix. 2005. "Geotourism in Malaysia Borneo." In *Geotourism*, edited by David Newsome, 1st Editio, 26–41. London: Routledge. DOI:<https://doi.org/10.4324/9780080455334>.
- [33] Vernon, Jon, Stephen Essex, David Pinder, and Kaja Curry. 2005. "Collaborative Policymaking: Local Sustainable Projects." *Annals of Tourism Research* 32 (2): 325–45. DOI:<https://doi.org/10.1016/j.annals.2004.06.005>.
- [34] Wibawa, Lutfi, Sujarwo Sujarwo, and Hiryanto Hiryanto. 2017. "Conflict Resolution Youth Village Tourism Cave Tubing Pindul in Yogyakarta." *Advances in Social Science, Education and Humanities Research* 88. Atlantis Press: 29–34. DOI:<https://doi.org/10.2991/nfe-16.2017.8>.
- [35] Badan Pusat Statistik Kabupaten Tulungagung. 2019. "Jumlah Wisatawan Mancanegara Dan Domestik Di Kabupaten Tulungagung, 2014-2018." [Tulungagungkab.bps.go.id](https://tulungagungkab.bps.go.id). 2019. <https://tulungagungkab.bps.go.id/statictable/2015/03/24/798/penduduk-berumur-15-tahun-ke-atas-yang-termasuk-angkatan-kerja-menurut-kabupaten-kota-2011-2015.html> (in Indonesian)
- [36] United Nations World Tourism Organization. 2001. "Global Code of Ethics for Tourism." Santiago. <https://www.unwto.org/global-code-of-ethics-for-tourism>.
- [37] Wisansing, Jutamas Jantarat. 2004. "Tourism Planning and Destination Marketing: Towards a Community-Driven Approach, a Case of Thailand." Lincoln University.
- [38] WTO. 2015. *UNWTO Annual Report 2015*. Madrid: UNWTO.

ASERS



The logo for ASERS Publishing, featuring the word "ASERS" in a bold, orange, sans-serif font with a stylized fan-like graphic to the left, and the word "Publishing" in a smaller, orange, sans-serif font below it.

Web: www.aserspublishing.eu

URL: <http://www.journals.aserspublishing.eu/jemt>

E-mail: jemt@aserspublishing.eu

ISSN 2068 – 7729

Journal DOI: <https://doi.org/10.14505/jemt>

Journal's Issue DOI: [https://doi.org/10.14505/jemt.v12.2\(50\).00](https://doi.org/10.14505/jemt.v12.2(50).00)