

PILGRIMAGE, FOLKLORE, AND ECOLOGICAL ETHICS: SYMBOLIC CONSERVATION PRACTICES IN DIENG'S SACRED LANDSCAPE, INDONESIA

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Abstract: This study examines the ecological and symbolic roles and meanings embedded in folklore associated with sacred sites on the Dieng Plateau, Indonesia. It explores how these narratives reflect cultural values, transmit ecological knowledge, and shape the relationship between local communities and their environment. A qualitative ethnographic approach was employed. Data were collected through participant observation and semi-structured interviews with local community members, the village head, the leader of the tourism awareness group, and village elders. The interview transcripts were thematically analyzed to identify and interpret recurring patterns and themes. The findings demonstrate that sacred sites on the Dieng Plateau, including ancestral burial sites, Jalatunda Well, Candradimuka Crater, Sileri Crater, Merdada Lake, Sikidang Crater, and Sedayu and Maerokoco Springs, serve as significant destinations for pilgrimage. Three main ecological themes emerge from local folklore: 1) Water is portrayed as essential for spiritual rituals and the physical survival of the community; 2) Folklore emphasizes the interdependence between humans and their environment, reflecting local wisdom in natural resource management and ecological balance; and 3) Stories highlight the immense and sometimes unpredictable power of nature, serving as warnings about environmental respect and the limits of human control. These sacred sites preserve local cultural values while conveying universal messages that underscore the importance of environmental conservation.

Keywords: Dieng Plateau, ecological wisdom, folklore, sacred ecology, sacred sites

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INTRODUCTION

Sacred landscapes have long been recognized as spaces where ecological, cultural, and spiritual values converge (Gahalot et al., 2025). Across the world, communities have imbued particular places with symbolic meanings, transforming natural features such as mountains, lakes, forests, caves, and springs into sanctuaries of memory, spirituality, and ecological wisdom (Marini Govigli et al., 2021). Anthropological and ecological studies reveal that such spaces function not merely as religious centers but also as living archives of local cosmologies, repositories of traditional ecological knowledge, and instruments of environmental regulation (Ormsby, 2021; Shiferaw et al., 2023). Pilgrimage practices, ritual activities, and folklore narratives associated with sacred places establish moral frameworks that guide human interaction with the natural environment. In this sense, sacred landscapes represent an essential dimension of intangible cultural heritage while contributing to biodiversity protection and the conservation of natural ecosystems (Sponsel, 2020).

The concept of sacred natural sites is not confined to any cultural or religious tradition but appears across continents and civilizations. From the Way of St. James in Spain to sacred groves in India, from shrines in Africa to mountains in East Asia, communities worldwide sustain worldviews that situate nature within a cosmological order demanding reverence and stewardship. These sites often overlap with ecologically fragile areas, enhancing their role as informal conservation zones. Local taboos, ritual prohibitions, and belief systems frequently prevent the exploitation and overuse of natural resources (Cloud & Redvers, 2023). Folklore plays a crucial role in sustaining perceptions of sacredness: narratives of ancestral spirits, mythic beings, and cosmological events anchor cultural memory to specific geographical features, reinforcing their spiritual and ecological significance (Al-Qobbaj & Marshall, 2024). The interplay between myth and landscape generates a cultural ecology with symbolic and material dimensions.

In Southeast Asia, the interrelation of folklore, pilgrimage, and ecology is particularly prominent in the Indonesian archipelago, where syncretic religious traditions and diverse local cosmologies converge. Sacred landscapes in Java, Bali, Sumatra, and Kalimantan are not only sites of ritual practice but also preserved as cultural heritage spaces that connect past and present. Scholars of Indonesian folklore and anthropology have documented how these landscapes carry embedded ecological values transmitted through oral narratives and ritual practices (Hakim et al., 2023; Sundari, 2021). Local communities often perceive sacred places as domains guarded by supernatural beings, and this perception regulates human

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activity by delineating zones of respect, prohibition, and ritual care. The ecological ethics encoded in such practices resonate with contemporary sustainability discourses, particularly in relation to the Sustainable Development Goals (SDGs), which emphasize the protection of terrestrial ecosystems and the halting of biodiversity loss (Haines et al., 2023).

The Dieng Plateau in Central Java offers a particularly compelling case study of a sacred landscape where pilgrimage, folklore, and ecological ethics intersect. Situated more than 2,000 meters above sea level, the plateau straddles the regencies of Wonosobo and Banjarnegara. Dieng is renowned for its volcanic activity, geothermal phenomena, crater lakes, and ancient temple complexes dating back to the eighth century. The etymology of “*Dieng*,” derived from the Javanese Kawi *Di-Hyang* or “abode of the gods,” reflects its long-standing association with spirituality and sacred power (Sukatno, 2004). Archaeological evidence shows that Dieng functioned as an important center of Hindu religious activity during the Old Mataram Kingdom, while later centuries witnessed the assimilation of Buddhist, Islamic, and indigenous Javanese traditions (Atmaja & Ba’in, 2019; Kurniawan et al., 2022).

Although Islam predominates in present-day Dieng, local communities sustain syncretic traditions that combine Islamic rituals with older spiritual practices. Sacred sites such as ancestral burial sites, Jalatunda Well, Candradimuka Crater, Sileri Crater, Merdada Lake, Sikidang Crater, Sedayu Spring, and Maerokoco Spring serve as focal points for pilgrimage, meditation, and ceremonial rituals (Surpi et al., 2021). Pilgrims engage in *Napak Tilas*, literally “tracing the footsteps,” a ritual performed before major ceremonies that involves seeking permission from ancestors and unseen guardians of the land (Sundari, 2021). These practices embody an awareness of human dependence upon natural and supernatural forces and operate as cultural mechanisms for maintaining ecological balance. Local custodians and elders, acting as cultural guardians, reinforce the sanctity of these sites through ritual performance and moral authority.

Beyond their ritual significance, the sacred sites of Dieng also embody ecological ethics. Springs, craters, and lakes embedded in local folklore are frequently designated as taboo zones where exploitation, deforestation, and pollution are strictly prohibited. Such prohibitions are enforced not solely through state regulation but also through collective belief and social sanctions grounded in local cosmology (Griffin & Barney, 2021). As a result, many sacred areas remain ecologically preserved, functioning as informal conservation zones that safeguard biodiversity, soil, and water resources. Folklore surrounding particular springs, for example, portrays them as sources of spiritual energy and life-giving water, reinforcing the imperative to maintain their purity. Likewise, narratives of catastrophic eruptions and supernatural punishments underscore the perils of ignoring nature’s power, serving as cultural warnings against ecological mismanagement.

However, despite the cultural and ecological significance of sacred landscapes, modernization and global tourism present mounting challenges. Increasing visitor numbers, the commodification of ritual practices, and infrastructural development threaten the integrity of sacred traditions and ecological systems (Cloud & Redvers, 2023).

At the same time, rural depopulation and generational shifts risk weakening the transmission of oral traditions that sustain the sacred status of sites (Stara et al., 2016). These dynamics underscore the urgency of documenting, analyzing, and interpreting the folklore and pilgrimage practices of communities such as those in Dieng to preserve cultural heritage and support sustainable environmental management. Existing research on sacred sites in Indonesia has highlighted the persistence of syncretic traditions, the symbolic role of natural features, and the influence of folklore on community behavior (Sumarwati, 2022; Björkman, 2021). Nonetheless, much of this scholarship has tended to emphasize either the religious dimensions of pilgrimage or the archaeological significance of temple complexes, leaving the ecological symbolism of folklore comparatively underexplored. For instance, while studies of Mount Lawu have demonstrated how sacred trees and caves are preserved through prohibitions grounded in folklore (Sumarwati, 2022) there remains a need for systematic research that explicitly interprets folklore in relation to ecological ethics within other sacred landscapes. Similarly, comparative analyses stress that folklore mediates the relationship between the visible and invisible worlds, thereby regulating human activity (Al-Qobbaj & Marshall, 2024).

However, they seldom integrate this perspective with the pressing contemporary concern of environmental conservation. This lacuna becomes particularly significant when considering the potential contributions of local knowledge systems to global sustainability agendas. Building on this context, the present study investigates the convergence of pilgrimage practices, folklore, and ecological ethics within the sacred sites of the Dieng Plateau. It examines how oral narratives and ritual traditions embody ecological wisdom, guide human interaction with the environment, and sustain conservation values across generations. By framing folklore as a dynamic cultural resource rather than a static relic, this research underscores its significance as a medium of environmental stewardship. As a result, the study contributes to broader academic discourses on sustainability, cultural preservation, and indigenous ecological knowledge by foregrounding the symbolic conservation practices embedded in Dieng’s sacred landscape.

THEORETICAL REVIEW

Sacred Sites and Folklore

Research on sacred sites and folklore has attracted sustained scholarly interest across disciplines such as anthropology, cultural studies, religious studies, and environmental conservation. Sacred sites are commonly conceptualized as landscapes imbued with spiritual or cosmological significance, often associated with shrines, temples, mosques, churches, pilgrimage routes, or natural features perceived as manifestations of divine presence (Liutikas, 2025). Their sacred character is typically reinforced through taboos and customary laws that regulate human behavior and restrict resource exploitation. As Lawasi et al. (2025) note, many sacred sites represent some of the earliest forms of protected areas, where spiritual prohibitions effectively function as conservation mechanisms. Berkes (2017) similarly emphasizes that sacred places frequently serve as focal points for community-based conservation, with the spiritual

dimension of human–nature relations safeguarding ecological systems. By attributing sacred qualities to specific landscapes, communities establish moral obligations and restrictions, including prohibitions against cutting trees, hunting, or altering the environment. Such practices contribute substantially to ecological resilience and biodiversity conservation. Folklore plays a central role in sustaining sacredness. Through myths, legends, ritual narratives, and oral traditions, communities legitimize and transmit the values associated with sacred landscapes.

These narratives articulate taboos, framing environmental protection within cosmological or ancestral belief systems. Sponsel (2020) argues that folklore-based prohibitions and rituals often ensure stronger compliance than state-imposed regulations because they are grounded in lived cultural and spiritual experiences. Empirical studies corroborate this view: Maru et al. (2023) documented how sacred forest patches in East Africa have been preserved primarily through taboo systems embedded in local folklore; Sinclaire et al. (2024) reported similar findings in South Asian sacred groves, highlighting their role as biodiversity refugia; and Slack (2023) showed that community-driven conservation practices anchored in spiritual beliefs often endure longer than formal conservation policies.

Despite their significance, studies of sacred sites and folklore are not without limitations. Much of the scholarship adopted a romanticized perspective, portraying sacred sites as uniformly successful conservation models. This tendency obscures intra-community contestations, generational shifts in belief, and the pressures of globalization, all weakening the authority of traditional taboos. Moreover, most research has concentrated on South Asia and Africa, with relatively limited attention to Latin America, Europe, and Oceania. Another limitation is the emphasis on ecological outcomes at the expense of assessing the sustainability of folklore traditions, particularly whether oral narratives are effectively transmitted to younger generations. These gaps underscore the need for more nuanced, comparative analyses addressing ecological and cultural sustainability.

Sacred Ecology

The theoretical framework of sacred ecology, first articulated by Berkes (2017), provides a vital lens for examining the interconnections among sacred sites, folklore, and environmental conservation. Sacred ecology posits that ecosystems should not be regarded solely as material resources but as sacred entities endowed with moral, spiritual, and cultural dimensions. Within this framework, human–nature relationships are characterized by reciprocity, wherein respect, ritual, and moral obligation regulate the use of resources. Indigenous knowledge systems exemplify this worldview. For instance, the Cree and Dene communities of North America, the Māori of New Zealand, and the Fijians of the South Pacific conceptualize ecosystems as relational and vibrant, with humans coexisting alongside other beings through reciprocal exchanges (Berkes, 2017). Beveridge (2021) and Sinthumule (2023) similarly document cultural practices in which animals are understood to provide sustenance in exchange for ritual acknowledgment or moral respect.

Despite its explanatory strength, the application of sacred ecology is not without challenges. The integration of indigenous cosmologies into formal policy frameworks often encounters obstacles in pluralistic and secular governance systems. Moreover, indigenous ecological knowledge is increasingly threatened by modernization, migration, climate change, and religious conversion, all of which destabilize the cultural foundations of sacred ecology. Scholarship has also paid relatively limited attention to how sacred ecology operates in urban or diasporic contexts, where sacred landscapes may exist symbolically rather than physically. These limitations indicate the need for more interdisciplinary and comparative approaches that investigate ecological processes and cultural transformations in contemporary societies.

In recent years, a growing body of scholarship has examined the intersection of folklore, sacred landscapes, and ecological conservation, underscoring their enduring significance and vulnerabilities amid socio-cultural and environmental transformations. Otieno et al. (2023) investigated community-driven conservation practices in Kenya, showing that sacred groves safeguarded through folklore-based taboos play a critical role in biodiversity protection.

Their findings demonstrate that such traditions are not merely symbolic but actively enforced and embedded in daily practices, thereby ensuring ecological sustainability. However, a limitation of the study is its regional focus, which constrains the generalizability of its conclusions to broader cultural contexts. Complementing this perspective, Tatay & Merino (2023) analyzed the ecological role of sacred groves across diverse cultural settings, highlighting how sacred narratives and mythologies underpin long-term ecological resilience. Their work emphasizes the interdependence of spirituality and conservation, showing how intangible cultural heritage (e.g., rituals, myths, and taboos) translates into tangible ecological outcomes by fostering community stewardship and deterring exploitative practices.

However, while their study illustrates the resilience and enduring cultural significance of sacred landscapes, it does not fully account for material socio-economic pressures, governance challenges, and environmental changes that increasingly threaten these groves. This omission leaves questions about how sacred narratives can be effectively integrated into modern policy frameworks to ensure sustained ecological protection. Extending this discourse, Slack (2023) argues that belief systems grounded in folklore often result in stronger compliance with conservation norms than state-enforced policies, particularly in indigenous contexts. This insight underscores the potential of non-state governance models, which sometimes outperform formal regulations.

Nonetheless, Slack (2023) acknowledges that reliance on folklore alone cannot substitute for comprehensive ecological policies, raising important questions about scalability and adaptability in diverse socio-political settings. Similarly, Lawasi et al. (2025) examined sacred landscapes in Indonesia, focusing on the interplay between spiritual traditions and modern conservation practices. Their findings suggest that rather than existing in opposition, traditional and modern approaches can be harmonized to create more inclusive and context-sensitive conservation models.

Despite this valuable contribution, their emphasis on successful integration leaves less attention to cases where tensions between tradition and modernity generate conflict or ecological degradation.

Finally, Le-Thi-Ngoc & Nguyen (2021) explored indigenous spiritual practices in Vietnam, documenting how the Khmer ethnic community's rituals surrounding a sacred pond are being reinterpreted in the context of climate change. Their research demonstrates how folklore and faith-based traditions can underpin resilience and environmental protection, highlighting the adaptability of sacred practices in dynamic ecological contexts. Nevertheless, the researchers concede that further research is needed to evaluate the long-term effectiveness of these adaptive strategies in mitigating climate-related risks. These prior studies collectively affirm the pivotal role of folklore and sacred landscapes as mediators of ecological governance, while also exposing the structural limitations that emerge when traditional knowledge systems confront globalization, modernization, and climate change. Building on this body of work, the present study critically examines the mechanisms through which folklore contributes to ecological resilience in local communities, with particular attention to how such practices are negotiated, transformed, and sustained amid contemporary socio-environmental challenges.

MATERIALS AND METHODS

Research Design

This study adopted a qualitative research design grounded in ethnographic methods, drawing on the frameworks of Miles et al. (2014) and O'Reilly (2012), with participatory observation as the primary data collection technique. A qualitative approach is particularly suited to examining the ecological and symbolic roles and meanings embedded in folklore associated with sacred sites on the Dieng Plateau, Central Java, Indonesia.

Figure 1 is divided into three panels to contextualize the research site geographically. Panel (a) shows the location of Banjarnegara Regency on Java Island, with a red box marking its position within Central Java Province.

Panel (b) provides a closer view of Banjarnegara and its neighboring regencies (Purbalingga, Pekalongan, Batang, and Wonosobo), highlighting the Dieng Plateau as the focal area of this study.

Panel (c) presents the altitude map of the Dieng Plateau, detailing topographical features and administrative boundaries across Banjarnegara, Batang, and Wonosobo Regencies. The Dieng Plateau, located in Banjarnegara Regency, Central Java, is a highland region with elevations ranging from 1,200 to 1,800 meters above sea level.

The map was developed in 2024 using publicly available digital elevation models (DEM) and official cartographic datasets, processed with Geographic Information System (GIS) software to accurately visualize altitude distribution.

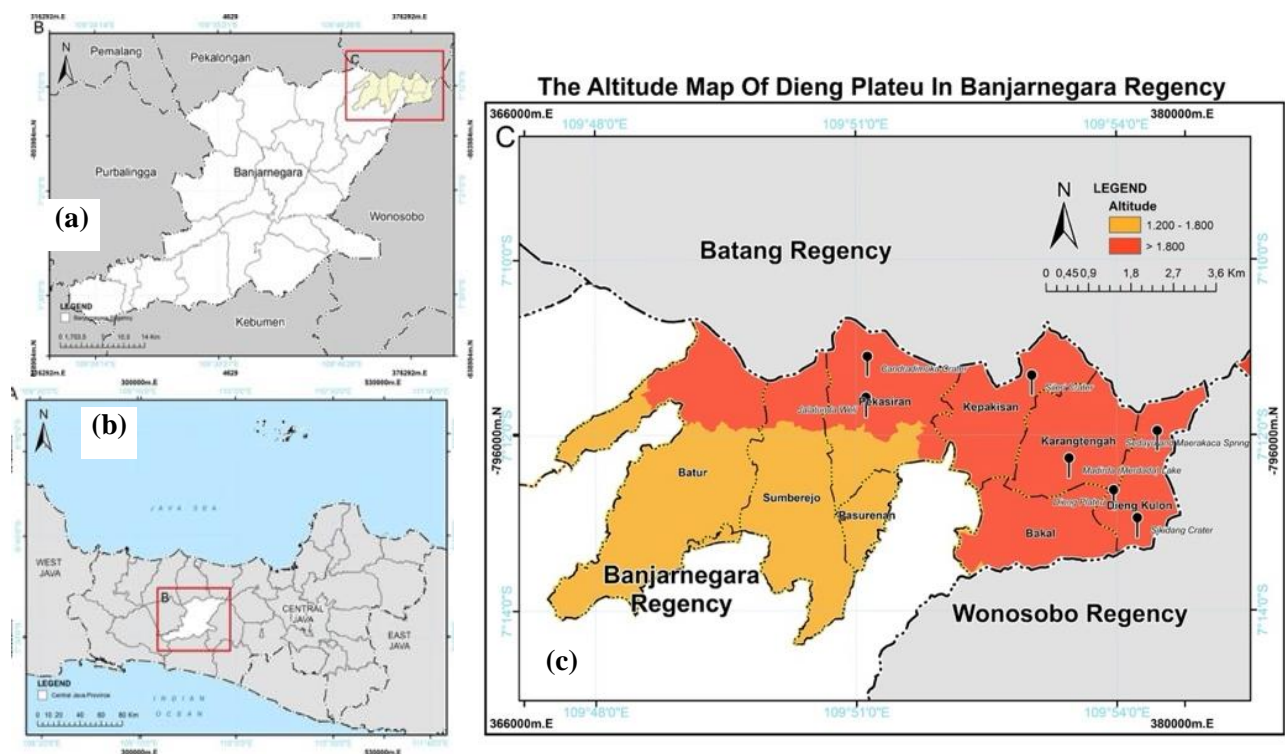


Figure 1. Map of Local Pilgrimage Point

Data Collection

Data were collected through observations and interviews on the Dieng Plateau in Central Java, Indonesia. The data obtained were in the form of folklore related to sacred sites on the Dieng Plateau, where pilgrimages were conducted. The data were then documented in interview field notes. Folklore data from these sacred sites were collected through in-depth interviews. Data collection employed a purposive sampling technique (Gubrium et al., 2012) to gain rich and diverse insights from various perspectives representing the social strata.

After participating in a pilgrimage at sites considered sacred by the Dieng people, the researchers conducted interviews to obtain data on the folklore associated with these sacred sites. Data source triangulation and member checking were employed to ensure data validity (Creswell & Creswell, 2018). The informants' profiles can be seen in Table 1.

Table 1. Profile of Research Participants

Informant	Initial Name and Age	Gender
4 local people taking part in pilgrimages at sacred sites	F (37 years old); BA (45 years old)	F
	AP (40 years old); IM (40 years old)	M
1 village head	SB (60 years old)	M
1 head of tourism awareness group	A (45 years old)	M
2 village elders	S (70 years old); IS (65 years old)	M

Data Analysis

After transcribing the interview data, thematic analysis was conducted to identify, analyze, and understand the thematic patterns or themes present in the data. This approach, as described by Braun & Clarke (2021), is shown in Table 2 below.

Data collection and analysis were performed simultaneously. The data were then organized into groups identified by various codes, allowing the researchers to derive the main points and general meanings repeated throughout the data. From these codes, patterns were identified, and three main themes emerged: 1) sacred sites visited by the pilgrims on the Dieng Plateau, 2) folklore related to these sacred sites, and 3) symbols and ecological meanings derived from the folklore.

Table 2. Thematic Pattern Analysis by Braun & Clarke (2021)

Analysis Phase	Description
Familiarization with data	Reading and rereading the transcripts several times
Coding data	Generating codes from the data
Searching for patterns	Defining and naming patterns emerging from the coding
Producing the report	Reporting the results of the previous stages

RESULTS AND DISCUSSION

Folklores Related to the Sacred Sites During *Napak Tilas* ('Local Pilgrimage') in the Dieng Plateau

The Dieng Plateau community performs the pilgrimage ahead of the traditional dreadlock-cutting ceremony. The purpose of this ritual is to ask for the blessing of ancestors, as conveyed by the informant, a local person, in the following interview excerpt. "Therefore, *Napak Tilas* is an activity whose purpose is to ask for the blessing of ancestors on the Dieng Plateau, including the founders of Dieng, the deceased elders, and the supernatural guardians who have been guarding the Dieng Plateau." (Local Resident, F, 37 years old)

"Hopefully, the dreadlock-cutting event will run smoothly after getting permission." (Local Resident, BA, 45 years old)

The holy sites visited were: 1) Ancestral cemetery, 2) Jalatunda Well, 3) Candradimuka Crater, 4) Sileri Crater, 5) Merdada Lake, 6) Sikidang Crater, 7) Sedayu and Maerokoko Springs. These seven places are considered sacred and have historical stories; some are believed to be where the guardian spirits of the Dieng Plateau area reside. Based on in-depth interviews, complete oral stories about each shrine at the pilgrimage destinations are summarized in Table 3.

Table 3. Sacred Sites and Oral Folklores

Sacred Places Visited During the Local Pilgrimage	Folklore
Ancestral Cemetery	The legend of the founding figures of Dieng Plateau, Ki Mangkuyuda and Ki Natayuda, who are believed to have spread Islam in Dieng.
Jalatunda Well	The legend of Nyi Roro Kidul's supernatural realm. There is a belief that anyone who manages to throw a pebble across the Jalatunda Well will have their wish granted. This is related to the Dieng community's belief that the well is directly connected to the Java Southern Sea, controlled by the supernatural queen Nyi Roro Kidul.
Candradimuka Crater	The Legend of Gatokaca. Candradimuka Crater is the place where characters from the Javanese puppet story, Gatokaca and Wisanggeni, were thrown into the crater as babies. Instead of dying, they became powerful due to the magical properties of the crater.
Sileri Crater	Sileri Crater is named after "Leri," which means rice-washing water in Javanese. The crater has murky water, similar to rice-washing water. According to legend, an old lady once accidentally spilled rice-washing water, which eventually turned into Sileri Crater.
Madirda (Merdada) Lake	The legend of Sumurup and Merdada Lake. According to the story of the Dieng people, the formation of Merdada Lake stems from the story of two brothers. The older brother was asked to look after Sumurup Lake, while the younger brother was asked to look after Merdada Lake.
Sikidang Crater	The Legend of the Jumping Deer. " <i>Kidang</i> " is the Javanese word for " <i>Kijang</i> " or "Deer." It is said that Sikidang Crater always has different locations. The crater's appearance is often not the same; sometimes it is on the west side, sometimes on the east side. This is believed to be caused by a magical deer that always runs and jumps, causing the crater to move.
Sedayu and Maerokoko Springs	The Legend of the Supernatural Beings Guarding the Springs. Sedayu and Maerokoko Springs, considered sacred, are believed to be protected by supernatural beings.

The folklore shown in the table is a summary of the results from the in-depth interviews conducted during and after the pilgrimage. This routine is viewed not only as a traditional ritual but also as the main medium for reviving legendary stories passed down through generations. Local people believe that the pilgrimage is a spiritual journey that cannot be

separated from the stories of ancestors, who are considered sacred. This is exemplified when ritual prayers are performed for figures like Ki Mangkuyuda and Ki Natayuda, as shown in Figure 2.



Figure 2. Pilgrims at ancestral cemetery (August 2024) (Source: Authors' photographs)

Figure 2 consists of two panels documenting the practices of pilgrims at an ancestral burial site. Panel (a) shows a group of pilgrims gathered inside a hall adorned with traditional ornaments and a national flag, where ritual activities are performed. Panel (b) depicts pilgrims seated outdoors near ancestral graves beneath large trees, illustrating the continuation of the pilgrimage in an open-air setting. These activities took place at the ancestral burial complex in Banjarnegara Regency, Central Java, and the photographs were taken in August 2024. The images were captured directly by the researchers using a mobile camera during participant observation to record the indoor and outdoor dimensions of the pilgrimage.

When visiting Merdada Lake, it was explained that its name originates from the word "*Mardida*," a term embedded in Javanese cultural puppetry. This term is linked to the story of siblings fighting over the *Cupu Manik Astagina* in the Ramayana. The story later evolved in relation to the culture of the Dieng people. The following is an interview excerpt from a local elder. "Merdada Lake was not originally filled with water. The story tells of two brothers who created water sources in their respective areas. The older brother succeeded in creating a lake and filling it with water. However, the younger brother faced difficulties in finding a water source." (Village Elder, S, 70 years old)

"Eventually, when the older brother was caught off guard, the younger brother made a hole to drain water from the lake. Today, the older brother's lake is known as Telaga Sumurup because it is dry and only appears occasionally. The younger brother's lake is now always filled with water and is called Telaga Merdada." (Village Elder, IS, 65 years old)

The people of the Dieng Plateau believe that the word "*Merdada*" carries a philosophy that humans must always practice patience. Based on the research results presented in Table 3 ("Sacred Sites and Oral Folklores"), it is evident that *Napak Tilas* (local pilgrimage) activities function as a medium to revive folklore in the form of legends on the Dieng Plateau. During the pilgrimage process, traditional leaders recount folktales about the origins of place names if anyone inquires. This was explained by the elders during a walking tour in the Sikidang Crater area, as shown in Figure 3 below.



Figure 3. A. Pilgrims at Sileri Crater; B. Pilgrims at Sikidang Crater (August 2024) (Source: authors' photographs)

Figure 3 presents two panels illustrating pilgrimage practices at geothermal sites on the Dieng Plateau. Panel (a) shows pilgrims gathered at the edge of the Sileri Crater, performing ritual activities beside the steaming water, while panel (b) depicts pilgrims standing on a wooden walkway overlooking the Sikidang Crater, underscoring the continuation of their visit within a more structured tourist setting. Both activities took place in Banjarnegara Regency, Central Java, and the photographs were taken in August 2024. The images were captured directly by the researchers using a mobile camera during participant observation to document the interaction between pilgrims and the volcanic landscape. These photographs provide visual evidence of the coexistence of religious pilgrimage and volcanic tourism in the Dieng Plateau.

Oral stories related to the Javanese puppet stories from the Mahabharata are also reflected in the legend of the Candradimuka Crater. The Candradimuka Crater in Dieng was formed due to soil cracks that produce sulfurous gas, which is relatively concentrated but considered safe. Natural springs are located around the craters. A source revealed that some pilgrims who visit Dieng with specific desires perform a ritual involving bathing in the spring water near the Candradimuka Crater. This area is considered sacred because of its connection to Javanese mythology, particularly related to the puppet (*wayang*) character Gatotkaca, who gained strength from the Candradimuka Crater.

Puppetry in Java, including in Dieng, has roots in Hindu mythology, especially from the Mahabharata and Ramayana epics, which have been adapted into the local culture. Characters such as Gatotkaca are understood not only as story figures but also as spiritual beings imbued with moral values, ethics, and cosmic symbolism. In Javanese belief, these characters are often regarded as manifestations of supernatural powers or principles of life.

Some important figures in Javanese puppetry are integrated into local legends and blended with folklore about the origins of shrines, village guardians, or supernatural occurrences related to craters, lakes, and temples. As noted in the background of the Dieng Plateau, although the Dieng people are predominantly Muslim, the knowledge and value system of their ancestors, rooted in Hinduism, is still preserved today.

Symbols and ecological meanings through folklore in the dieng plateau

Based on the folklore described previously, these legends convey ecological symbolism. Several findings related to ecological symbols and meanings in Dieng Plateau folklore were as follows.

First, water as a source of life. Jalatunda Well, Merdada Lake, and Sedayu and Maerokoco Springs portray water as an essential element of human existence. Beyond its role as a source of life, water is described as having a spiritual dimension that is both revered and safeguarded. The sanctity of water in folklore reflects the belief among the Dieng people that preserving water sources is a vital part of protecting nature.

“Water in Dieng is very much needed, especially since most of the population are farmers. Water sources such as Merdada Lake are utilized for land irrigation. There are also certain water sources, such as Jalatunda Well, which are not utilized because they are located far from agricultural land.” (Village Head, SB, 60 years old). The name *Jalatunda* derives from two words: *jala*, meaning “net,” and *tunda*, meaning “not yet done.” Interpreted together, the name Jalatunda Well refers to a well that can accommodate all delayed requests. This is linked to the belief that anyone who can throw a stone across the well to the opposite side will have their wishes granted. This kind of folklore also illustrates human dependence on nature. In Figure 4A, local elders and pilgrims are shown climbing the steps to Jalatunda Well.



Figure 4. A. Pilgrims at Jalatunda Well; B. Pilgrims at Candradimuka Crater (August 2024) (Source: authors' photographs)

Figure 4 presents pilgrimage activities at two prominent sacred sites on the Dieng Plateau. Panel (a) shows pilgrims at Jalatunda Well, while panel (b) depicts pilgrims at Candradimuka Crater, with both observations recorded during fieldwork in August 2024. Jalatunda Well is traditionally regarded as a site of spiritual potency and purification, whereas Candradimuka Crater carries symbolic significance in local folklore, representing resilience and transformation. The images were captured by the authors through direct participant observation, documenting pilgrims' ritual practices

within these natural landscapes. The people of the Dieng Plateau also believe that supernatural beings guard the water sources of Sedayu and Maerokoco Springs. The presence of these guardians is one of the reasons why the surrounding community treats the springs with reverence and protects them carefully. This belief is reflected in local testimonies.

“Sedayu and Maerokoco Springs are also not utilized to irrigate farmers’ land. The water in Sedayu and Maerokoco Springs is considered sacred. People from Bali utilize the water for their prayer rituals.” (Local resident, AP, 40 years old)

“When I was a child, there was a friend of mine who urinated near the spring. Afterwards, he fell, became permanently disabled, and was unable to walk normally into adulthood. This was believed to be punishment from the supernatural guardians of the place for his inappropriate behavior.” (Local resident, IM, 40 years old)

Second, human actions can affect nature. The story of Merdada Lake highlights the relationship between social harmony and its ecological consequences. The rivalry between two brothers in guarding the lake becomes a metaphor for how social imbalance can disrupt the natural environment. In Javanese, the word *dada* connotes “vast,” a fitting name as Merdada is the largest lake on the Dieng Plateau. Folklore narrates that Merdada Lake was once dry until the younger brother diverted water from Sumurup Lake to fill it.

“The older brother was busy with his own matters; when he was careless, the younger brother stole his water source to fill Merdada Lake.” (Village elder, IS, 65 years old)

“At first, Little Brother was confused because the lake he had made was dry and unfilled. However, he worked hard to create a water tunnel from Big Brother’s lake. Eventually, it succeeded, and the lake was filled.” (Village elder, S, 70 years old)

This folklore linking Merdada Lake and Sumurup Lake symbolizes the reciprocal relationship between humans and nature. If people neglect nature, as represented by the elder brother, nature ceases to provide benefits. This is reflected in the current condition of Sumurup Lake, which is no longer filled with water. Conversely, if humans care for nature, natural resources will remain abundant, as in the story of the younger brother and Merdada Lake.

Third, nature has the power to surpass human capability. This theme appears in the folklore surrounding sacred sites such as the Candradimuka Crater, which is believed to grant strength and transformative power. In Figure 4B, pilgrims are shown sitting on the crater’s rim to pray and offer ritual offerings. The folklore teaches that nature can act as an agent of human transformation. The Candradimuka Crater, associated with the Mahabharata tale of Gatotkaca’s empowerment, symbolizes purification and renewal for nature and humanity.

“Candradimuka Crater is believed by the people here to be the crater in the Mahabharata story, where Gatotkaca was immersed and gained his strength. Until today, people with certain desires are encouraged to bathe here under the guidance of traditional elders. Its efficacy is believed to be similar to that of Gatotkaca’s transformation. Those who bathe in the crater will gain great strength, and their wishes will be fulfilled.” (Head of the Tourism Awareness Group, A, 45 years old)

Based on this excerpt, the nature of the Candradimuka Crater symbolizes the earth’s power to create new life and provide strength to living beings. This suggests that maintaining the balance of nature, including active volcanoes, is crucial for sustaining human life. This research reveals that sacred sites on the Dieng Plateau, along with the folklore associated with them, are not merely traditional rituals but serve as important tools for understanding local ecology. Local Pilgrimage (*Napak Tilas*), a practice of visiting places considered sacred by traditional and village leaders, is a ritual that connects humans, nature, and ancestral spiritual entities. The symbolism of water, human relationships with nature, and the power of nature are vividly represented through these folk narratives.

This finding underscores the significance of maintaining harmony with nature, as illustrated by the pilgrimage tradition of the Dieng Plateau. The stories told by the Dieng Plateau community, such as the punishment of an individual who broke taboos by urinating near the spring, are still believed today. The broken leg resulting from this act is thought to have been caused by the supernatural spirits residing in the spring. Southeast Asian mythology is rich with stories of water spirits, some of which originated in India, while others are of local origin. These myths reinforce humanity’s respect for water sources (Zachrisson, 2020), supporting the finding that the folklore linked to sacred sites on the Dieng Plateau conveys profound ecological symbols and meanings. Water, which is central to several sites such as Jalatunda Well, Merdada Lake, and Sedayu and Maerokoco Springs, is not merely viewed as a physical element but also as a symbol of life and spirituality. In folklore, water is linked with mystical powers and is revered as a life-giver that must be protected and respected (Zhu et al., 2022). Sacred sites are understood in a spiritual context and as mediums for conveying ecological messages to future generations. For example, the legend of Jalatunda Well is often used to represent the abundance of water that must be preserved. This shows that folklore has significant potential to educate people about the importance of environmental conservation while simultaneously strengthening local identity.

Thus, sacred sites in Dieng Plateau function as ritual spaces and key elements in maintaining a balance between humans, culture, and nature. These sites are a tangible manifestation of the interconnectedness of spiritual, cultural, and ecological dimensions, aligning with the concept of sacred ecology (Berkes, 2017). This relationship has been explored in numerous studies highlighting the role of spiritual values and folklore in environmental preservation.

Reviews by Jonuks (2023), Li (2024), Govigli et al. (2021), and Varner (2009) indicate that people who regard certain places as sacred tend to have a greater sense of responsibility toward protecting the surrounding environment. The folklore attached to certain sites on the Dieng Plateau reinforces the spiritual connections between humans and nature. Research by Aanuoluwapo-Ajayi & Olatumil (2018) and Sultoni et al. (2023) on the relationship between folklore and environmental conservation has emphasized folklore’s role as a medium for ecological education. Studies by Melaku & Ivars (2024) and Purwanto (2022) have demonstrated that sacred sites often exhibit better-preserved biodiversity than other areas, owing to customary restrictions that limit harmful activities. This affirms that the sacred sites on the Dieng Plateau hold local significance and contribute to global discussions on culture-based environmental conservation. The present study findings

open avenues for exploring how the preservation of sacred sites, rooted in traditional values, could serve as a strategy to address modern challenges, such as the declining environmental awareness among younger generations and the loss of local knowledge. However, further research is needed to evaluate the effectiveness of such strategies in a more localized manner.

CONCLUSION

This research aimed to explore and document pilgrimage practices in the Dieng Plateau, focusing on ancestral burial sites and sacred natural landmarks such as the Sileri and Sikidang craters. The findings demonstrate that pilgrimage activities were not confined to enclosed ritual spaces but extended into open-air and geothermal environments, where religious devotion was interwoven with ecological and touristic dimensions. These practices highlight the coexistence of spiritual traditions and local identity, showing how cultural heritage in Banjarnegara Regency is sustained through ritual engagements with both human-made and natural sacred sites. The implications of this study underscore the need to recognize pilgrimage in the Dieng Plateau as a multifaceted cultural phenomenon that preserves intangible heritage while intersecting with contemporary tourism development. This recognition points to opportunities for cultural tourism initiatives that respect religious traditions and ecological contexts. Nevertheless, the research is limited by its reliance on a single fieldwork period in August 2024, which might not capture seasonal or temporal variations in pilgrimage practices. Furthermore, the analysis was based primarily on qualitative observations and visual documentation, without incorporating extensive participant narratives or quantitative measures.

Future research should therefore adopt a longitudinal approach, combining interviews with pilgrims and community leaders and employing mixed-methods to provide a more comprehensive understanding of the intersections between religion, culture, and tourism in the Dieng Plateau. Comparative studies across other regions of Java and Indonesia could also deepen insights into the ways pilgrimage adapts to diverse ecological and socio-cultural settings.

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