

Contributions to Finance and Accounting

Nadia Mansour

Lorenzo M. Bujosa Vadell *Editors*

# Generative AI in Finance and Law

Innovation, Regulation, and  
Technological Developments



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# **Contributions to Finance and Accounting**

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Editors

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**Financial Distress Prediction of Nonfinancial Companies Registered on the ASE Using Logistic Regression** ..... 871  
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# Explore the Uniqueness of Bayah Dome Geopark: A Path Toward Sustainable Tourism and Conservation



Juliana Juliana , Amelda Pramezwary , Diena M. Lemy , Rudy Pramono , and Arifin Djakasaputra 

**Abstract** This research is necessary because it combines two relevant concepts in developing the Bayah Geopark, one of the natural tourism destinations offering extraordinary geological wealth, including unique geological dome formations. This study explores the uniqueness and potential of geological domes in the Bayah Geopark from the perspective of nature conservation and sustainable tourism development. The research methods include field surveys, geological data collection, and qualitative analysis. Research in the Bayah Geopark aims to investigate the tourism potential related to geological domes, including developing tourist routes, ecotourism activities, and improving supporting facilities to optimize economic benefits for the local community. The urgency of the research can be explained in the following terms: This research is significant in ensuring the environment of Bayah Dome Geopark. Because this area has very high geological diversity, biodiversity, and cultural diversity, environmental conservation must be carried out sustainably and oriented toward conservation. Thus, this research can help increase public awareness of the importance of ecological conservation and sustainable development. This research also promotes sustainable tourism by introducing responsible practices, such as waste management, energy conservation, and local community participation, to create continuity between tourism growth, environmental conservation, and community welfare.

**Keywords** Bayah Dome Geopark · Uniqueness · Sustainable tourism

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## 1 Introduction

The management of Indonesia's natural resources still relies mainly on the extractive sector, such as the oil and gas and mining sectors, which tend to decline in both reserves and contributions. Therefore, the Indonesian economy must immediately shift to sectors prioritizing added value and conservation to ensure sustainability. Moreover, since 2015, Indonesia has been actively promoting the Sustainable Development Goals (SDGs) Agenda or Sustainable Development, which was agreed upon at the United Nations (UN) General Assembly in 2015 [1, 2]. The Ministry of Tourism and Creative Economy/Tourism and Creative Economy Agency) continues to strive to realize sustainable tourism in Indonesia. One of the many efforts made to realize sustainable tourism-based tourism is to develop the potential of the Bayah Geopark in Indonesia [3].

Sustainable Tourism is a community development concept that strengthens the capacity of rural communities to manage the potential of existing tourism resources by ensuring local community participation in these activities [4, 5]. With sustainable tourism, the tourism industry benefits from an economic perspective and can also empower the community and protect the environment. To support this, various parties must work together. Stakeholders, including the Government, residents, tourists, business owners, and business actors, must be able to work together and support each other. In this case, business actors have an equally important role as other stakeholders. Research conducted by [6–8] shows that Sustainable Tourism has been proven to be able to improve the local economy and preserve natural and cultural resources. The same thing was also studied by [6–11] showing that the local community supports tourism by developing entrepreneurship in the tourism industry, increasing social control of the community in maintaining the environment and expanding the role of local traditional leaders in supporting tourism development. This is supported by research conducted by [12–14] explaining that the prospects for implementing sustainable ecotourism in tourist areas can develop and encourage community participation. Research conducted by [15–19] shows that the Government has a strong desire to create original and natural tourist attractions. In this case, one of which can be made is the Bayah Geopark. Bayah Geopark, located in the Bayah region of Indonesia, is a geological site of significant scientific and cultural importance. The area is characterized by dome-shaped geological formations formed over millions of years through geological processes. These geological domes are stunning natural wonders and hold great potential for conservation and sustainable tourism [20–22].

Bayah Geopark is a geological site recognized for its unique geological features and cultural significance (Fig. 1). The area is famous for its dome-shaped geological formations, which are believed to have been formed through the uplift of the earth's crust over millions of years. This geological process created a unique landscape characterized by concentric rings visible from the air and the ground. Bayah Geopark is essential not only from a geological point of view but also in terms of cultural and historical significance. The area is home to several ancient temples and



**Fig. 1** Geopark Bayah Dome

archaeological sites, which are believed to date back to the Hindu and Buddhist eras. These cultural and historical sites are not only of significant scientific importance but also have great cultural and spiritual significance for the local community [23, 24].

The development of Bayah Geopark is carried out holistically by integrating the concepts of protection, education, and local economic development. Through tourism and the protection of geological resources, innovative local business activities, new jobs, and high-quality training will be created that stimulate the growth of new sources of income [11, 13]. Geopark empowers local communities through cohesive partnership activities. Therefore, Geopark is determined through a bottom-up

process involving all relevant parties locally and regionally. This process requires commitment from the local community, strong partnerships, political support, and strategies that will meet all community objectives while displaying and protecting the geological heritage in the area [20, 25, 26]. The main aim of this study is to explore the uniqueness and potential of the geological dome of Bayah Geopark from the perspective of conservation and sustainable tourism. Specifically, this study aims to analyze the cultural and historical significance of the archaeological sites and temples of Bayah Geopark. Identify the potential for sustainable tourism development in Bayah Geopark, including the development of ecotourism and cultural tourism initiatives. Explore the challenges and opportunities for conservation and sustainable tourism development in Bayah Geopark. This research also aims to explore the uniqueness and potential of the Bayah Geopark geological dome from the perspective of conservation and sustainable tourism.

Related to the background above, this study raises the following problems: How can the uniqueness of Dome geology in Bayah Geopark be integrated with conservation and sustainable tourism development? How can tourism potential in Bayah Geopark be developed sustainably? How can environmental conservation in Bayah Geopark be carried out sustainably? How can local communities be involved in the tourism development process in Bayah Geopark? How can tourism development in Bayah Geopark be carried out sustainably and oriented toward environmental conservation? The urgency of the research can be explained in the following terms: This research is fundamental to ensure the environment in Bayah Dome Geopark. Because this area has very high geological diversity, biodiversity, and cultural diversity, environmental preservation must be carried out sustainably and oriented toward conservation. Thus, this research can help in increasing public awareness of the importance of environmental conservation and sustainable development. This research is also very important for developing sustainable tourism in Bayah Dome Geopark. Thus, this research can help increase local income and public awareness of the importance of environmental conservation and sustainable development. This research is significant for integrating local community involvement in the development process of Bayah Dome Geopark. Thus, this study can help increase public awareness of the importance of environmental conservation and sustainable development.

This study is significant for developing the local economy in Bayah Dome Geopark. Thus, this study can help increase local income and public awareness of the importance of environmental conservation and sustainable development. This study is significant for developing infrastructure in Bayah Dome Geopark. Thus, this study can help improve the tourism experience in this area and increase public awareness of the importance of environmental conservation and sustainable development. This study is critical to developing education about the geological diversity, biodiversity, and cultural diversity in Bayah Dome Geopark. Thus, this study can help increase public awareness of the importance of environmental conservation and sustainable development. This study is significant for developing tourism in Bayah Dome Geopark. Thus, this study can help increase local income and public awareness of the importance of environmental conservation and sustainable

development. This study is critical to the economic development of Bayah Dome Geopark. Thus, this study can help increase local income and public awareness of the importance of environmental conservation and sustainable development.

This research aligns with the sustainable development goals of SDG 14, this research can contribute to protecting marine and coastal ecosystems because the Bayah Geopark includes land geological formations and unique marine biodiversity. With a better understanding of the geological dome and its associated ecosystems, conservation strategies can be designed to protect underwater life. SDG 15 The diversity and natural habitats in the Bayah Geopark can be studied and protected through this research. This includes identifying endemic species, habitats, and sustainable management to ensure terrestrial ecosystems. SDG 11 Sustainable Cities and Communities Sustainable tourism in the Bayah Geopark can help develop the local economy and strengthen the infrastructure of local communities.

Tourism development can drive sustainable growth for local communities by considering its environmental and social impacts. SDG 12 This research can help develop more sustainable consumption and production patterns, especially in the tourism industry. More efficient use and reduction of waste can be achieved through wise management of natural resources and conservation efforts. SDG 13 research on the uniqueness of dome geology can provide insight into its influence on local weather and climate patterns. By understanding its impacts, mitigation and adaptation measures can be designed to address the challenges of climate change in the region. Research in the Bayah Geopark aims to investigate the tourism potential related to geological domes, including developing tourist routes, ecotourism activities, and improving supporting facilities to optimize economic benefits for local communities. This study also promotes sustainable tourism by introducing responsible practices, such as waste management, energy conservation, and local community participation, to create continuity between tourism growth, environmental conservation, and community welfare.

Sustainable tourism is rapidly growing tourism, including the growth of accommodation capacity, local population and environment, where tourism development and new investments in the tourism sector should not have a negative impact and can blend with the environment if we maximize positive impacts and minimize negative impacts [27–29]. State that sustainable tourism is a balanced triangulation relationship between tourist destinations with their habitats and people, the creation of holiday packages, and the tourism industry, where no stakeholder can disrupt the balance.

Based on this understanding, it can be concluded that the tourism sector is developed for current needs but does not sacrifice future needs so that future generations can enjoy it. This condition is essential to maintain the existence of sustainable tourism so that sustainable development can be carried out. From this statement, it is understood that sustainable development is part of sustainable development, which considers current needs without ignoring the ability of future generations to meet their needs.

Ecotourism is a tourism development model that has received a severe response from local governments [4, 9, 10, 13, 30, 31]. Ecotourism adheres to the principles

as stated as follows [32–35] emphasizing the lowest possible negative impact on nature and culture that could damage the tourist destination, providing education to tourists about the importance of conservation, emphasizing the importance of responsible business working with government and community elements to meet the needs of local residents and provide benefits to conservation efforts, directing economic benefits directly to conservation goals, management of natural resources and protected areas, emphasizing the needs of regional tourism areas and the arrangement and management of plants for tourist purposes in areas designated for such tourism purposes, emphasizing the use of environmental and social-based studies, and long-term programs, to evaluate and minimize the impact of tourism on the environment, encouraging efforts to increase economic benefits for the state, business people, and local communities, especially residents living in areas around protected areas, trying to ensure that tourism development does not exceed acceptable social and environmental limits as determined by researchers who have worked with local residents, trusting the use of energy sources, protecting wild plants and animals, and adapting them to the natural environment and culture [36, 37].

Ecotourism is a potential tourism development model that maintains natural resources and supports improving the local community's economy [4, 10, 31]. Ecotourism can provide an alternative economic improvement to resource management activities and generate income for local communities. The goal is to expand knowledge, recreational experience, and business relations in the field of education [8]. Through the development of ecotourism that emphasizes local culture in utilizing land, we can increase community income while preserving land resources and maintaining local culture and technology, which is generally following the conditions of its natural environment [38].

Geopark tourism is an area with a particular geological heritage that has international significance, is rare, and has an aesthetic appeal that is important to be developed as part of an integrated concept of conservation, education, and economy [24, 39]. Geoparks are described as new and different entities that can bring thoughts and feelings to a present-day dimensional space in the continuum of the past for the future [40]. In addition, Geopark is seen as an innovative means to achieve sustainable regional development goals. According to [40], Geopark tourism is a natural tourism destination that has the potential to develop into various types of tourism products. Both in terms of biodiversity, sociocultural wealth (Bio Heritage), and natural conservation areas [41–43].

The Geopark Tourism concept itself seems to have the potential to generate significant income for developing ecotourism areas and allow full community involvement in the planning, management, and implementation of ecotourism businesses and all the benefits obtained [44]. This also requires an active role from the community because the community that has knowledge about nature and culture in the area has the potential to become an attraction and selling point for tourists. Full community involvement is so vital that it becomes an absolute necessity [4, 45]. The ecotourism perspective is taken to coordinate tourism in favor of the local community. Geopark tourism can preserve a tourist spot so that its sustainability and authenticity can be adequately maintained [36]. Ecotourism also directly involves

the local community as the main actors in tourism activities, which are expected to improve the economic level of the local community. Not only that, ecotourism also requires an active role in empowering the local community to be more productive, creative, and innovative [46, 47].

## 2 Method

This research will be conducted for 1 year using qualitative research methods. Creswell stated, “In a qualitative case study, the questions may address a description of the case and the themes that emerge from studying it” [48]. The researcher will use two primary data collection techniques: semi-structured in-depth interviews and observations. For semi-structured in-depth interviews, the researcher will use purposive sampling techniques to determine the informants involved in this study [49]. Creswell [48] stated that this sampling technique is a deliberate selection because of the quality of the participants (informants) so that the researcher will decide what needs to be known and find informants who can provide information according to the knowledge and experience they have. Therefore, the researcher will conduct interviews with several parties who are considered competent in this field.

This study will be conducted with a comprehensive review of the existing literature on the geological and cultural significance of the Bayah Geopark will be conducted. Field observations were conducted to collect data on the geological processes that formed the dome-shaped geological formation of the Bayah Geopark. Interviews will be conducted with local community members and tourism industry stakeholders to collect data on the cultural and historical significance of Bayah Geopark. Surveys will be conducted with tourists and local communities to collect data on the potential for sustainable tourism development in Bayah Geopark.

The data obtained is then analyzed by researchers using procedures that follow the rules of the qualitative approach and case study method. There are several stages in qualitative data analysis, according to [49] including (1) processing and preparing the data to be analyzed; (2) reading the data as a whole; (3) coding to organize the data; (4) applying the coding stages to describe the themes being analyzed; (5) the descriptions that have been compiled will be presented in narrative form; and (6) interpreting in qualitative research. In addition, researchers will also ensure the validity of the data through triangulation of sources, both from primary and secondary data sources, so that they can display coherence and justify the themes raised in the research. Through these stages and procedures, researchers can present descriptive and accurate data based on research findings.

### 3 Result and Discussion

#### 3.1 Result

The researcher interviewed the Director of the Bayah Dome Geopark, Ir. Engkap Kapriadi (Fig. 2).

The delineation of the Bayah Dome Geopark area, which covers 15 sub-districts, includes 179 villages and 5 sub-districts with an area of 201,602 ha or 2016.02 km<sup>2</sup>, which has taken into account accessibility and visibility as well as the existence of potential Geological Heritage, Geological Diversity, Biodiversity, and Cultural Diversity (Fig. 3).

The uniqueness of Bayah Dome Geopark lies in its outstanding geological and cultural significance. Geological is a domed structure formed by the uplift and erosion of the earth's crust. It is a valuable channel for the movement of the earth's crust. The Geopark is mainly composed of sedimentary rocks that contain visible fossils. It reflects a rich paleontological heritage. The Miocene geological strata also highlight their importance in understanding the region's history and culture. This Geopark is deeply connected to local legends and traditional practices, which increases attractiveness. Oral traditions link the construction of the dome to folklore. While historical remains such as ancient mining tools shed light on its past as

Fig. 2 Photo session





Fig. 3 Geopark Bayah Dome

an economic. Despite the potential, current tourism at the Bayah Dome Geopark faces infrastructure and management challenges.

There are four Main Pillars Of Geopark Development consists geological heritage (Having a unique geological heritage that is significant internationally (UGGp) and nationally (National Geopark), There is a relationship between geological diversity, biodiversity and cultural diversity), management (Having a Geopark management system that a Joint Decree determines at the Regent/Governor/Governor level, Optimizing the duties and functions of the commission in the Geopark management organization), visibility (Having a gate as a Geopark information center equipped with an interpretation panel, Supporting facilities such as museums, restaurants, toilets, Geopark souvenir kiosks, parking lots, Having sufficient promotional materials (booklets, leaflets, guidebooks), networking partnerships (Active in membership of the Indonesian Geopark Network (JGI), Asia Pacific Geopark Network (APGN) and Global Geopark Network (GGN) as a forum for sharing experiences and knowledge and establishing cooperation (sister Geopark) between national Geoparks and/or UGGp).

There are basic amenities such as parking spaces and hiking trails. However, housing and interpretive centers are not enough. Visitor surveys highlight the desire for interactive geological exhibits and better signage to enhance the educational experience. The majority of tourists (68%) are domestic tourists. Foreign visitors accounted for 32%, although tourists praised the quiet environment and educational opportunities. But, concerns about waste management and a lack of clear conservation regulations point to urgent problems that must be addressed. The challenges of sustainable tourism in Bayah Dom Geopark originate primarily from environmental and community issues. Irregular pedestrian activity has led to noticeable soil erosion on popular roads. Meanwhile, an inadequate waste disposal system causes littering. Increased human activity also threatens the planet.

### 3.2 Discussion

The results show that Bayah Dome Geopark has enormous potential as a tourism destination. Bayah Dome Geopark is facing challenges that threaten its sustainability. Geological uniqueness and cultural heritage provide a strong foundation for building a balanced tourism and conservation model. Integrating community participation with scientific conservation efforts is key to sustainable development. Lessons from successful Geoparks worldwide, such as South Korea's Jeju Island. It emphasizes the importance of shared governance environmentally friendly infrastructure and tourism driven by education. Addressing identified gaps in infrastructure Visitor management and environmental policies will help ensure that Bayah Dome Geopark is developed into a global tourism center. At the same time, the natural and cultural heritage is preserved. The uniqueness of Bayah Dome Geopark lies in its geological and cultural heritage, making it a prime candidate for sustainable tourism development. The distinctive geological formations of the Bayah Dome, shaped by tectonic activity over millions of years, are significant not only for their scientific value but also for their aesthetic appeal, attracting both researchers and tourists. Furthermore, the region's rich biodiversity and cultural traditions offer opportunities to create an integrated tourism experience. By emphasizing the preservation of natural and cultural assets, Bayah Dome Geopark can serve as a model for balancing economic development with environmental conservation, aligning with the principles of sustainable tourism.

However, sustainable tourism in Bayah Dome Geopark requires comprehensive planning and community involvement. Local communities play a critical role in ensuring the success of tourism initiatives, as they are the custodians of the cultural heritage and natural resources. Programs focused on capacity building, such as ecotourism training and heritage conservation workshops, can empower residents to actively participate in tourism-related activities while fostering a sense of ownership. Moreover, partnerships between stakeholders, local governments, NGOs, and private entities can facilitate resource mobilization and strategic planning. This collaborative approach is vital to address potential challenges, such as environmental degradation and cultural commodification, which could arise from unregulated tourism.

Implementing conservation and educational initiatives is essential to enhance the Geopark's sustainability. Geotourism activities, such as guided geological tours and interpretive centers, can raise awareness about the importance of protecting the Bayah Dome's natural and cultural heritage. Educational programs aimed at schools and tourists can instill a deeper appreciation of the Geopark's value and foster responsible tourism behaviors. Additionally, leveraging technology, such as mobile apps and virtual tours, can provide an innovative way to engage broader audiences while minimizing physical impacts on the site. Through these efforts, Bayah Dome Geopark can achieve a harmonious balance between tourism development and conservation, ensuring its legacy for future generations.

## 4 Conclusion

Bayah Dome Geopark has enormous potential as a unique destination for sustainable tourism and conservation. Geological is a prime example of how natural heritage can drive economic and environmental sustainability. The study emphasizes that education geotourism, and community participation can promote Domebayah's uniqueness and preserve its ecological integrity. Addressing challenges, such as environmental degradation and lack of community participation, will help this Geopark survive long-term as a sustainable tourism. This study emphasizes integrating a multidisciplinary approach to Geopark exploration and development. Future research should delve into community perspectives. Evaluate the social and economic impacts of tourism initiatives on local livelihoods. Studies can also explore new conservation techniques. And sustainable tourism practices tailored to Dome Bayah's unique characteristics. Such research will provide actionable insights for policymakers and stakeholders to balance development and conservation. Cooperation between local communities, the government, and the private sector is essential for sustainable tourism and conservation in the Bayah Dome Geopark. Emphasis should be placed on educational programs to raise awareness about the importance and conservation benefits of Geoparks. Developing sustainable infrastructure, such as green facilities and guided tours, can attract responsible tourists while minimizing environmental impact. In addition, promoting local entrepreneurs and community participation in the decision-making process can help increase economic and social benefits. And ensure the conservation of the natural and cultural heritage of the Geopark.

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