

Cultural Heritage Management and Preservation Strategy for the Kaheng Kalua Prehistoric Cave Area as Tourism Destination in Konawe Islands Regency

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ABSTRACT

This study aims to identify strategies for managing and preserving the cultural heritage of the Kaheng Kalua Prehistoric Cave area so that it can be utilized as a sustainable tourism destination in the Konawe Islands Regency. The research focuses on cultural and natural potential, the physical condition of the site, the role of the local community, and the supporting and inhibiting factors in site management and preservation. The research method used was qualitative with a descriptive approach. Data were collected through field observations, in-depth interviews with stakeholders, and documentation. Informants were selected purposively, including village officials, education and culture offices, community leaders, and local residents surrounding the site. Data analysis was conducted through data reduction, presentation, and verification to obtain valid findings. The research results indicate that the Kaheng Kalua Prehistoric Cave Area possesses cultural value, with the potential for educational and visual tourism. Proposed management strategies include establishing visiting area boundaries, strengthening community involvement, and

digital-based promotion. In conclusion, site management must be carried out in an integrated manner between the government, the community, and relevant parties, while adhering to the principles of sustainable cultural preservation.

Keywords: Management, Preservation, Prehistoric Caves, Tourist Destinations

INTRODUCTION

Eastern Indonesia, including Southeast Sulawesi Province, possesses abundant prehistoric cultural heritage that has not yet been fully identified or optimally managed.^[1] One area with significant archaeological and historical value is the Kaheng Kalua Prehistoric Cave Area, located in Teporoko Village, Southeast Wawonii District, Konawe Islands Regency. This area consists of one main prehistoric cave and several rock shelters situated within a coastal karst environment and is believed to have functioned as a locus of past human activity, as indicated by surface archaeological remains.

Field observations and previous archaeological studies reveal that the Kaheng Kalua Prehistoric Cave Area

contains various cultural remains, including fragments of human bones and teeth, pottery sherds, and mollusk remains. These findings indicate there is prehistoric human habitation in the Wawonii Islands region and demonstrates the importance of the site as a scientific resource for reconstructing patterns of past human life. In addition to its scientific value, the presence of prehistoric caves and rock shelters also offers educational and cultural potential that can be utilized as a medium for learning local history, particularly for younger generations.^[2]

Despite its significant archaeological value, the preservation condition of the Kaheng Kalua Prehistoric Cave Area faces various challenges. Field findings indicate that several cultural remains are vulnerable to natural factors such as high humidity, weathering processes, and the growth of uncontrolled vegetation. Human activities, including unrestricted access to the cave area without supervision, further exacerbate the risk of damage.^[3] The absence of access boundaries, informational signage, and specific regulations has resulted in the caves and rock shelters functioning as open spaces that are susceptible to artifact displacement, removal, and physical deterioration of the site.

These challenges are compounded by the lack of an institutionalized management system. To date, the Kaheng Kalua Prehistoric Cave Area has not been formally designated as a protected cultural heritage site and is not supported by a comprehensive and sustainable conservation program. As a result, preservation efforts remain fragmented and largely dependent on individual awareness within the local community, without adequate policy support or monitoring from local government authorities.

Conversely, the Kaheng Kalua Prehistoric Cave Area has considerable potential to be developed as an educational-based cultural tourism destination. Its relatively pristine natural environment, strong association with local history, and preliminary community

support provide a solid foundation for community-based tourism development. However, tourism development without careful planning and effective management may accelerate site degradation and diminish the authenticity of the cultural heritage.^[4] Therefore, a comprehensive study is required to assess the condition and potential of the cultural heritage in the Kaheng Kalua Prehistoric Cave Area, as well as to formulate integrated management and preservation strategies. Such strategies are expected to ensure the sustainability of the site's archaeological and historical values while guiding its utilization as a sustainable cultural tourism destination that benefits local communities and regional government.

LITERATURE REVIEW

Management and Preservation of Prehistoric Cultural Heritage

Prehistoric cultural heritage constitutes material evidence of past human activities and plays a crucial role in reconstructing the history and development of human civilization.^[5] In archaeological studies, cultural heritage is not merely understood as isolated physical artifacts but as elements embedded within spatial, environmental, and cultural contexts.^[6] Therefore, the preservation of prehistoric cultural heritage requires an integrated approach that considers the relationship between artifacts, site locations, and their surrounding environments.^[7]

In the context of the Kaheng Kalua Prehistoric Cave Area, cultural remains such as human bone fragments, pottery sherds, and mollusk remains represent primary archaeological data indicating prehistoric human occupation in the Wawonii Islands region. These remains possess high scientific value but are inherently fragile and vulnerable to damage if not properly managed and protected. Consequently, preservation efforts should prioritize both the physical protection of the site and the regulation of human activities in and around the cave area.

Prehistoric Caves as Spaces of Past Human Activity

Prehistoric caves and rock shelters are among the most commonly utilized habitation spaces by prehistoric communities, particularly in karst regions. Caves functioned as shelters, subsistence activity spaces, and locations for the deposition of cultural and biological remains, which later became archaeological evidence.^[8] The assemblage of artifacts and ecofacts within caves reflects patterns of human adaptation to natural environments. The characteristics of the Kaheng Kalua Prehistoric Cave Area, which is situated within a coastal karst landscape, indicate its potential significance as a regional archaeological resource. However, prehistoric caves are also highly susceptible to environmental changes, including weathering processes, humidity, and biological growth, as well as to uncontrolled human activities.^[9] These vulnerabilities necessitate specialized management strategies that consider the physical characteristics of caves and the preservation needs of the cultural remains they contain.

Cultural Site Management and Its Utilization as Cultural Tourism

Cultural site management refers to systematic efforts to maintain the sustainability of cultural values through protection, development, and planned utilization. In the context of cultural tourism, the use of cultural heritage sites must prioritize conservation principles to prevent the degradation of site authenticity due to tourism activities.^[10]

The Kaheng Kalua Prehistoric Cave Area has the potential to be developed as an educational-based cultural tourism destination due to its archaeological significance and relatively undisturbed natural environment. Nevertheless, tourism development without adequate planning and management may impose pressure on the site, such as increased uncontrolled access, damage to cultural remains, and environmental changes within the cave

system. Therefore, cultural tourism management in this area must be grounded in the actual conditions of the site and supported by clear regulations and institutional frameworks.^[11]

Community-Based Preservation in Prehistoric Site Management

Community-based preservation emphasizes the involvement of local communities as key stakeholders in the protection and management of cultural heritage sites.^[12] Communities residing near heritage sites interact directly with the site environment and thus play a crucial role in determining the long-term sustainability of preservation efforts.^[13]

In the case of the Kaheng Kalua Prehistoric Cave Area, community involvement is particularly important given the absence of an optimal institutional management system. Community-based preservation can be implemented through increasing awareness of the significance of prehistoric cultural heritage, regulating community activities around the cave area, and actively involving local residents in managing the site as a cultural tourism destination. This approach aligns with the broader objective of prehistoric site preservation, which encompasses not only physical protection but also social and cultural sustainability.

MATERIALS & METHODS

This study employed a qualitative descriptive approach;^{[14],[15]} this approach was used to systematically and factually describe the condition of cultural heritage remains, as well as the management and preservation practices of the Kaheng Kalua Prehistoric Cave Area based on field data. The qualitative descriptive design aimed to understand the actual conditions of the study area without conducting quantitative measurements.^[16] This approach was considered appropriate for examining cultural and archaeological phenomena that emphasize contextual understanding, field conditions, and existing preservation issues.

The research was conducted in the Kaheng Kalua Prehistoric Cave Area, located in Teporoko Village, Southeast Wawonii District, Konawe Islands Regency, Southeast Sulawesi Province, Indonesia. This site was selected due to the presence of prehistoric cultural remains, including caves and rock shelters containing human bone fragments, pottery sherds, and mollusk remains, as well as observable challenges related to site preservation and management. Data sources consisted of primary and secondary data. Primary data were obtained directly from the field through observation, interviews, and documentation. Secondary data were collected from literature, research reports, and documents related to prehistoric site preservation, cultural heritage management, and cultural tourism. ^[17]

Data collection was conducted using the following techniques:

1. Observation

Direct observations were carried out at the research site to examine the physical condition of the prehistoric caves and rock shelters, the surrounding environment, and the presence and condition of cultural remains. Observation aimed to obtain an accurate depiction of the site's preservation condition, level of maintenance, and potential damage. ^[18]

2. Documentation

Documentation was conducted to record the condition of the site and its cultural remains. This included field notes and visual documentation of caves, rock shelters, and identified cultural materials. ^[19] Documentary data served as empirical evidence and primary support for observational findings.

3. Interviews

Semi-structured interviews were conducted with informants consisting of local community members and relevant stakeholders. The interviews aimed to gather information regarding site utilization, community knowledge of cultural heritage

values, and perceptions of site management and preservation.

4. Literature Review

A literature review was conducted by examining books, academic journals, research reports, and other documents relevant to prehistoric site preservation, cultural heritage management, and cultural tourism. Data analysis was carried out using a qualitative descriptive method through the stages of data collection, data reduction, data presentation, and conclusion drawing. Data obtained from observations, documentation, and interviews were analyzed to describe the actual condition of cultural heritage remains and the management of the Kaheng Kalua Prehistoric Cave Area. Furthermore, the results of the analysis were used as the basis for formulating management and preservation strategies through a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats). ^{[20],[21]}

RESULT AND DISCUSSION

Empirical Conditions of the Kaheng Kalua Prehistoric Cave Area

The results of the study indicate that the Kaheng Kalua Prehistoric Cave Area is situated within a coastal karst landscape and consists of one main cave and several prehistoric rock shelters distributed in the surrounding area. Field observations show that the physical condition of the cave and rock shelters remains relatively natural and has not undergone significant structural alteration. The cave morphology, the form of the rock shelters, and the surrounding environmental characteristics continue to reflect the original karst landscape.

Nevertheless, the observations also reveal that the area lacks an adequate site protection and management system. No physical boundaries, informational signage, or official markers indicating the site's status as a prehistoric heritage area were identified. Access to the cave and rock shelters is open and uncontrolled, allowing

unrestricted human activities to occur within the site.

Distribution and Condition of Cultural Remains

Based on field documentation, the cultural remains identified in the Kaheng Kalua Prehistoric Cave Area include fragments of human bones and teeth, pottery sherds, and mollusk remains. These materials are distributed across the floors of the cave and rock shelters, with most remains exposed on the surface and lacking physical protection.^[22] The exposed position of these remains indicates that their archaeological context is highly vulnerable.

Several bone fragments and pottery sherds exhibit signs of weathering and displacement. These conditions are likely influenced by environmental factors such as high humidity, water seepage, as well as human activities within the cave. Visual documentation demonstrates that the distribution of cultural remains is unorganized and that no conservation measures have been implemented. These empirical conditions are illustrated in Figure 1.



Gambar 5.1 Tinggalan Gua Prasejarah Kaheng Kalua
(Sumber: Diolah Oleh Riska, 2025)

Variation in Conditions among Prehistoric Rock Shelters

The findings also reveal variations in conditions among the prehistoric rock shelters. Some shelters still display cultural remains that are relatively clear and easily identifiable, while others show a noticeable reduction in the amount of material visible

on the surface. This variation indicates that each rock shelter experiences different levels of disturbance and environmental dynamics.^[23]

When compared with descriptions from previous studies, several rock shelters show changes characterized by a decrease in visible cultural remains on the shelter floors. This finding suggests the occurrence of disturbances affecting the preservation of cultural materials, resulting either from natural processes or human activities. These conditions indicate that the sustainability of prehistoric cultural remains in the area is highly fragile.

Influence of Environmental Factors and Human Activities

Environmental factors play a significant role in influencing site conditions. High humidity levels within the cave, weathering processes affecting karst formations, and vegetation growth around cave and rock shelter entrances contribute to the gradual degradation of the site's physical condition. Water seepage and natural sediment accumulation also affect the position and preservation of cultural remains on the cave floors. In addition to natural factors, human activities also exert considerable influence on site conditions. Open access without supervision enables disturbances to cultural remains, both intentional and unintentional. The combination of environmental processes and uncontrolled human activities constitutes the primary threat to the long-term preservation of prehistoric cultural heritage in the Kaheng Kalua Prehistoric Cave Area.

The findings of this study demonstrate that the condition of cultural remains in the Kaheng Kalua Prehistoric Cave Area reflects weak preservation efforts. Cultural materials that remain exposed and unprotected are highly susceptible to physical damage and the loss of archaeological context. In archaeological research, context is a critical element that determines the scientific value of cultural remains. Unrestricted access to prehistoric

caves and rock shelters significantly increases the risk of disturbance, including displacement, artifacts removal, and physical deterioration. These findings are supported by field documentation showing changes in the condition of several rock shelters when compared with descriptions from earlier studies.

From a site management perspective, the results reveal a gap between the site's archaeological potential and existing management practices. The Kaheng Kalua Prehistoric Cave Area possesses high archaeological and historical value and strong potential for development as a cultural tourism destination. However, without a preservation-oriented protection and management system, site utilization may instead accelerate degradation and undermine the authenticity of the cultural heritage.

CONCLUSION

Based on the analysis of data obtained through observation, interviews, and documentation, this study concludes that the Kaheng Kalua Prehistoric Cave Area contains significant prehistoric cultural remains that serve as evidence of past human activities. The presence of one prehistoric cave and several rock shelters indicates that the area holds important cultural value that must be preserved sustainably. The findings also indicate that the management and preservation of cultural remains in the Kaheng Kalua Prehistoric Cave Area have not been implemented optimally. This is evidenced by the absence of an integrated management system, the limited role of local government authorities, and the low level of community involvement in preservation efforts. Furthermore, the utilization of the Kaheng Kalua Prehistoric Cave Area as a cultural tourism destination is not yet supported by adequate management planning. This condition poses a potential threat to the preservation of cultural remains if site development is not accompanied by clear and effective conservation measures.

Therefore, this study concludes that the management of the Kaheng Kalua Prehistoric Cave Area should be directed toward more structured and integrated preservation efforts to ensure that its cultural values are maintained and can be utilized sustainably in the future.

Declaration by Authors

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