

ASERS

# Journal of Environmental Management and Tourism

Quarterly

Volume VII

Issue 2(14)

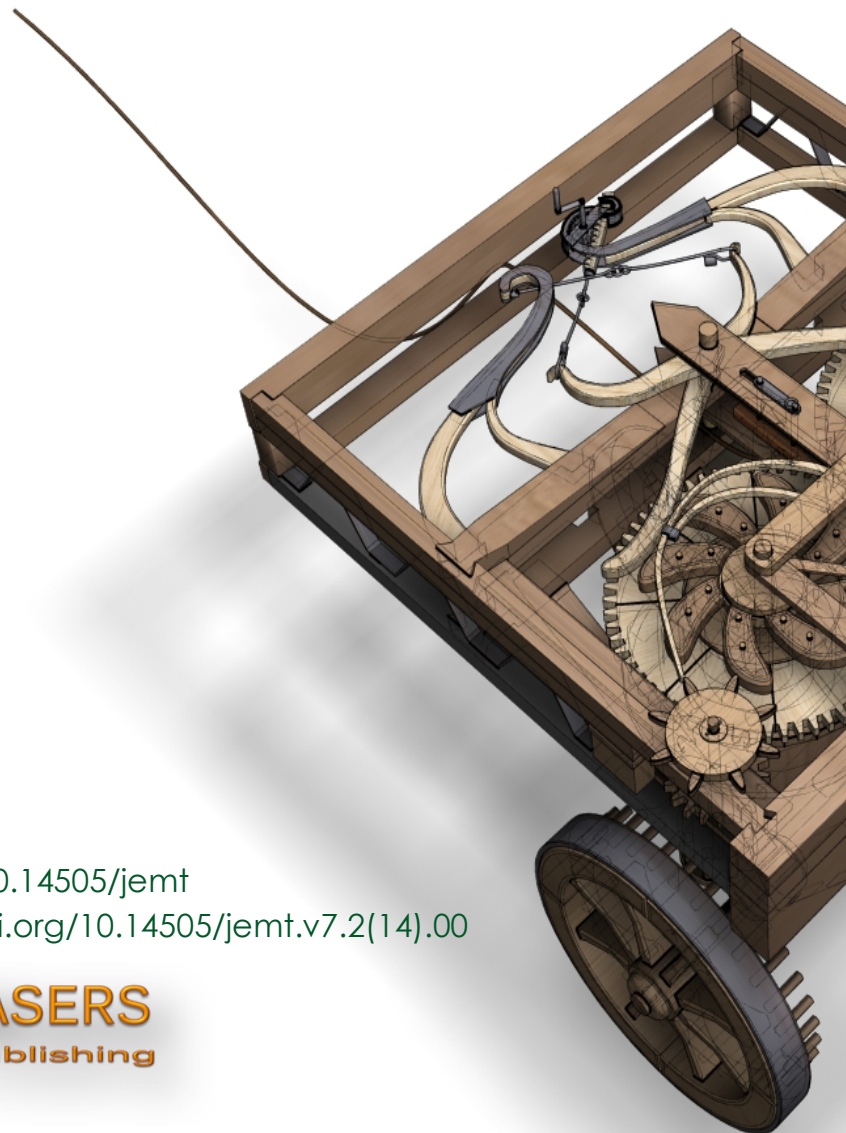
Summer 2016

ISSN 2068 – 7729

Journal DOI: <http://dx.doi.org/10.14505/jemt>

Journal's Issue DOI: [http://dx.doi.org/10.14505/jemt.v7.2\(14\).00](http://dx.doi.org/10.14505/jemt.v7.2(14).00)

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

**Chuen-Chee Pek**

Nottingham University Business School,  
Malaysia

**Roberta De Santis**

LUISS University, Italy

**Fabio Gaetano Santeramo**

University of Foggia, Italy

**Dan Selișteanu**

University of Craiova, Romania

**Laura Ungureanu**

*Spiru Haret* University, Romania

ASERS Publishing

<http://www.asers.eu/asers-publishing>

ISSN 2068 – 7729

Journal DOI: <http://dx.doi.org/10.14505/jemt>

## Contents:

|    |  |
|----|--|
| 1  | <p><b>Monitoring the Air Pollution and Evaluation of the Impact of Aluminium Production in Talco</b> ... 169</p> <p>Oqil RASULOV, Marian SCHWARZ</p>   |
| 2  | <p><b>Development of Arctic Natural Resources by the Industrialized Countries in the Context of Energy, Ecological and Economic Security</b> ... 174</p> <p>Mihail Nikolaevich DUDIN, Nikolaj Vasilevich LYASNIKOV, Vladimir Dmitriyevich SEKERIN, Anna Evgenevna GOROHOVA, Sergey Valeryevich BANK, Vyacheslav Viktorovich BURLAKOV</p> |
| 3  | <p><b>A Model for Environmental Quarry System based on Particles, Vibration and Noise (PVN) Components.</b> ... 185</p> <p>Komeil RAISIAN, Jamaiah YAHAYA, Aziz DERAMAN, Abdul Razak HAMDAN, Izhar Abadi Ibrahim RAIS, Noor Zaitun YAHAYA</p>  |
| 4  | <p><b>Institutional Aspects of Forecasting and Organizing Forests Management</b> ... 194</p> <p>Saida Olegovna APSALYAMOVA, Bella Olegovna KHACHIR, Oleg Zakireevich KHUAZHEV, Valeri Pavlovich ZYZA</p>   |
| 5  | <p><b>Green Management in Hotels: a Supply-Side Analysis</b> ... 205</p> <p>Miriam MBASERA, Engelina du PLESSIS, Melville SAAYMAN, Martinette KRUGER</p>   |
| 6  | <p><b>Forest Policy Priorities: Forest Management Comparative Analysis (Russia, Canada, Brazil and USA)</b> ... 216</p> <p>Svetlana Sergeevna NOSOVA, Rafael Envarovich ABDULOV, Yulia Mihailovna MEDVEDEVA, Dmitry Valentinovich SHIRYAEV, Nadezhda Alekseevna KAMENSKIKH</p>   |
| 7  | <p><b>Improvement of the Institutional and Economic Mechanism of the Region's Natural Resource Potential Assessment</b> ... 224</p> <p>Sergey FROLOV, Valentyna SAMODAY, Yuliya MASHYNA</p>  |
| 8  | <p><b>General Tendencies in Modern Economy: Sustainable Development and Green Economy</b> ... 231</p> <p>Larisa Nikolaevna RUDNEVA, Irina Gennadievna PCHELINTSEVA, Maria Andreevna GURYEVA</p>  |
| 9  | <p><b>Residents' Perception of Environmental Impacts of Tourism Recreational Activities in Protected Area</b> ... 238</p> <p>Ravi SHARMA, Sushil CHAURASIA, A.K. BHATTACHARYA</p>  |
| 10 | <p><b>Public-Private Partnership as a Tool of Public Tourism Sector Administration</b> ... 250</p> <p>Olessya ZHIDKOBILNOVA, Yelena STAVBUNI, Bagdat SPANOVA</p>   |

**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

**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

- 11 **Affecting Factors on Rural Tourism Investment Analyzed through Grounded Theory: The Case of the Villages of Larijan District, Amol, Iran**  
Mehdi HESAM, Mohammad KAZEMI, Mohammad REZAZADEH ... 256
- 12 **Tourism Destination Marketing: A Case Study of Puri Sea Beach in Odisha, India**  
P.P. MOHANTY, H.B. ROUT ... 271
- 13 **Educational Environment of University - A Model of International Students' Socio-Psychological Adaptation to the Ethno-Cultural Characteristics of Society**  
Nataliya S. RADEVSKAYA, Elena K. VESELOVA, Marianna Ya. DVORETSKAYA, Elena Yu. KORJOVA, Lira Yu. MONAKHOVA ... 287
- 14 **Residents' Perception of Educational Tourism in Jakarta, Indonesia**  
Roosbeh Babolian HENDIJANI ... 295
- 15 **Development Prospects of the Brand of Tomsk**  
Olga Sergeevna KEKSEL, Alena Aleksandrovna IVCHIK, Marina Aleksandrovna SHTANKO, Svetlana Valerievna AZAROVA, Elena Valerievna SUKHUSHINA ... 306
- 16 **On the Concept of Sustainable Recreational Use of Natural Resources of Cross-Border Areas of Altai**  
Evgenia O. HARMS, Maria G. SUKHOVA, Nina A. KOCHEEVA, Alexander I. MINAEV, Andrey V. KARANIN ... 313
- 17 **Ecological Thinking and Certification of Hotel Service Providers in Slovakia**  
Gejza Mikuláš TIMČÁK, Jana JABLONSKÁ, Ladislav MIXTAJ, Ľubomír ŠTRBA, Ján DERCO, Erik WEISS ... 321
- 18 **Increasing Community Environmental Awareness through Geodiversity Conservation Activities at Ciletuh, Sukabumi, West Java**  
Mohamad Sapari Dwi HADIAN, Ayu Krishna YULIWATI, Krishna Nur PRIBADI ... 327
- 19 **Growth of Coastal Population: Likely Exposure to Sea Level Rise and Associated Storm Surge Flooding in the Sultanate of Oman**  
Talal Al-AWADHI, E. RAMADAN, B.S. CHOUDRI, Yassine CHARABI ... 333
- 20 **Legal Form as a Determinant of the Evaluation of Agricultural Entities in Slovakia Using the Topsis Method**  
Ivana KRAVČÁKOVÁ VOZÁROVÁ, Rastislav KOTULIČ, Roman VAVREK ... 340

# Call for Papers

## Issue 3(15) Fall 2016

# Journal of Environmental Management and Tourism

**Journal of Environmental Management and Tourism** is a young 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, modelling, 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.

|                                   |  |
|-----------------------------------|--|
| <b>Deadline for submission:</b>   | 25 <sup>th</sup> July 2016   |
| <b>Expected publication date:</b> | September 2016   |
| <b>Website:</b>                   | <a href="http://www.asers.eu/journals/jemt/">www.asers.eu/journals/jemt/</a> |
| <b>E-mail:</b>                    | <a href="mailto:jemt@asers.eu">jemt@asers.eu</a>                             |

To prepare your paper for submission, please see full author guidelines in the following file: [JEMT\\_Full\\_Paper\\_Template.doc](#), then send it via email at [jemt@asers.eu](mailto:jemt@asers.eu).

## Increasing Community Environmental Awareness through Geodiversity Conservation Activities at Ciletuh, Sukabumi, West Java

Mohamad Sapari Dwi HADIAN  
Universitas Padjadjaran, Indonesia  
[sapari@unpad.ac.id](mailto:sapari@unpad.ac.id)

Ayu Krishna YULIWATI  
Universitas Pendidikan Indonesia  
[ayukrishna@upi.edu](mailto:ayukrishna@upi.edu)

Krishna Nur PRIBADI  
Institute Teknologi dan Sains Bandung  
[krishnapribadi@itsb.ac.id](mailto:krishnapribadi@itsb.ac.id)

### Suggested Citation:

Hadian, M.S.D. *et al.* (2016). Increasing community environmental awareness through geodiversity conservation activities in Ciletuh, Sukabumi, West Java, *Journal of Environmental Management and Tourism*, (Volume VII, Summer), 2(14): 327-332. DOI: [http://dx.doi.org/10.14505/jemt.v7.2\(14\).18](http://dx.doi.org/10.14505/jemt.v7.2(14).18). Available from: <http://www.asers.eu/journals/jemt/curent-issue>

### Article History:

Received, February 2016; Revised, April 2016; Accepted, June 2016.  
2016. ASERS Publishing. All rights reserved.

### Abstract:

*The demand for precious stone increased sharply threatens the environment sustainability. Geopark is one of the forms of sustainable development that implement new paradigm of natural resources management, which makes natural resources as a source of economic growth through tourism development. Geoheritage is geodiversity that is more valuable as an inheritance, as it became a record of an event on earth. Geological features are significant of scientific, educational, and cultural. Geological conservation is conducted on extraordinary geological phenomenon and the first step to take advantage of geodiversity which is through a planned program to protect its existence.*

*Three main reason for geodiversity conservation, namely: has the values of science, which is beneficial for human life and ecosystems supporting, non-renewable nature, many forms of geodiversity very sensitive to disturbance, especially threatened due to various human activities. Ciletuh region have unique geological diversity and the age of the rocks are the oldest in West Java. The results showed that the level of public awareness of the environment is still low, because they tend to prioritize their livelihood, and have the tendency to exploit natural resources. Therefore, it is needed a strong environmental campaign to raise public awareness that geodiversity needs to be protected.*

**Keywords:** environmental awareness, geological conservation.

**JEL Classification:** O13, Q57.

### 1. Introduction

Geoheritage is geodiversity that is more valuable as an inheritance, as it became a record of an event on earth. Geological features are significant of scientific, educational, cultural, and aesthetic value. Geological conservation is conducted on extraordinary geological phenomenon (outstanding) and is the first step to take advantage of geodiversity which is through a planned program to protect its existence. Ciletuh Geopark at Sukabumi has extraordinary formation that make geological diversity in this area is very rich and unique that

cannot be found elsewhere. However, several problems occurred in the conservation areas such as: waste management problems, water pollution, land degradation due to illegal mining activities and others.

Ciletuh Geopark is one out of seven geoparks located Sukabumi West Java. It has a remarkable landscape and geological formation, that makes this geopark rich in geological diversity and unique because it cannot be found elsewhere. Geological diversity (geodiversity) is a picture of the variety of geological components contained in a region; including the existence, dissemination, and circumstances so as to represent the geological evolution of the area. Rocks, minerals, fossils, soil and landscape is an integral part of nature. In the context of life, the basic components of geology and identified formation that affect animals, plants, and the social network of local communities that produce culture. Ciletuhgeopark has a number of geosites. One of the geosite is a natural amphitheater, that is the product of from the removal of the old rocks Paleogene in the days before the Tertiary (50-65 million years ago).



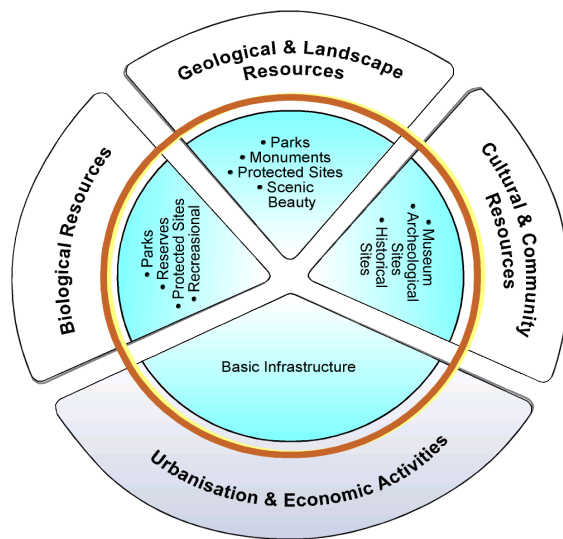
Source: Suci Andriani (2014)

Figure 1 - Natural Amphitheater at Ciletuh Geopark, Sukabumi, West Java-Indonesia

One of the key success factors of geodiversity conservation is the level of awareness and appreciation on the heritage value of the resources by stakeholders, particularly the local communities. An informed society or community will make wise decisions about protecting and preserving resources that define the very essence of their culture and society (Norzaini, Azman, Sharuna Abdul Halim and Ibrahim Komoo 2009). Activities to increase community awareness were implemented to overcome such problems. The main objective of this research is to explore the geoconservation activities of Geopark Ciletuh, Sukabumi West Java Indonesia and find out about the community environmental awareness in the Geopark Ciletuh, Sukabumi West Java Indonesia.

## 2. Framework

The framework in this research used the following concept for geopark element which includes geodiversity conservation: geological conservation, biodiversity conservation, cultural heritage conservation, landscape of scenic beauty (multiple heritage value), Geoforest Park, geosites, geotracks, integrated nature conservation, integrated heritage conservation.



Source: Gray (2004)

Figure 2 - Geopark Elements

Geoconservation is continuing an early work based mostly on recognition of the scientific and research values of certain bedrock features as heritage which informs us about the Earth's past development, resulted in the preparation of inventories of significant bedrock sites and somelandform features. During the last decade geoconservation activities were better integrated in physical planning and development strategies their social and economic impact being more and more taken into consideration. Geodiversity conservation needs the community involvement.

The community involvement in conservation and valuation procedures of the geological heritage is emphasized by all, as community perceptions can help to maintain and protect local geological sites and raise public awareness of environmental matters at geopark as a geotourism destination. This is inline with findings from Hurriyati *et al.* (2015) the development of systems and means through cross involvement or interaction between the government, community, and other relevant parties to develop tourism destination.

### 3. Methodology

The method uses disqualitative and survey method with the observation of time coverage "oneshoot"/cross sectional less than a year during 2014. Desk study was conducted before a field survey. The survey was done to observe the geoconservation activities conducted in the region and also the community awareness. In-depth interview was conducted to selected respondents who are: (1) geopark management (Indonesia National Committee for Geopark), (2) government (3) local geopark management, (4) business community and (5) local community (residents in the surrounding area).

The interview was a qualitatively oriented nature. The sampling technique is purposive sampling. Data analysis was performed with descriptive analysis. The analysis was guided by the research variables and research open ended interview questions.

### 4. Results and discussions

#### 4.1. Geological diversity

Ciletuh geological region is unique and very interesting to observe, because the geology is the result of a collision of two different plates, the Eurasian Plate (continental shelf), which is composed of granite (acidic), and the Indo-Australian Plate (oceanic plate) which is composed of basal (base), resulting in a marine sedimentary rocks (pelagic sediments), metamorphic rocks (rock alteration), and alkaline igneous rocks up to ultra bases. Different types of rock mixed in this through called Bancuh rock (rock mixed) otherwise known as Melange which is the oldest rock group (Pre Tertiary) are exposed at the surface of the mainland island of Java, with ages ranging from 120-65 million years. Ciletuh Geopark area is one of the oldest rock formations in West Java Island. The geopark can be divided into 4 segments, which are: Cibadak Segment, Citisuk Segment, Citireum Segment, and Amphiteater Ciletuh.

Ciletuh remarkable formation made a geological diversity in this area is very rich and cannot be found anywhere else. Geological diversity (geodiversity) is a picture of the variety of geological components contained in a region; including the existence, dissemination, and circumstances so as to represent the

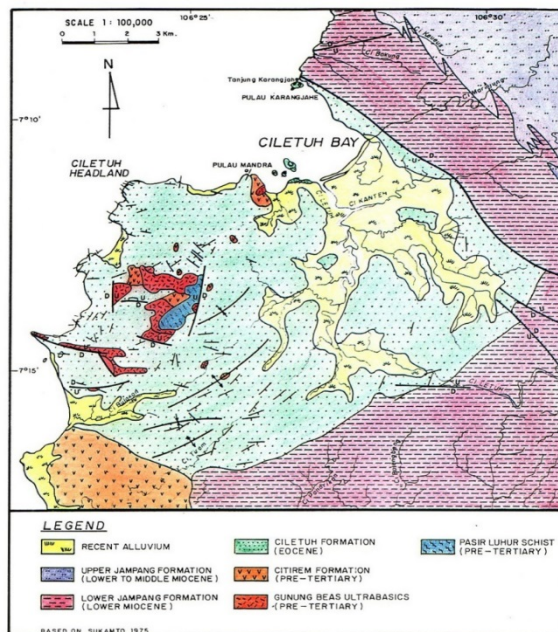
geological evolution of the area. Rocks, minerals, fossils, soil and landscape is an integral part of nature. In the context of life, the basic components of geology and identified natural landscape affect animals, plants, and become the social fabric of local communities that produce culture. There is several geological richness of this area:

- Ciletuh have natural amphitheater. There are two opinions that explain how this phenomenon may occur: The first opinion resulting from the removal of the old rocks Paleogene in the days before the Tertiary (50-65 million years ago), then deposited new sediment on top, but over time, the northern part of the area is experiencing landslides and formed amphitheater leaving Jampang surrounding heights. The second opinion due to the large meteor that fell in the past and used its fall amphitheater shape morphology.

- Ciletuh is one of the unraveling of the oldest rocks on the island of Java. In a beautiful natural environment Ciletuh found a collection of rock Melange / Bancuh which is composed of acid to ultramafic, of metamorphic sediments adjacent to each other in tectonics. They are the oldest rocks in West Java which is exposed to the surface. This collection of rock trenches evidence results subduction oceanic plate under the continental plate in the Cretaceous period, 50-65 million years ago.

- Ciletuh has many waterfalls are very intriguing. This is caused by the presence of active geologic activity in the past, namely in the form of reverse fault (which means the earth's shifting plates resulting in the emergence of new natural phenomena: such as waterfalls, springs). Ciletuh waterfalls in the area have the characteristics and uniqueness of each, several waterfalls that exist in Ciletuh, namely: Curug Awang, Curung Peak Manik, Sodong waterfall, waterfall Cimarjung, and others.

- Ciletuh has a beach which is equipped with rocks of various shapes and islands that extend around Ciletuh located between two places with a well-known tourist beaches, namely: the port of the queen and the end of the tile. Where beaches have clear water, white sand, and the rich variety of marine life, plus a view of the sea around the rocks that make up the diverse morphology, such as: a stone dragon, frog stone, stone bull, and others. Several islands in the sea also Ciletuh, namely: Mandra island, Pulau Manuk, Gotor island, the island of Kunti, and Karanghantu.



Source: Mega Rosanna, 2008

Figure 3 - Outcrop map of oligocen in Java Island

#### 4.2. Community environmental awareness and geoconservation activities in the area

Geoconservation processes targeted at the conservation of a site should take place in two sequential phases: knowledge generation and management actions. Knowledge generation is crucial in the heritage assessment of the site, including the recognition of its geotourism potential.



The awareness of communities on the environment still needs improvement, also the community (local) lack of concern for the natural, litter. There is still mining / gold mining without permission. Exploring the forest / hunting for subsistence reasons. The tradition of keeping nature in society (Sunda Kabuyutan) only concerns regarding the local restrictions due to cultural belief (should not be cutting certain trees in certain areas), but did not change their lifestyle. Special hobbies communities only know that the area is the location of the geopark. There is low community awareness on the environment, littering in the area, where they are active. An act of vandalism of individuals will spoil the beauty of the rocks there, also a slow and low learning process for the hobbies' community who visit the Geopark area Ciletuh. This is due to geopark manager has not put up signs disciplinary rules of behavior of tourists coming to the area. The education community (school and academia) are aware of the geoconservation because post school tour is available. The Geology Pusdiklat have done training to the local community (2014) with excursion to the field to introduce of the types of rocks in geosite, and conservation should not be mined and the impact in the event of damage to the environment.

Several geoconservation activities that have been done in the area, are as follows: education through socialization to raise awareness from the Department of Energy and Mineral at West Java: socialization of environmental conservation in the area Ciletuh. There are concerns on the negative effects of mining without permission. It is found through the survey that the community is apathetic and after socialization there was no significant change. Education for local communities was implemented over two years 2013-2015. Installations of information boards in the area Geopark geological Ciletuh initial steps have information about the various geological objects that have been determined at this place. In several places, there are signboard containing geological knowledge about the object, seen from the definition of the name, the origin of the name, the site development, interesting things on the site, and linked with the geological history of the area.

National Geopark committee along with the Ministry of Energy and Mineral have given socialization to the local communities in the development of this future Ciletuhgeopark, and initiated several groups to play an active role in the development of this geopark. Further cooperation is engaged with related institutions and universities (in the context of regional development, manufacture regulations, advanced research, etc.)

This cooperation is directly coordinated by the government of Sukabumi, particularly some districts whose territory is part this geopark program. The districts and sub-districts CiemasCiracap, is involved because the initial concept of the geopark program will involve communities using the bottom to top (bottom-up) approach. Cooperation with relevant agencies, such as the Geological Agency and the Ministry of Energy and Mineral Resources has also been made in the effort of making regulations in accordance with the concept of conservation. In the development of research in this area, the Faculty of Engineering Geology, University of Padjadjaran was involved in exploration of the geological history of this area in greater detail for the purposes of delineation of regions therein.

## Conclusion

Based on the analysis that has been done, be concluded as follows:

- Ciletuh is rich in geological heritage, where the oldest rocks of the island of Java in the area and coupled with the phenomenon amphitheater that cannot be found in other places. Biological and cultural diversity is also taken into consideration when measuring the carrying capacity in the conservation of this area. Communities that have formed and its role is also an important asset in the sustainability of conservation programs that will be implemented in this area.

- The concept of conservation in accordance with a variety of natural resources that exist in Ciletuh in an effort to minimize the environmental damage that occurred in this place is the implementation of the program Geopark, where the program emphasizes on sustainable conservation efforts are also raising the value of education and the socio-economic environment that carried out directly by the local community

- *Shared Value* in the geopark is an important value sistem that must be socialized to the community so that they will conserve the geosites. Geoconservation activities at GeoparkCiletuhneeds all the stakeholder to work together and in a coordinated and systematic manner not partial activities.

- An information center as education facility for community and incoming tourists concerning geodiversity to improve awareness and people education

## Acknowledgements

Special thanks is given to the team member of this article, Dean of Geology Faculty Padjadjaran University, Head of Graduate Faculty Padjadjaran University, Dean of Economics Education and Business also School of Post-Graduate Study Universitas Pendidikan Indonesia, Head of PAG, Geological Agency for their support in this article so that it can be completed and submitted in this journal.

## References

- [1] Andrasanu, A. 2005. The Geopark – Framework for research, education and training in sustainable development, Second Conference on the Geoheritage of Sebia, Belgrade.
  - [2] Azman, N. *et al.* 2010. Public Education in heritage conservation for geoparkcommunity. International Conference of Learner Diversity, Prosedia Social on Learner Diversity.
  - [3] Bemmelen, R.W. van. 1949. *The Geology of Indonesia*. Government Printing Office, The Hague.
  - [4] Benjamin, C. *et al.* 2009. Thrusting of a Volcanic Arc: A New Structural Model for Java, *Petroleum Geoscience*, 15: 159–174, Geological Society of London. DOI 10.1144/1354-079309-831
  - [5] Brilhá, J. 2002. Geoconservation and Protected Areas. *Environmental Conservation*, 29(03): 273-276.
  - [6] Gray, M.. 2004. *Geodiversity: Valuing and Conserving Abiotic Nature*, Wiley
  - [7] Hamilton, W. 1979. Tectonics of the Indonesian Region. *US Geological Survey Professional Paper* 1078.
  - [8] Hurriyati, R., and Sofwan, D.M.P. 2015. Analysis of Co-Creation Experience Towards a Creative City as a Tourism Destination and Its Impact on Revisit Intention. *Journal of Environmental Management and Tourism*, Volume VI, 2(12): 353-358.
  - [9] Hutchison, C.S. 1976. Indonesian Active Volcanic Arcs: K, Sr, and Rb Variation with Depth to the Benioff Zone. *Geology*, 4: 407-408.
  - [10] Masrul, K.F., and Suroso, D.S.A. 2013. Studi Proses Pengajuan Kawasan Geopark Parahyangan Di Jawa Barat Sebagai Anggota Global Geopark Network\_Unesco, *Jurnal Perencanaan Wilayah dan Kota A SAPPK*, 3(1): 77-86.
  - [11] Mega, F.R. 2006. Geologi Kawasan Ciletuh, Sukabumi: Karakteristik, Keunikan Dan Implikasinya, Lokakarya Penelitian Unggulan Pengembangan Program Pascasarjana FMIPA UNPAD 3 April 2006”
  - [12] Mega, F.R. 2008. Geologi Kawasan Ciletuh Sukabumi, *Bulletin Scientific Contribution*, 6(2): 111-119.
  - [13] Mega, F.R. 2008. Potensi Geowisata Kawasan Gunung Badak Teluk Ciletuh Sukabumi. Available at: <http://pustaka.unpad.ac.id/wp-content/uploads/2013/08/>
  - [14] Mega, N. 2015. Eksotisme Amfiteater Raksasa Lembah Ciletuh. Available at: <http://wisata.kompasiana.com/jalan-jalan/2012/11/21/eksotisme-amfiteater-raksasa-lembah-ciletuh-510737.html>
  - [15] Newsome, D. *et al.* 2012. *Natural Area Tourism: Ecology, Impacts and Management*, Channel View Publications.
  - [16] Norzaini, A. *et al.* 2009. Integrated Public Education for Heritage Conservation: A Case for Langkawi Global Geopark. In Ainsworth G & Garnett Stephen, S. (Editors) (2009). RIMBA: Sustainable Forest Livelihoods in Malaysia and Australia. LESTARI, UKM: Bangi. 151-157.
  - [17] Tavares, A.O. *et al.* (2015). Community Involvement in Geoconservation: A Conceptual Approach Based on the Geoheritage of South Angola, *Sustainability*, 7: 4893-4918. DOI:10.3390/su7054893
- \*\*\* Anonim, 2015. [Kawasan Geologi Ciletuh, Sukabumi yang Menawan - KOTA CIBADAK](http://infocibadak.blogspot.com/2013/07/kawasan-geologi-ciletuh-sukabumi-yang.html), info<http://infocibadak.blogspot.com/2013/07/kawasan-geologi-ciletuh-sukabumi-yang.html>, diakses 5 mei 2015 jam 15.08



 **ASERS**  
Publishing

Web: [www.asers.eu](http://www.asers.eu)

URL: <http://www.asers.eu/asers-publishing>

E-mail: [asers@asers.eu](mailto:asers@asers.eu)

ISSN 2068 – 7729

Journal DOI: <http://dx.doi.org/10.14505/jemt>