

# Challenge in Geo-Interpretation Development and Implementation

## Case Study: Rinjani-Lombok UNESCO Global Geopark

Ruwaida Fajriasanti<sup>1\*</sup>, Lalu Budi Karyawan<sup>2</sup>

<sup>1</sup>*Politeknik Pariwisata Lombok*

<sup>2</sup>*Rinjani-Lombok UNESCO Global Geopark*

\**Corresponding author. Email: ruwaida@ppl.ac.id*

### ABSTRACT

Interpretation has been developed in many destinations around the world as an approach for creating meaningful visitor's experience. In Rinjani-Lombok Geopark, interpretation development was first initiated to help managers, local government and community in creating thematic geotourism products, through which knowledge and appreciation toward geopark's resources can be promoted to visitors. The guideline for Rinjani-Lombok interpretation is formulated through geotourism trail concept, encompasses 4 geotourism trails in this area, namely: *Trail of Ancient Volcano in the West Coast of Lombok*, *Trail of Ancient Sembalun Volcano*, *Trail of Youngest Volcano Rinjani*, and *Trail of Rinjani Cultural Landscape*. This paper attempts to examine the challenges of geo-interpretation after 5 years of its development and implementation in Rinjani-Lombok Geopark. More specifically, the challenges are identified through local stakeholders perspectives. Data are gathered mainly through deep interview method with relevant individuals, and analysed qualitatively to draw a conclusion of what factors causing the challenges as well as how they can be addressed. Result indicates that there are issues with stakeholder's involvement, plan efficiency, misconception of interpretation, stakeholder's wisdom, and plan stability in the development and implementation of Rinjani-Lombok geo-interpretation.

**Keywords:** *Geopark tourism, Geopark interpretation, Geotourism trail, Geopark management.*

### 1. INTRODUCTION

Interpretation within the tourism context is related to the delivery of narration or story in a tourism destination. Interpretation is about building intellectual and emotional relationship between visitor and places by utilising attractive, provocative and enjoyable storytelling. In regard to this, story is utilised to help creating and managing visitor's experience [1].

The COVID-19 pandemic saw a rise of concern for a more quality tourism. Recent studies believe that travellers today need an objective beyond having leisure to inspire them to travel away from home. There is a global trend which shows shift to a more environmentally friendly travel as well as transformative travel. The quality of experience will become one of the main considerations in choosing a destination. In line with this, authentic experience will gradually have higher value proposition for travellers

[2]. In other words, today and future travel in tourism is a travel carried out with purpose.

Providing tourists with purpose and meaningful experience is at the heart of interpretation [1,3]. This is why interpretation is suitable for all kinds of tourism and attraction—nature based, cultural based, man-made. Interpretation benefits tourism attractions and destinations in many ways. It facilitates managers and local communities to communicate the meaning and significance of their resources to the visitors; helps evoking deeper appreciation for these resources; and to a greater length, supports the preservation of local values and heritages [4,5]. In time of dynamic shift driven by pandemic, interpretation can be incorporated in tourism product development, branding and marketing efforts of a destination to attract visitors and redirects tourism development to a more sustainable and quality way.

In Rinjani-Lombok UNESCO Global Geopark (RL-UGG), interpretation has been developed since long before pandemic era. It was initiated in 2015 to help managers, local government and community in creating thematic geotourism products, through which knowledge and appreciation toward geopark's resources can be promoted to visitors. The guideline for RL-UGG interpretation is formulated through geotourism trail concept, encompasses 4 geotourism trails in this area, namely: *Trail of Ancient Volcano in the West Coast of Lombok*, *Trail of Ancient Sembalun Volcano*, *Trail of Youngest Volcano Rinjani*, and *Trail of Rinjani Cultural Landscape*. Although first initiated by The Ministry of Tourism, the development of RL-UGG geotourism trail involved all local parties including geopark's managers, local governments, local communities, tourism businesses and academicians.

However, most recent studies indicate that the implementation of interpretation in RL-UGG is not yet optimal [6,7]. These studies underscore several problems with geopark management including education aspects—which may be directly and indirectly related to the implementation of interpretation in RL-UGG. This paper attempts to examine the challenges of interpretation—more specifically, geotourism interpretation or *geo-interpretation*—after 5 years of its development and implementation in RL-UGG. The provision of an optimum interpretation service is needed not only to communicate the geopark's significance effectively to its visitors, but also to inspire responsible behaviour toward the sustainability of its geological, biological and cultural resources. It can also contribute to maintain Rinjani-Lombok status as a UGG and ensure the benefit of the geopark's management for local communities. In addition, the pandemic situation also serves as a perfect momentum for any destinations, including geopark, to evaluate, rethink and reformulate its tourism development strategies [2,6,8].

### **1.1. Geopark and Geotourism**

Geopark is a single, unified geographical area with extraordinary geological diversity (geodiversity) and geological heritage (geoheritage). The development of geopark is based on three main purposes: conservation, education and sustainable development. Aside from its emphasis on geological elements of a place, geopark is actually not just about rocks or other geological phenomena. It is believed as a living landscape, where biotic elements (biological diversity) and cultural elements (cultural diversity) interact with its geological elements. The most basic concept of a geopark is to bridge knowledge and wisdom about Earth, its history and resources with modern society's total dependence on Earth's natural resources—a relationship well known by past generations [9].

Tourism is developed in geopark not as a main objective, but rather as a vehicle toward conservation, education and sustainable development. Geopark tourism can have rather broad spectrum, including ecotourism, sport tourism and adventure tourism. However, geotourism is probably the type of tourism most often appears in various definitions and discussions that accompany the concept of geopark [9,10].

In most simple definition, geotourism is a form of tourism that utilises the geological attributes of an area as its main attraction. However, geotourism definition has been evolving over time, encompasses notions such as learning, understanding, appreciating the geological processes of a place; not merely appreciating the beauty of the landscape [11,12,13]. Geotourism activities, supported by the provision of interpretation facilities and services for tourists [11], can encompass geotrails and its observation points, guided tours, geoactivities, visitor center [13], as well as geotourism product (geoproduct) [14,15].

Geotrails, guided tours, geotourism village and geotourism product are the type of geotourism activities that are developed in RL-UGG. These education and appreciation based activities, supported by interpretive facilities, will provide benefits for the conservation of geological heritage and sustainable local development in the geopark's area.

### **1.2. Geo-Interpretation**

The most classic definition of interpretation was notably introduced by Freeman Tilden in 1957. Since then, many other definitions has been developed and interpretation has been identified as 'a form of educational activity' [4], 'a process, tool, approach of communication' [16], 'the translation of scientific language into the language of ordinary people' [16], 'a tool for management', 'revelation of meaning', 'a process to stimulate appreciation and enthusiasm' [5]. The newest definition by National Association of Interpretation (NAI) is as follow:

"A purposeful approach of communication that facilitates meaningful, relevant, and inclusive experiences that deepen understanding, broaden perspectives, and inspire engagement with the world around us."

With emphasis on visitor's experience, interpretation becomes very relevant for any form of tourism, including geotourism. A memorable experience will contribute to customer satisfaction. This can encourage them to stay longer, which means, increase their spending or even make repeat visits. This is also in line with the concept of storynomics in the world of marketing, namely business practices centered on stories, which bring in money [17].

Interpretation within geotourism context (*geo-interpretation*) bridges stories and meaning about the Earth, its landscape, its resources with people and society. It can be understood as a process to create meaningful experience by establishing emotional and intellectual relationship between visitor and various elements of geotourism resources. By providing meaningful geotourism experience, as well as evoking the appreciation of visitors and local communities for geotourism resources, geo-interpretation can contribute to the utilisation of geopark sites in a sustainable manner.

All kinds of interpretation should follow the same principle. Six basic principles of interpretation as introduced by Tilden consist of (1) relevance, (2) revelation, (3) art, (4) provocation, (5) wholeness, (6) according to the ability of visitors. All efficient interpretation must also meet these following qualities: (1) thematic, (2) organized, (3) relevant and (4) enjoyable. Other experts also suggest the importance of love and passion in developing interpretation content as well as implementation of technology [4].

More specifically, in geo-interpretation, it is important to relate the geological values of a place to natural and cultural values. A geological site will only become relevant if its significance from an environmental and cultural point of view can be understood. Thus, the alienation of man and nature, which is often the root of various environmental problems, can be overcome. The principle of integrated interpretation in the geopark area is also known as the ABC concept (abiotic-biotic-cultural interconnection), an interpretation approach used to popularize the Earth's heritage through geotourism [15,18].

### ***1.3. Managing Geo-Interpretation***

Managing geo-interpretation is a cyclical process. The general cycle of interpretation management can be divided into three main areas, namely planning, implementation, and evaluation. Each area consists of different activities and steps.

Interpretation planning has everything to do with identifying resources, establishing goals and objectives, studying visitors, identifying interpretation topic and theme, choosing suitable interpretation program and media. The plan can be differed into three categories: (1) strategic interpretation plan, (2) detailed interpretation plan, (3) interpretation program and media plan. Meanwhile, the implementation of interpretation can be carried out through these following steps: (1) developing interpretation design; (2) developing interpretation program; (3) promoting interpretation program; (4) operating interpretation program; (5) maintenance of interpretation program; (6) monitoring interpretation program. Finally, evaluation needs to be

carried out periodically in accordance with the types of geotourism activities/programs and its interpretive media [19].

It is also noteworthy that the success of interpretation development needs participation and collaboration of all stakeholders. The wider the scope and the deeper the content of interpretation, the more actors need to be involved. These actors may be members of local community, non-government organisation, business, government and educational institution. Depends on their affiliation, these actors can have varying role in interpretation development [19].

As with other types of plan, the effectiveness of an interpretation plan implementation can only be realized if the stakeholders participation is also effective. Therefore, this participation must be based on 5 elements: fairness, effectiveness, knowledge, wisdom, and stability.

## **2. METHOD**

In this paper, a qualitative approach is used to identify challenges in RL-UGG geo-interpretation development and implementation. More specifically, the challenges are identified through local stakeholders perspectives.

Data collection was carried out in two phases, using primarily in-depth interview method. In both phases, informants were chosen from actors who have been involved in the development and implementation of RL-UGG geo-interpretation during 2015-2019 period. The first phase is focused on how geo-interpretation planning and implementation efforts were conducted by RL-UGG managers. Thus the primary informant involved in this phase is the managers of RL-UGG Executive Board. In the second phase, the scope of the informants was broaden to include other actors from different parties, including local community, tourism business, expert groups, and local government. In the end, a total of 11 informants were interviewed, representing different groups of stakeholder. Most were based on Mataram City, while others in Central Lombok Regency and East Lombok Regency. In addition, observation was also carried out in the second phase of data collection, focusing on the type and quality of 'geo-interpretation' program as well as media that have been developed and implemented in RL-UGG geotrails.

Interviews data are then transcribed and reviewed to identify some common recurring themes, opinions and beliefs. Based on previous studies, 5 predetermined keywords regarding stakeholders participation in a tourism plan implementation are also used as predefined codes to assign to these common themes, opinions and beliefs. This is actually to help constructing a cohesive understanding and explanation on what sparking

challenges in RL-UGG geo-interpretation development and implementation as well as how these challenges can be addressed.

**3. RESULT AND DISCUSSION**

**3.1. RL-UGG Geo-Interpretation Planning and Implementation Process**

Planning is indispensable for the success of geo-interpretation development and implementation in RL-UGG. Broadly speaking, planning has become a basic principle that is widely adopted in tourism development in various destinations at the regional, national as well as local level [20,21]. The plan for RL-UGG geo-interpretation is formulated into 4 geotrails and supported by a Geotourism Interpretation Guideline and an Action Plan for RL-UGG Geotourism Trail Development Year 2015-2019. It should be noted that these plans are developed not as formal policies; but rather, as guidelines for related parties to be considered in their own institutional policy and program development. Judging from the scope of the content, these plans can be categorized into strategic interpretation plan. The contents for each planning product is presented in Table 1.

stakeholders were given strengthening on areas of interpretation management through socialization, workshop, situation analysis and product development activities.

The implementation of the plans began in 2016. The first phase of implementation (2016-2017) focused on the development of thematic geoproducts that include geo-souvenir, geo-culinary, geo-homestay and geo-tour. Though still driven by the Ministry of Tourism, the role of RL-UGG Executive Board was also encouraged during this phase as the program’s co-coordinator and co-facilitator.

The second phase of implementation (2017-present) includes interpretation design development, promotion, and interpretation program and media operation activities. These activities are carried out entirely at the initiative of local stakeholders, where the RL-UGG Executive Board has become the main promotor of the geopark’s geo-interpretation activities by adopting planning and implementation process from the previous phase. A diversity of geo-interpretation associated media and programs is developed throughout this second phase, ranging from information panels, geological information center, educational camps (educamp), virtual tours, geotourism seminars, to

**Table 1.** Content of RL-UGG Geo-interpretation Planning Products

No	Planning Product	Scope & Content
1	Geotourism Trails of Rinjani-Lombok Geopark	<ul style="list-style-type: none"> <li>a. Central theme for geotourism trails</li> <li>b. List of geosites, biosites and cultural sites on each geotourism trail</li> <li>c. Important attribute of geosites, biosites and cultural sites on each geotourism trail</li> </ul>
2	Geotourism Interpretation Guideline for Rinjani-Lombok Geopark	<ul style="list-style-type: none"> <li>a. Interpretation theme on the 4 geotourism trail</li> <li>b. Main important sites on the 4 geotourism trail</li> <li>c. Indication of visitor groups</li> <li>d. Interpretation objective</li> <li>e. Interpretation <i>outline</i> and <i>storyline</i></li> <li>f. Indication of interpretation media and personal technique</li> </ul>
3	Action Plan for Rinjani-Lombok Geotourism Trail Development Year 2015-2019	<ul style="list-style-type: none"> <li>a. Program for geotourism trail development</li> <li>b. Activity for geotourism trail development</li> <li>c. Location of activity implementation</li> <li>d. Time of activity implementation</li> <li>e. Responsible actor/agency</li> </ul>

Source: research data (2021)

Throughout the planning process (2015-2016), the Ministry of Tourism has a major role as the leading sector. Planning framework and method were developed by a team of experts consisting tourism planning expert, tourism interpretation as well as geologists and geotourism practitioner. Local stakeholders were involved as key actors who will benefit from the planning process, execute the plans that have been drawn up and monitor the implementation of the plans. Therefore, the transfer of knowledge from central (external) to local (internal) stakeholders is an important aspect in the overall planning process. Local

geotourism villages. However, field study results indicate that these various media and programs have not been fully developed according to the principles of effective interpretation.

**3.2. Stakeholders Perceptions of RL-UGG Geo-Interpretation**

Implementation that does not go according to the plan is actually a common reality in the field of tourism planning—or, basically, any field of planning. In RL-UGG, the integration of information on the geopark’s

resources, the strengthening of the region's sense of place, and the provision of meaningful experiences for visitors, which area among the objectives of geo-interpretation planning and development, have yet to be realized through implementation activities. In addition to plans and the planning process itself [20,21], stakeholders have a significant influence on the planning process and plan implementation [22].

The local stakeholders of RL-UGG geo-interpretation development and implementation encompass 5 different groups: local community, non-governmental agency, business, government and educational institution. Interview data yields some interesting findings regarding local stakeholders' view on RL-UGG geo-interpretation development, their roles in RL-UGG geo-interpretation planning and implementation, as well as factors they perceive as constraint in RL-UGG geo-interpretation implementation.

Regarding geo-interpretation development, there are common perspectives as follows:

- a. "Interpretation is related to the delivery of information about a destination/tourist attraction. It is important to relay the information as comprehensive as possible."
- b. "Interpretation is closely related to guiding activity. It is a form of communication technique that can be useful to initiate more enjoyable, two-way interaction between tour guides and his/her audiences."
- c. "Interpretation is relevant for geopark tourism, as it can benefit geopark sites, local people tourism businesses and guiding practices in many ways."
- d. "Interpretation can be utilized as an effective education tool and is in line with the spirit of quality tourism now emerging in some important sites of RL-UGG."

Other perspective sees that interpretation is, at heart, an attempt to 'translate' something. Translating an object to its audiences contains an idea that all interpretation aims to convey the various relationships represented by an object so that others can understand—for example, the relationship between geological objects and the biotic (ecological) environment. However, this translation effort, in its practice in RL-UGG area, is often understood in a narrow sense; limited to narrating a story of an object from a certain scientific point of view without exploring its relation to other fields, or even its relevance to humans.

Regarding roles in geo-interpretation planning and implementation, each stakeholder has different contribution. Of all stakeholders, the Executive Board of RL-UGG holds the most significant role as an

advocate, initiator and/or organizer of geo-interpretation development efforts.

Regarding constraints of geo-interpretation implementation, the most common recurring themes across the informants are as follows:

- a. The absence of or poor involvement of some actors, such as biologist/naturalist, culture expert and local government.
- b. The problem in the geopark's management, where the Executive Board doesn't have the authority and flexibility to manage budget and program.
- c. Difficulties in marketing interpretive programs with geotourism theme.
- d. Poor motivation of local tourism businesses and guides to develop interpretive geotourism-themed programs due to the fact stated in point (b).

The direction of tourism and interpretation development in RL-UGG, which focuses on geotourism or the geological aspect of the area, is also seen by several parties as a problem in itself. By establishing geotourism as the main theme, tourism in the geopark becomes too specific and some fears that it will be difficult to reach a wider group of tourists. The concept of geopark itself is believed to be not solely related to geology or rocks. There are elements of biodiversity and culture that are also of special value in the geopark area. Therefore, the interpretation developed in the geopark should also be able to guide visitors as well as the local community to understand the relationships between geological elements and the culture and flora-fauna of the geopark. In this case, some informants believe that the reasons for choosing geotourism for geopark still need to be questioned.

### ***3.3. Challenges in RL-UGG Geo-Interpretation Development and Implementation***

Based on the discussion in subchapter 3.1 and 3.2, there are several challenges related to planning process and stakeholder's perception that are thought to trigger discrepancies in the implementation RL-UGG geo-interpretation. These challenges are grouped according to five issues: (1) fairness in stakeholder involvement, (2) efficiency of plan, (3) misconceptions of interpretation, (4) stakeholder's wisdom, and (5) plan stability. The five issues are identified with stakeholder participation theory as the basis; that the role of stakeholders in the preparation and implementation of a plan is influenced by elements of fairness, efficiency, knowledge, wisdom, and stability [22].

### **3.3.1. Fairness in Stakeholder's Involvement**

As with the majority of Indonesian geoparks, tourism development in RL-UGG is dominated by geotourism ideas. This is not wrong, but the interpretation planning ideally can be aimed at emphasizing the relationship of geological phenomena with the nature and culture of RL-UGG. Thus, the balance and interconnection of ABC components (abiotic-biotic-cultural) within the geopark's area can be realized, resulting in the true form of geotourism.

Balancing the ABC components is a challenge in RL-UGG geo-interpretation development and implementation. The existing geo-interpretation plans and so-called activities are considered by many as not fair enough in bridging human alienation with the geological heritages of RL-UGG. One of the main problems, as stated by many informants, is the dominance of geology expertise and the lack of involvement of experts in other fields.

### **3.3.2. Plan Efficiency**

Firstly, in addition of strategic plans, there is also a need for more detailed interpretation guidelines/plans. A detailed plan is needed to ensure that interpretation development in the smaller segments of RL-UGG geotourism trails is still connected to the central theme of the trails. The absence of detailed plan has caused confusion among local stakeholders when developing interpretation for a more specific area or site. Secondly, the existing plans have no formal or even legal standing, making it difficult for the Executive Board to encourage local authorities to include aspects of the plans in their own planning and policy. Lastly, the scientific theme of RL-UGG geotourism trails is still difficult to be translated into the area's interpretation narration, media and program. It is challenging to determine the relevance of themes for the general audience/visitor.

### **3.3.3. Misconception of Interpretation**

Partial understanding of interpretation is still a big challenge in RL-UGG. Common misconceptions about interpretation, as indicated in subchapter 3.2, include:

- a. "As a form of story presentation, interpretation can be delivered with a simple method of memorizing and reciting."
- b. "Interpretation is the delivery of all information regarding a destination/tourist attraction. It is the similar thing as storytelling."
- c. "Interpretation is a communication technique used in tourism guiding activity."

### **3.3.4. Stakeholder's Wisdom**

Wisdom is related to the ability of stakeholders to use information in making decisions or predicting what

will happen. In the planning stages of RL-UGG geo-interpretation, local stakeholders are involved intensively in many forms of strengthening program. They are expected to be able to independently implement and develop interpretations in their respective places based on the important themes of RL-UGG.

Nevertheless, in the operation of the interpretation plan, the community, tourist attraction managers, and tourism businesses are currently still limited to inserting interpretation narratives in their guiding activities. They have not yet reached the stage of developing their own interpretive programs and activities that support the central theme of RL-UGG. One of the biggest challenge is that stakeholders feel they don't have enough information about the market segments that might be interested in interpretive geotourism programs.

### **3.3.5. Plan Stability**

Stability relates to how the decisions or development strategies that have been produced last. After a decision or plan is made, the plan needs to have flexibility and conditions or requirements for reconsideration [22]. Stability in the development of geotourism interpretation is closely related to how the institutional management of RL-UGG area is carried out.

RL-UGG Executive Board, as the main actor in charge of carrying out various Geopark management activities, has very limited scope for implementing regional geotourism interpretation plans. The Executive Board has been carrying out various activities, including those related to geotourism development and interpretation application, using the main source of funding from local governments. This is because The Executive Board as a non-structural organization does not have the authority to manage its own budget, and is prohibited from developing its own business. Meanwhile, it is difficult to guarantee stability in the budgeting of RL-UGG Executive Board activities in OPDs due to the influence of many factors. Changes in leadership, policy shifts, political will, and conflicts of interest within the local government are factors that indirectly challenge the implementation of RL-UGG geo-interpretation.

## **4. CONCLUSION**

The development and implementation of geo-interpretation in RL-UGG has been carried out since 2016. However, there are challenges that still need to be addressed to ensure more effective and quality interpretation in this area. Related stakeholders can start to evaluate the existing plans and reorientating the interpretation development, utilizing this time of pandemic to think of what strategies are best for future tourism in RL-UGG. It is greatly suggested that as many as relevant stakeholders and experts be involved, the

central interpretation themes be reviewed, and the correct understanding of interpretation principles be strengthened in the evaluation and reorientation process of RL-UGG geo-interpretation.

## AUTHORS' CONTRIBUTIONS

Ms. Fajriasanti is the main author of this paper, designed the research, carried out analysis and wrote the manuscript. Mr. Karyawan helped with data collection and review of the draft.

## ACKNOWLEDGMENTS

We thank Dr. Prayitno Basuki, S.E. who gave inputs for the research design. We also thank Ir. Wiwien T. Wiyonoputri, M. T. and the members of Interpretasi Indonesia for sharing their wonderful insight on the interpretation development in RL-UGG.

## REFERENCES

- [1] G. Moscardo, *Stories and Design in Tourism*, *Annals of Tourism Research*, vol. 83, 2020, p. 102950.  
<https://doi.org/10.1016/j.annals.2020.102950>.
- [2] M. N. Pradono, R. S. Setiawan, I. A. S. Valendia, F. T. S. Tarno, *Post Crisis: Indonesia Toward Quality Tourism, Strategies, Tactics, Policies*, MarkPlus Tourism, 2020.
- [3] F. Tilden, *Interpreting Our Heritage*, University of North Carolina Press, 1977.
- [4] L. Beck, T. Cable, *Interpretation for the 21st Century: Fifteen Guiding Principles for Interpreting Nature and Culture*, The University of California, 2002.
- [5] J. Carter, *A Sense of Place: an interpretive planning handbook*, Scottish Natural Heritage, 2001.
- [6] H. S. Cahyadi, D. Newsome, *The Post COVID-19 Tourism Dilemma for Geoparks in Indonesia*, *International Journal of Geoheritage and Parks*, 2021.  
<https://doi.org/10.1016/j.ijgeop.2021.02.003>.
- [7] A. P. Kartika, B. H. Wibisono, *Management Effectiveness of Rinjani-Lombok Geopark on Geotourism Track*, *Built Environment Studies*, vol. 1(1), 2019, pp. 1-8.
- [8] P. Everingham, N. Chassagne, *Post COVID-19 ecological and social reset: Moving away from capitalist growth models towards tourism as Buen Vivir*, *Tourism Geographies*, vol. 22(3), 2020, pp. 555-566. DOI: 10.1080/14616688.2020.1762119
- [9] P. J. McKeever, N. Zouros, *Geoparks: Celebrating Earth heritage, sustaining local communities*, *Episodes*, vol. 28(4), 2005, p. 274. DOI: 10.18814/epiugs/2005/v28i4/006
- [10] G. Martini, *Geoparks... a vision for the future*, *Revista do Instituto de Geociências-USP*, vol. 5, 2009, pp. 85-90.
- [11] T. A. Hose, *Geotourism, or can tourists become casual rock hounds. Geology on your doorstep*. The Geological Society, 1996, London, pp. 207-228.
- [12] R. K. Dowling, D. Newsome, D. (Eds.), *Geotourism*, Routledge, 2006.
- [13] D. Newsome, R. K. Dowling, *Setting an agenda for geotourism*, *Geotourism: The tourism of geology and landscape*, 2010, pp. 1-12.
- [14] N. T. Farsani, C. Coelho, C. Costa, *Geotourism and Geoparks as Novel Strategies for Socio-Economic Development in Rural Areas*, *International Journal of Tourism Research*, vol. 13(1), 2011, pp. 68-81.
- [15] R. K. Dowling, *Global Geotourism—An Emerging Form of Sustainable Tourism*, *Czech Journal of Tourism*, vol. 2(2), 2013, pp. 59-79.
- [16] S. H. Ham, *Environmental Interpretation: A Practical Guide for People with Big Ideas and Small Budgets*, North American Press: Golden, Co, 1992.
- [17] R. McKee, T. Gerace, *Storynomics: Story-driven marketing in the post-advertising world*, Hachette UK, 2018.
- [18] M. Pásková, J. Zelenka, T. Ogasawara, *The ABC Concept—Value Added to the Earth Heritage Interpretation?*, *Geoheritage*, vol. 13(38), 2021.  
<https://doi.org/10.1007/s12371-021-00558-8>
- [19] W. T. Wiyonoputri, D. Anindita, A. Masita, *Pedoman Interpretasi Daya Tarik Wisata*, Kementerian Pariwisata dan Ekonomi Kreatif, 2020.
- [20] V. A. Gunn, *Tourism planning: Basics, concepts, cases*, New York: Routledge, 2002.
- [21] K. Lai, Y. Li, X. Feng, *Gap between tourism planning and implementation: A case of China*, *Tourism Management*, vol. 27(6), 2006, pp. 1171-1180.
- [22] E. T. Byrd, *Stakeholders in sustainable tourism development and their roles: applying stakeholder theory to sustainable tourism development*, *Tourism review*, vol. 62(2), 2007, pp. 6-13.