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Safarwadi Cave: Integration of Geological Heritage, Religious Tourism, and Community Resilience

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ABSTRACT

Safarwadi Cave, located in Pamijahan Village, West Java, is a unique geological site rich in spiritual and cultural values. The cave has a historical association with Sheikh Abdul Muhyi and the spread of the Syattariyah order, which makes it a major destination for religious pilgrimages every year. In addition to its spiritual value, Safarwadi Cave also holds geological wonders such as karst morphology, underground water flows, and distinctive speleotems, so it has great potential as a geological heritage site. This research aims to assess the potential integration between geological heritage and religious tourism in Safarwadi Cave, as well as its contribution to building local community resilience and sustainable development. Through field surveys, interviews with local stakeholders, and literature review, this research identified important elements in geotourism development, such as geological education, conservation awareness, and community economic empowerment. The results show that the combination of geological wonders and religious values enriches the appeal of Safarwadi Cave as a multidimensional tourist destination. In addition, community involvement in tourism management, local product sales, and preservation of cultural stories strengthens economic resilience and social cohesion. Safarwadi Cave is a clear example of how a geoheritage site, if developed inclusively, can act as a driver of sustainable development and conservation.

***Keywords**: community resilience, geoheritage, geotourism safarwadi cave, religious tourism*

ABSTRAK

Gua Safarwadi, yang terletak di Desa Pamijahan, Jawa Barat, merupakan situs geologi unik yang kaya akan nilai spiritual dan budaya. Gua ini memiliki keterkaitan historis dengan Syekh Abdul Muhyi dan penyebaran tarekat Syattariyah, yang menjadikannya tujuan utama ziarah keagamaan setiap tahunnya. Selain nilai spiritualnya, Gua Safarwadi juga memiliki keajaiban geologi seperti morfologi karst, aliran air bawah tanah, dan speleotem yang khas, sehingga memiliki potensi besar sebagai situs warisan geologi. Penelitian ini bertujuan untuk menilai potensi integrasi antara warisan geologi dan wisata religi di Gua Safarwadi, serta kontribusinya dalam membangun ketahanan masyarakat setempat dan pembangunan berkelanjutan. Melalui survei lapangan, wawancara dengan pemangku kepentingan lokal, dan tinjauan pustaka, penelitian ini mengidentifikasi elemen-elemen penting dalam pengembangan geoturisme, seperti pendidikan geologi, kesadaran konservasi, dan pemberdayaan ekonomi masyarakat. Hasil penelitian menunjukkan bahwa kombinasi keajaiban geologi dan nilai-nilai religi memperkaya daya tarik Gua Safarwadi sebagai destinasi wisata multidimensi. Selain itu, keterlibatan masyarakat dalam pengelolaan pariwisata, penjualan produk lokal, dan pelestarian cerita budaya memperkuat ketahanan ekonomi dan kohesi sosial. Gua Safarwadi adalah contoh nyata bagaimana situs warisan geologi, jika dikembangkan secara inklusif, dapat bertindak sebagai pendorong pembangunan berkelanjutan dan konservasi.

***Kata kunci:** geowisata gua safarwadi, ketahanan masyarakat, pariwisata religi, warisan geologi*

PENDAHULUAN

Indonesia is widely recognised as a country with an incredibly diverse geological landscape, encompassing karst formations, cave systems, underground water flows, and unique speleothems. One site that exemplifies this richness is Safarwadi cave, located in the village of Pamijahan, West Java. This cave not merely holds geological uniqueness but also serves as a significant site in the history of Islam's spread in the region through the figure of Syekh Abdul Muhyi. This historical connection makes Safarwadi cave a popular religious pilgrimage destination visited annually. The blend of geological and spiritual values makes this site highly potential for development as an integrated tourism destination based on geological and religious heritage, supporting sustainable development and strengthening the resilience of the local community.

This study aims to examine the potential for integrating geological heritage and religious tourism at Safarwadi cave, identify its strategic role in building the resilience of local communities, and formulate recommendations for sustainable management of the area. The research is expected to contribute theoretically to the development of interdisciplinary studies that combine geological, spiritual cultural, and social resilience aspects. Practical findings are anticipated to serve as a reference for relevant stakeholders, including the government, tourism managers, and local communities, in efforts to develop the area with a focus on conservation, education, and community empowerment.

The novelty of this research lies in its approach, which integrates three main aspects: the uniqueness of Safarwadi cave's geology, the historical and spiritual values in Syattariyah Sufi tradition, and community involvement in managing and developing the tourism area. This study not only highlights the destination's potential from a geotourism perspective but also positions the community as the main actor in preserving cultural and environmental values while reaping economic benefits from tourism activities. Such a holistic approach is still rarely applied in geotourism development in Indonesia, making it a new contribution to scientific literature and field practice.

The study's findings indicate that the combination of geological wonders and religious values enriches Safarwadi cave's appeal as a tourist destination. Local communities play a role in tourism management, providing local products, and preserving cultural narratives. It has positive implications for enhancing community economic resilience and social relations. Key elements in developing this area include geological education, conservation awareness, and community-based economic empowerment. The practical implications of this research include several strategic recommendations, such as the importance of officially designating Safarwadi cave as a geological heritage site, developing geological and cultural interpretation materials for visitors, and integrating Safarwadi cave into regional geotourism networks like the UNESCO Global Geopark Ciletuh, Palabuhanratu. An Inclusive and Community-Based Approach Safarwadi Cave has great potential as a model for geotourism development that aligns with environmental conservation, spiritual values, and the improvement of local community well-being.

Physical Description of Safarwadi Cave

Safarwadi Cave is located in Pamijahan Village, Bantarkalong Subdistrict, Tasikmalaya Regency, West Java. This location is approximately ±60 km from the Muhammadiyah University of Tasikmalaya campus, with a travel time of approximately ±1 hour 48 minutes by car. The main cave passage is approximately 284 meters long, with an average width of 24.5 meters and a height of approximately 50 meters. However, the usable flat area is only approximately 100 square meters, divided into two main sections: the front and back sections.

Table 1.
Physical Description of Safarwadi Cave

Cave section	Cave Length/Area	Height
Total Flat area	±100 m^2	--
Front Section	±50 m^2	±10 m
Rear Section	±50 m^2	±10 m
Main Cave Passage	Length 284 m, Land area 24,5 m	

Geotourism

Geotourism represents a thoughtful form of nature-based tourism that emphasizes the appreciation of geological heritage as its primary draw, grounded in the principles of conservation, education, and the empowerment of local communities (Prasetyo et al., 2023). This approach not only seeks to utilize and conserve landforms and geological features but also recognizes the inherent cultural and environmental values interwoven within these landscapes. By integrating geological aspects with educational, scientific, and conservation goals, geotourism aspires to deliver a well-rounded experience for visitors (Wulung et al., 2021).

In this context, geotourism is viewed as a dynamic interplay of geological phenomena that create distinctive landscapes, enriching them with scientific, visual, and cultural appeal. Such processes yield unique geological environments that can serve as open-air laboratories and educational tourism destinations (Wijaya & Widodo, 2015; Permana et al., 2024). A crucial element of geotourism is the geosite,

characterized as a location of significant geological interest, often dating back centuries or millennia, which also bears educational, cultural, and economic relevance. Indonesia, for instance, is home to more than 40 identified geosites, several of which have gained recognition as part of the UNESCO Global Geoparks Network, including Gunung Sewu, Lake Batur, Mount Rinjani, and Ciletuh Palabuhanratu (Wendita, 2019).

The Geotourism Box framework, introduced by Wulung et al. (2021), provides a comprehensive method for assessing geotourism potential. This model encompasses six key variables, including three core components geological processes, landform features, and tourism infrastructure alongside three supporting parameters: geological knowledge (geo-base), historical-geological context (geo-history), and additional cultural or ecological values (geo+). These components serve as valuable indicators in evaluating the strengths and suitability of geotourism destinations. Noteworthy case studies from the Bandung Basin region, such as Pawon Cave, Stone Garden, Curug Dago, and Batu Batik, illustrate considerable geotourism potential based on the established criteria.

Moreover, the aim of developing geotourism extends beyond simply attracting visitors; it also focuses on fostering environmental conservation and enhancing community well-being. As such, the revitalization of geosites calls for a well-rounded approach that encompasses improvements in physical infrastructure, the preservation of cultural landscapes, and the enhancement of scientific interpretation for the public. A case in point is the Botubarani Geosite in Gorontalo, where revitalization efforts, including site clean-up and the installation of informational signage, have successfully increased tourism appeal while empowering the local community (Permana et al., 2024).

Recent insights further highlight the importance of integrating geological and cultural elements, including spiritual dimensions, to cultivate multifaceted tourist destinations. This is exemplified by Safarwadi Cave in West Java, where the geological features are complemented by spiritual significance and local historical narratives. The outcome is a destination that not only captivates with its geological interest but also enriches visitors' experiences through cultural and spiritual engagement, thereby strengthening community resilience (Ulum & Anggaini, 2020; Rahman et al., 2024). In this context, geotourism serves as a notable avenue for promoting geoscience education, environmental preservation, and the affirmation of local identity in a manner that prioritizes sustainability.

In conclusion, geotourism has emerged as a multidisciplinary approach that harmonizes geoscience, the preservation of both natural and cultural heritage, and sustainable economic growth through active community participation and responsible environmental stewardship.

LITERATURE REVIEW

Geotourism is a tourism approach based on geological potential and uniqueness, developed with the principles of conservation, education, and empowerment of local communities. This approach emphasises the utilisation and preservation of geological heritage and landscapes, while simultaneously considering the cultural and environmental values inherent in them (Prasetyo et al., 2023). Geotourism plays a crucial role not only as an educational tool for the general public but also as a medium to promote environmental conservation and enhance active community participation in area management (Rahman et al., 2024). Research findings indicate that the integration of geological and cultural elements, including religious values, can enhance the appeal of a destination, expand the reach of tourists, and promote sustainable community development (Ulum & Anggaini, 2020).

A study on Safarwadi Cave confirms that this integration results in a multidimensional tourist destination, where spiritual and local historical values enrich the geological potential of the area. Community involvement in geotourism development is one of the key factors in the success of a destination, both economically and socially, as well as in terms of preserving local values (Elsap Patta Pasulu et al., 2024). Research by Nofirman et al. (2025) reinforces this argument by showing that community-based economic empowerment can be achieved through education, inclusive geological narratives, and the strengthening of local identity. In relation to community resilience, the concept of community resilience is

an important framework that reflects the ability of communities to adapt, endure, and recover from social, economic, and environmental pressures through the utilisation of existing social and cultural capital (Indayani, 2022).

Local-based tourism, especially in geoparks and spiritual sites, is highly dependent on the active participation of the community in maintaining the sustainability of the area. Additionally, the integration of spiritual values in tourism area development plays a crucial role in shaping community character and balancing material and spiritual dimensions. Spiritual values not only enrich tourists' experiences but also serve as guidelines for ethical and sustainable management (Sarnoto & PdI, 2025). According to Ihsani and Mufidah (2024), religious tourism can create emotional and spiritual connections between visitors and sites, as well as strengthen the preservation of traditional values. Research conducted byPutri et al (2020) in Ciletuh Geopark shows that combining geological and spiritual narratives can encourage active community involvement in preserving sites and promoting local identity to tourists.

Based on this literature review, this study focuses on exploring how the integration of geological heritage and religious tourism at Safarwadi Cave can contribute to strengthening the resilience of local communities, both socially, economically, and culturally. This focus is directed at the active involvement of the community in natural and cultural conservation and the use of local narratives as a force for sustainable development.

Research Questions:

1. What form does the integration between geological heritage and religious tourism take in the Safarwadi Cave area?
2. How are local communities involved in developing the area as a geotourism and religious tourism destination?
3. What are the impacts of this integration on the resilience of local communities, particularly in social, cultural, and economic aspects?

METHOD

This study uses a qualitative approach with a case study design. This approach was chosen to explore in depth the phenomenon of integration between geological heritage and religious tourism in shaping the resilience of local communities in the Safarwadi Cave area, Pamijahan Village, West Java. Case studies enable researchers to understand the context comprehensively and holistically through various data sources and direct interaction with the community and research environment (Rahardjo, 2017). The population in this study includes all elements of the community involved in tourism activities in Safarwadi Cave, including tourism managers, religious leaders, local traders, and tourists. The research subjects were determined purposively, namely those who were considered to have understanding, experience, and direct involvement in the development of the tourism area, both from a religious and geological perspective. The main informants consisted of community leaders, tourism awareness group (Pokdarwis) administrators, and representatives from the village government. Data collection techniques were conducted through field observations, in-depth interviews, and document studies. Interviews were conducted semi-structurally to allow researchers to explore data flexibly yet remain focused. The interview guide was developed based on indicators derived from geotourism theory (Prasetyo et al., 2023), community empowerment (Ulum & Anggaini, 2020), and the integration of spiritual values in tourism (Sarnoto & PdI, 2025). Additionally, observations were conducted to document tourism activities, social interactions, and cultural and environmental conservation efforts in the Safarwadi Cave area. Supporting documents collected included village profiles, tourism activity reports, and local publications related to the history of Safarwadi Cave.

Data analysis was conducted interactively and cyclically, following the Miles Huberman analysis model in Aryanto et al (2022), through the processes of data reduction, data presentation, and conclusion drawing. Data obtained from interviews, observations, and documentation were analysed thematically to identify patterns, connections, and meanings relevant to the research focus. Data validity was maintained through source and method triangulation techniques, member checks, and peer debriefing, in accordance with the principles of validity in qualitative research (Nartin et al., 2024). This research was

conducted at Safarwadi Cave, Pamijahan Village, Tasikmalaya Regency, West Java Province. This location was chosen because it has a strong combination of geological sites and religious values and demonstrates active community involvement in tourism development. The research was conducted over three months, from March to May 2024. The researcher's presence in the field was direct involvement, with the role of a passive participant to maintain objectivity while still understanding the socio-cultural context of the community.

Table 2.
Qualitative Assessment of Geotourism and Religious Tourism Integration in Safarwadi Cave

Assessment Aspect	Indicator	Field Findings	Category	Remarks
Geo–Religious Integration	Presence of geological and religious narratives in tourism packages	Information on speleothems and the history of Sheikh Abdul Muhyi is available	High	Integration occurs naturally and is reinforced by local narratives
Community Participation	Involvement in management, education, and local economy	Active tourism groups (Pokdarwis); women involved in informal sectors	High	Community engagement spans across gender and generations
Conservation Awareness	Efforts to maintain cleanliness and preserve cave formations	Voluntary maintenance based on religious values	High	Collective awareness rooted in spiritual reverence
Local Potential Utilisation	Use of historical and geological narratives to attract visitors	Narratives used in guiding and local promotion	Moderate-High	Requires improvement in interpretative media and sustained promotional efforts
Economic Resilience	Diversification of livelihood through tourism	Food stalls, souvenirs, parking services, and simple accommodation	Moderate	Tourism offers supplementary income for previously agriculture dependent communities
Sociocultural Resilience	Preservation of local values and intergenerational interaction	Cultural stories and practices are actively passed on and upheld	High	Social resilience is strengthened through tourism-based cultural interaction

Table 2 presents a comprehensive qualitative assessment of the integration between geotourism and religious tourism within the Safarwadi Cave area. This evaluation highlights several key aspects pertinent to sustainable tourism development and community empowerment, based on rigorous field research involving direct observation, in-depth interviews, and detailed documentation.

The first aspect assessed is Geo-Religious Integration, which evaluates how effectively geological and religious narratives complement one another within the tourism offerings. Observations indicate a commendable level of accessibility to information regarding the unique speleothems and the significant history of Syekh Abdul Muhyi, conveyed through informative signage and local guides' storytelling. This strong integration suggests a harmonious coexistence of spiritual and scientific perspectives, enriched by local narratives.

The second aspect focuses on Community Participation, which reflects the active engagement of local residents in managing the area, as well as educational and tourism-related economic initiatives. The tourism awareness group (Pokdarwis) operates with notable enthusiasm, involving individuals across diverse ages and genders, including women contributing to informal sectors such as culinary arts and crafts. This high level of participation underlines the community's vital role in tourism development, affirming their position as central stakeholders rather than mere spectators.

The third aspect pertains to Conservation Awareness, emphasizing local efforts to maintain the cleanliness and aesthetic value of the cave’s landscape. Community members take initiative in environmental upkeep, driven by a

shared understanding of the site's sacred significance. This reflects commendable ecological consciousness rooted in local cultural values.

The fourth aspect, Utilization of Local Potential, examines how geological and historical narratives are leveraged to enhance tourist interest. While these narratives are currently utilized in guiding and promotional activities, there remains a valuable opportunity for improved interpretative media and marketing strategies to further elevate their appeal. Consequently, this category is evaluated as moderate to high in potential.

The fifth and sixth aspects relate to Economic Resilience and Socio-Cultural dimensions. From an economic viewpoint, we observe a diversification of livelihoods through enterprises such as food stalls, souvenir shops, parking services, and simple accommodations. Although these initiatives are still developing, they provide meaningful supplementary income for residents who have historically relied on agriculture. In terms of socio-cultural dynamics, the preservation of folklore, local traditions, and active intergenerational interactions within tourism activities underscore a strong commitment to socio cultural resilience based on local values.

In conclusion, the findings reflected in Table 2 suggest that the Safarwadi Cave area exhibits commendable levels of integration, participation, and conservation, alongside significant potential to promote sustainable community resilience.

RESULTS AND DISCUSSION

This study aims to explore how the integration of geological heritage and religious tourism contributes to the resilience of local communities in the Safarwadi Cave area. The findings of this study are presented in three sub-focuses that are directly related to the research questions: (1) the form of integration between geological heritage and religious tourism, (2) community involvement in area development, and (3) the contribution of this integration to the resilience of local communities.

Integration of Geological Heritage and Religious Tourism

The entrance to Safarwadi Cave is the first part that shows the characteristics of a tropical karst system. The rock walls shown in the picture indicate the process of carbonate rock dissolution, forming natural cavities with uneven and grooved surface textures. The greenish-brown colour and damp surface indicate ongoing geochemical activity, making this area part of an active cave system. Epiphytic vegetation such as mosses, ferns, and climbing plants grow around the cave entrance, indicating a moist and ecologically balanced microenvironment. The presence of drainage grilles on the cave entrance floor indicates infrastructure intervention aimed at improving visitor accessibility and safety without compromising the cave's natural character. This facility also reflects conservation-based tourism efforts to preserve the area. Thus, the entrance to Safarwadi Cave serves not only as a physical access point to the cave but also as the starting point for interpreting its geological, ecological, and spiritual values.



Figure 1.
The entrance to Safarwadi Cave
Source: Author's documentation, 2025

The integration of geological heritage and religious tourism at Safarwadi Cave represents a unique synergy that distinguishes this site as a multifaceted geotourism destination in West Java, Indonesia. The cave, a product of karstification processes within the Kalipucang Formation, features an array of speleothems stalactites, stalagmites, and flowstones that showcase geological evolution spanning millennia. These natural formations are not only scientifically significant but also imbued with spiritual importance due to their association

with Syekh Abdul Muhyi, a prominent Islamic scholar whose tomb lies in close proximity to the cave. This convergence of geological and religious narratives creates a tourism experience that appeals to diverse audiences, blending scientific inquiry with spiritual reverence.

Field observations demonstrate that this integration is effectively woven into the visitor experience. Information boards strategically placed throughout the cave complex detail the geological processes responsible for its formation, such as the dissolution of carbonate rocks and the deposition of minerals forming speleothems. These scientific explanations are enriched by oral traditions narrated by local guides, who highlight the cave's sacred history tied to Syekh Abdul Muhyi's spiritual practices. A local guide noted, "This cave is a testament to nature's power and a sanctuary for the soul. The speleothems are like pillars of a natural mosque, guiding us to reflect on both creation and the Creator." This narrative fusion underscores a high degree of integration between the site's spiritual and scientific dimensions.

The management of Safarwadi Cave further exemplifies this integration. The local Tourism Awareness Group (Pokdarwis) has crafted guided tours that seamlessly combine geological education with religious storytelling. During peak pilgrimage periods, special tours incorporate geological interpretations alongside religious activities, such as prayers and recitations held at specific cave locations. This approach not only enhances the visitor experience but also reinforces the cultural and geological significance of the site, fostering a sense of place and identity for the local community.

Visitor responses highlight the success of this integrated approach. Interviews reveal that the combination of geological and religious elements significantly enriches their experience. One visitor commented, "I was drawn by the cave's natural beauty, but its spiritual story gave it a deeper meaning. It's a rare blend of learning and feeling connected." Feedback collected by site managers consistently reflects high satisfaction, indicating that the dual narrative resonates with tourists and enhances their appreciation of Safarwadi Cave.

The local community's role as both guardians of the geological heritage and custodians of religious traditions is pivotal to this integration's success. By harmonizing scientific knowledge with spiritual values, Safarwadi Cave emerges as a model of sustainable tourism that bridges geotourism and religious tourism. This holistic approach not only attracts visitors but also strengthens community resilience by leveraging local heritage, making it a valuable case study for geotourism development worldwide.

Beyond its geological marvels, Safarwadi Cave holds deep cultural and spiritual significance for the local community. The results of observations and interviews indicate that the integration of geological and religious values at Safarwadi Cave occurs naturally and culturally. The cave, formed from a karst system with speleothem structures and underground water flows, is not only a natural wonder but also a spiritual site visited by thousands of pilgrims each year. The historical narrative of Syekh Abdul Muhyi, who spread the Syattariyah Order, strengthens the spiritual connection of the community to this site. This integration is evident in the combination of geotourism information boards with religious historical markers, as well as the availability of tour packages that include both pilgrimage and geological education. This reinforces the findings of Prasetyo et al. (2023) that geotourism destinations containing cultural or spiritual elements have stronger appeal and impact on the preservation of local values.

Safarwadi Cave is a real example of an active karst system formed through the dissolution of limestone by water containing carbon dioxide (CO_2). This process produces various cave ornaments, such as stalactites and stalagmites, formed from the accumulation of calcium carbonate ($CaCO_3$) resulting from water droplet precipitation. Images taken from this cave show rough, uneven rock textures dominated by white, greyish, brown, and black colours. The white colour indicates the presence of calcite deposits, while the reddish-brown colour is likely caused by iron oxide, and the black colour comes from manganese deposits or microbial growth.



Figure 2.
Karst
Source: Author's documentation, 2025

Stalagmites and Stalactites in Safarwadi Cave: A Geological Marvel and the Importance of Conservation

Safarwadi Cave, situated in West Java, Indonesia, is an extraordinary karst cave that showcases remarkable geological formations, including stalagmites and stalactites. These formations are the result of a gradual natural process involving water and minerals, evolving over thousands of years. Beyond their visual allure, the stalagmites and stalactites in this cave possess significant scientific value and serve as a key attraction for geotourism. However, due to their delicate nature, it is essential to prioritize the preservation of the cave's environment.



Figure 3.
Stalactites
Source: Author's documentation, 2025

Stalagmites are intriguing rock formations that rise from the cave floor. Their formation begins when rainwater seeps through the soil and rocks above the cave. As the water traverses layers of limestone, it dissolves minerals, such as calcium carbonate. When this mineral-rich water drips from the cave ceiling to the floor, the evaporation of carbon dioxide (CO_2) leaves behind small mineral deposits. This process can be likened to the gradual accumulation of wax on a table each drop contributes a layer, ultimately leading to the formation of a stalagmite. In Safarwadi Cave, the surface of the stalagmites exhibits a wet and slippery appearance, signifying ongoing mineral deposition and growth. Should the surface appear dry, it might indicate a cessation of this natural growth process. The brownish hue of the stalagmites is often attributed to a combination of other minerals, including iron oxide which imparts a rusty color and organic materials from the soil, such as decomposed plant matter transported by water.

Stalactites serve as the counterpart to stalagmites, forming as they hang from the cave ceiling. The process of stalactite formation is quite similar: mineral-rich water seeps through cracks in the overhead rock and drips from the ceiling. Water droplets that remain suspended momentarily before falling leave behind minute mineral deposits, gradually shaping spiky structures that resemble droplets frozen in time.

In Safarwadi Cave, the stalactites display a yellowish to brownish tint with a wet sheen, likely due to the presence of iron oxide or clay minerals carried by the water. This sheen indicates that the deposition of minerals is an active process, suggesting that these formations continue to grow. Their pointed, hanging shapes contribute to the cave's enchanting ambiance, resembling natural chandeliers created by nature. One of the captivating features of Safarwadi Cave is the presence of early column formations, where stalagmite-like structures emerge directly beneath stalactites. This phenomenon suggests the initial stages of column formation, when stalagmites and stalactites draw closer together and eventually converge, creating mineral pillars that link the cave floor to the ceiling. This process, which can span tens of thousands of years, highlights the remarkable patience of nature in crafting this subterranean masterpiece.

The ongoing growth of stalagmites and stalactites points to the fact that Safarwadi Cave is part of an active hydrogeological system. Such systems comprise a network of water flow

within geological structures, including caves and underground aquifers. The activity of this system indicates that water continues to traverse the cave, delivering minerals and fostering the creation of new formations. This emphasizes that caves are dynamic environments, continuously evolving rather than stagnant.

The delicate nature of stalagmites and stalactites renders them highly vulnerable to damage. Human interaction, for instance, can leave oils or contaminants that hinder these formations' growth. Variations in temperature or humidity within the cave can disrupt the intricate process of mineral deposition. Additionally, pollution be it from smoke or sewage can adversely affect the water's chemical composition and compromise the integrity of these formations. Therefore, maintaining the pristine conditions of cave ecosystems is paramount. Moreover, these geological formations encapsulate valuable insights about Earth's history. The layers within stalagmites and stalactites serve as a natural archive; by studying them, researchers can gain understanding into ancient climates, historical rainfall patterns, and even human activity from the past. Damaging these formations would mean losing essential opportunities to uncover the historical narrative of our planet.

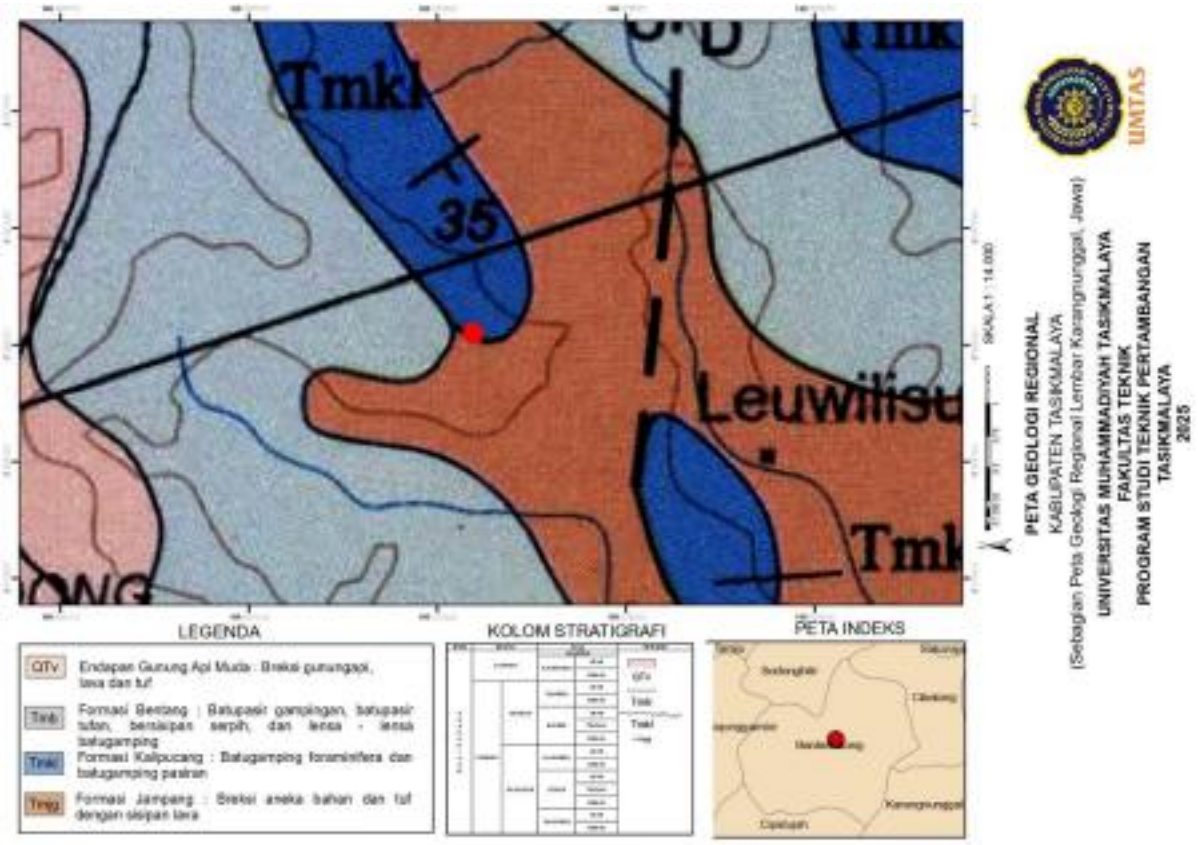


Figure 4.
Map
Source: Author's documentation, 2025

Scientifically, stalagmites and stalactites represent invaluable resources for studying geological processes and environmental changes across millennia. Aesthetically, their unique shapes and colors transform caves into breathtaking underground galleries. This natural beauty also draws interest from geotourism, which emphasizes appreciation for geological features. It is crucial, however, to manage geotourism sustainably, ensuring the preservation of cave environments. Strategies may include limiting visitor numbers and establishing designated paths to minimize disturbances to these fragile formations. By adopting mindful practices, we can continue to enjoy and protect the wonders of Safarwadi Cave for future generations.

Safarwadi Cave is geographically located in Pamijahan Village, Bantarkalong Subdistrict, Tasikmalaya Regency, West Java, at coordinates 7.564873° S and 108.074525° E. Geologically, this area is part of the Kalipucang Formation, composed of marine sedimentary rocks such as coral reef limestone, sandstone, and shale, dating from the Early to Middle Miocene period. This formation is widely recognised in southern West Java as the primary component of the active karst system in the southern part of Tasikmalaya. The presence of the Kalipucang Formation in Safarwadi Cave explains the formation of cave ornaments such as stalactites and stalagmites, as well as the complex underground water flow system, which formed through the dissolution of carbonate rocks by water containing carbon dioxide (Maulidita et al., 2022).

Structurally, this area is part of the back-arc basin tectonic zone, which has undergone uplift and folding due to regional tectonic activity in southern Java. This characteristic reinforces the cave's role as part of geological heritage (geoheritage) with high scientific, educational, and conservation value.

Community Involvement in Area Development

The local community plays a central role in the management of the Safarwadi Cave area. Local residents are involved in guiding activities, parking management, selling local products, and maintaining environmental cleanliness. Women also play a dominant role in informal economic activities such as food stalls, handicraft production, and simple accommodation services. This information was obtained through in-depth interviews with members of the Tourism Awareness Group (Pokdarwis) and local community leaders. This active participation aligns with the community empowerment theory proposed by Ulum and Anggaini (2020), which states that community resilience is formed through collective involvement in long-term social and economic activities.

Additionally, it was found that the community consciously maintains a balance between economic needs and religious values. For example, cave cleanliness is managed voluntarily by residents because they believe the place to be sacred. This finding reinforces the results of Putri et al's (2020) research in the Ciletuh Geopark area, which states that community involvement in tourism management based on local wisdom encourages environmental preservation and cultural identity strengthening.



Figure 5.
Interview Documentation with Mr. Lili
Source: Author's documentation, 2025

The documentation of the interview with Mr. Lili, one of the managers of the Safarwadi Cave tourist area, reflects the active involvement of the community in the sustainable preservation and development of local potential. Located at the main entrance of the site, Mr. Lili explained how the community, through the Tourism Awareness Group (Pokdarwis), directly participates in providing facilities, managing parking, and educating visitors about the geological and spiritual values of the cave. This involvement reflects the growing collective awareness of the importance of preserving the area while utilizing it as a sustainable economic resource.

Moreover, the presence of local managers like Mr. Lili strengthens their role as guardians of historical narratives and facilitators in utilizing the cave as an educational tourist destination. According to his account, there has been an increase in residents' awareness of maintaining cleanliness, environmental sustainability, and the emergence of initiatives to provide geotourism information to pilgrims and general tourists. These findings confirm that a community-participatory approach not only strengthens social and economic aspects but also builds the foundation of community resilience

through the harmonious integration of natural and cultural potential.

Contributions to Local Community Resilience

The integration of religious tourism and geotourism at Safarwadi Cave demonstrates tangible contributions to strengthening community resilience across three main dimensions: social, economic, and cultural. In the social dimension, intergenerational involvement in managing the tourism area strengthens social cohesion while ensuring the transfer of local knowledge. In the economic dimension, the presence of tourism activities creates new income sources, expanding economic options for the community, particularly for those previously reliant on the agricultural sector. Meanwhile, in the cultural dimension, historical narratives and religious practices remain alive and preserved through ongoing interaction between local residents and visitors.

The research findings reveal that community resilience does not stem solely from the ability to adapt to challenges but also from the strengthening of local values rooted in history and spirituality. This finding expands the perspective on community resilience, shifting from a focus on responses to disasters or crises to a model of resilience built on local potential and spiritual strength (Sarnoto & PdI, 2025).

Theoretical Implications and Development

The findings of this study not only reinforce existing theories but also highlight the importance of expanding the concept of geotourism through a spiritual geotourism approach, which is geology-based tourism that integrates spiritual and cultural values in a balanced manner. The theoretical model of geotourism, which has traditionally focused on educational and conservation aspects, shows potential for modification by incorporating the spiritual dimension as an integral part of both tourist attraction and conservation strategies. The contribution of this research lies in the development of a geotourism framework rooted in religious values and the strengthening of the concept of community resilience through the addition of cultural and spiritual resilience elements.

CONCLUSION

This study concludes that integrating geological heritage and religious tourism in Safarwadi Cave has a positive impact on the resilience of local communities, particularly with regard to social, economic and cultural aspects. The area's sustainability is supported by local involvement. This involvement is key to its management and preservation. The pragmatic ramifications of this research underscore the significance of a community-based approach in cultivating geotourism that also accentuates spiritual values. The government and tourism managers are advised to prioritise education, cultural preservation and community economic empowerment. The study's limits are that it looks at only a few places, it was short, and it doesn't look at how much of an effect it had. Therefore, future research is recommended that expands the location, adopts a mixed-methods approach and explores the concept of spiritual geotourism in various local contexts.

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