

Integrated Development and Preservation of Kimpulan Temple Based on Public-Private Partnership

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Abstract

Conventional preservation of temples often faces challenges related to funding, management, and utilization of sites, resulting in incomplete conservation efforts. This study aims to explore the successful preservation of Candi Kimpulan through the Public-Private Partnership (PPP) approach model. The PPP model is expected to address these challenges by optimizing resources and creating synergy between the government, private universities, and the community. The theoretical basis emphasized is the Public-Private Partnership (PPP) approach as a collaboration model between the government, private institutions, and the community to support the sustainable preservation of cultural heritage by optimizing the function, form, and meaning of cultural sites. This qualitative research utilizes a case study method to analyze the impact of PPP on the function, form, and meaning of the preservation of Candi Kimpulan. The findings indicate that the PPP model implemented in the development of the Universitas Islam Indonesia (UII) Library and Museum building, integrated with the restoration of Candi Kimpulan, successfully created a progressive preservation zone, functional space reconciliation and enhanced the site's cultural significance. Collaboration among stakeholders in this project ensures the sustainability of cultural preservation, creating multifunctional spaces that support education, research, and maintenance. In conclusion, the PPP approach has proven effective in supporting sustainable cultural heritage preservation, making Candi Kimpulan a successful model for other preservation projects.

Keywords: *Conservation; Integrated Development; Public-Private Partnership*

Introduction

Cultural heritage sites, such as temples, historic monuments, or traditional artifacts, hold significant value in terms of history, aesthetics, and symbolism and must be preserved to pass on to future generations. However, preservation efforts are often

hindered by various challenges, including natural degradation due to aging, the impact of natural disasters, and insufficient attention to their upkeep. These obstacles are further exacerbated by limited financial resources, a shortage of conservation experts, and the existence of ineffective regulations that fail to comprehensively support preservation processes. As a result, preservation efforts frequently fall short of their goals, leaving numerous unresolved issues.

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Several examples of temple preservation projects that have not been adequately completed include the Kedulan Temple, where restoration efforts have only covered the core zone, while the buffer zone continues to face unresolved land acquisition challenges (Ciptahening et al., 2019). Kedulan Temple is located in Kedulan Hamlet, Tirtomartani Village, Kalasan District, Sleman, Special Region of Yogyakarta, at coordinates 7° 44' 28" S and 110° 28' 5" E. Morangan Temple, located amidst a residential area, has also failed to fully restore its temple artifacts. Morangan Temple is located in Morangan Hamlet, Sindumartani Village, Ngemplak District, Sleman Regency, Special Region of Yogyakarta. Geographically, it is located at 8° 30' - 7°20' S and 109° 40' - 111° 0' E. Additionally, numerous other temples situated near river streams have been affected by lahar flows from Mount Merapi's eruptions, causing their artifacts to become buried and difficult to excavate or restore. This highlights the significant challenges in preserving cultural heritage, which demand more serious attention and the implementation of more effective approaches (Kiswiranti, 2018).

The challenges in preserving cultural heritage represent a complex issue involving various aspects, from resource limitations to social and institutional factors. Cultural heritage preservation often requires substantial funding, whether for physical restoration, site management, or community outreach and education (Supratikno Rahardjo, 2024). Unfortunately, government budgets allocated for preservation are often limited, as they compete with other priorities such as infrastructure, education, and healthcare. Consequently, many preservation projects are delayed or cannot be comprehensively completed. Even when funding is available, its use is often inefficient due to a lack of long-term planning or adequate oversight (Hidayat & Rusman, 2022).

Cultural heritage preservation also requires specialists with specific skills, such as archaeologists, conservators, and restoration

experts. In Indonesia, the number of such specialists remains very limited, leading to many preservation projects being carried out without adherence to proper scientific and technical principles. For instance, inappropriate restoration methods can damage the authenticity of structures or diminish the historical value of artifacts. Furthermore, the lack of training and education in conservation results in knowledge and skill gaps, hindering effective cultural heritage preservation efforts (Arda, 2018).

Despite the existence of various regulations governing the preservation of cultural heritage, such as Law No. 11 of 2010 on Cultural Heritage, their implementation and enforcement are often suboptimal. Many cultural heritage sites suffer damage or are lost due to unplanned development, land exploitation, or artifact theft. This is exacerbated by weak oversight and a lack of strict penalties for violations. Existing regulations are also frequently too inflexible to address the social and environmental dynamics surrounding cultural heritage sites (Supratikno Rahardjo, 2024).

Communities play a vital role in cultural heritage preservation, both as direct custodians of these sites and as beneficiaries of preservation efforts. However, public awareness of the importance of cultural heritage preservation is often low. Many individuals view heritage preservation as solely the government's responsibility, leading to a lack of participation in safeguarding or supporting preservation efforts. On the other hand, economic pressures in local communities sometimes compel people to neglect or even damage cultural sites for short-term economic gains. Evidence of low community involvement is found in the case of preservation in the Dieng Plateau which requires evaluation of zoning regulations for restoration space (Gumelar & Rully, 2022). Other evidence is related to the difficulties faced by the government in land acquisition in the case of the preservation of Kedulan

Temple, which has not been successful until now (Riyanto, 2005).

To address these challenges, collaboration between the government and the private sector through a Public-Private Partnership (PPP) model offers a promising solution. This model enables the pooling of resources, expertise, and broader networks to support the sustainable preservation of cultural heritage (Sugiyanto, S.S., 2022).

- **Financial Support:** The private sector can provide financial contributions to bridge the funding gap in government budgets, whether through direct investments, sponsorships, or corporate social responsibility (CSR) funds.
- **Expertise Enhancement:** Private sector involvement can bring in specialists from various disciplines, such as architects, conservators, or project managers with experience in managing large-scale preservation projects.
- **Efficiency and Innovation:** The private sector is often more flexible and innovative in developing preservation strategies, particularly in adopting modern technologies such as information technology and project management tools.
- **Public Awareness Improvement:** This collaboration can also engage the community through educational programs, tourism promotion, or local economic empowerment, thereby increasing public participation in safeguarding and utilizing cultural heritage.

Through synergy between the government and the private sector, existing challenges can be addressed in a more structured and sustainable manner. This approach also allows cultural heritage preservation to be carried out without placing the entire financial burden on the state budget while creating opportunities for active participation from various stakeholders.

The preservation of Kimpulan Temple presents unique characteristics that distinguish it from other temple preservation projects. Kimpulan

Temple is located in Kimpulan Hamlet, Umbulmartani Village, Ngemplak District, Sleman Regency, Yogyakarta Special Region, at coordinates: 7.6882268406618° S, 110.41549777382° E. The conservation of this site was carried out simultaneously with the construction of the Library and Museum Building at Universitas Islam Indonesia (UII), creating a rare synergy between the preservation of an archaeological site and the development of modern infrastructure. This approach exemplifies best practices in cultural heritage preservation, where conservation and development not only complement each other but also generate greater benefits (Panca Putra et al., 2019).

The construction of the UII Library and Museum Building, integrated with the preservation of Kimpulan Temple, has created a space that functions not only as a modern learning center but also as a hub for education and cultural preservation. The addition of a museum, conservation areas, and open spaces that protect the Kimpulan Temple site enhances the building's utility. This demonstrates that cultural heritage preservation can coexist with the provision of educational facilities without compromising the historical values of the site (Noor, 2012).

Figure 1. Kimpulan Temple in the UII Library and Museum Complex
Source: Mutaqi, 2023

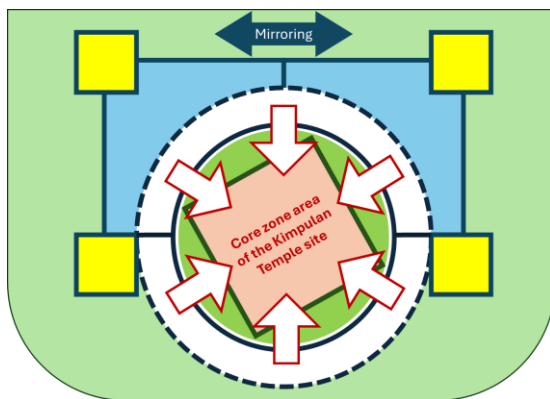


The architectural design of the UII Library and Museum Building was developed adaptively to honor and protect the presence of Kimpulan Temple. The building's structure was carefully

crafted to avoid damaging the core zone of the temple, with design elements reflecting the harmony between the past and the present. Furthermore, the inclusion of open spaces that safeguard the temple and the responsive layout in accordance with preservation zoning demonstrate how modern architecture can adapt to the needs of conservation (Mutaqi, 2023).

This is evident in the position of the Kimpulan Temple artifact, which is at the center of the orientation of the UII Library and Museum building design, which is clearly visible in the architectural design concept that was developed adaptively (see Figure 2. The UII Library and Museum Building Adaptation Design Concept).

Figure 2. The UII Library and Museum Building Adaptation Design Concept
Source: Project Doc.



The integration of preservation and development, in this case, creates a deeper meaning, both for UII as an institution and for the broader community. The UII Library and Museum Building has become not only a symbol of educational progress but also a tribute to cultural heritage. The Kimpulan Temple site, preserved within the building, sends a strong message about the importance of maintaining a balance between modern development and the preservation of historical values.

The simultaneous approach applied here shows that cultural heritage preservation does

not have to be isolated from modern development. On the contrary, this integration opens opportunities to create added value in terms of function, form, and meaning. The best practices demonstrated in this case provide an important lesson for other preservation projects - that cooperation between modern architecture and cultural preservation can create complementary and sustainable solutions.

The Kimpulan Temple case serves as concrete evidence that cultural heritage preservation does not always have to rely on traditional conservation methods separate from development needs. Instead, an integrated preservation approach can yield significant benefits, both for conservation purposes and for the broader community (Prianto & Lestari, 2023).

The main objective of this study is to evaluate the effectiveness of the Public-Private Partnership (PPP) model in cultural heritage preservation, with a focus on the restoration of Kimpulan Temple. The research aims to understand how PPP can be a strategic approach to address various preservation challenges, such as budget constraints, the shortage of experts, and the lack of public awareness. By studying the Kimpulan Temple case, this research also seeks to demonstrate how collaborative preservation efforts can lead to sustainable, effective, and meaningful outcomes.

The goal of this study is to identify the benefits derived from the collaboration between the public and private sectors in cultural heritage preservation, particularly in the case of Kimpulan Temple restoration. The study aims to analyze the impact of the PPP model on three key aspects of preservation: function, form, and meaning. In terms of function, the research will assess how this collaboration enhances the utility of the cultural site, whether as a tourist attraction, an educational center, or a spiritual space. Regarding form, the objective is to analyze the success of the physical restoration of the temple and the maintenance

of its structure and surrounding environment in accordance with established conservation principles. On the aspect of meaning, the study will explore how PPP can preserve or enrich the cultural, historical, and symbolic values of Kimpulan Temple.

Additionally, this research aims to provide recommendations that can be applied to other cultural heritage preservation projects in Indonesia, including strategies for designing a collaborative framework between the government and the private sector, as well as mechanisms for monitoring and evaluating the success of PPP projects in the broader and more sustainable context of cultural preservation.

Literature Review

The literature review is a crucial part of the research as it provides a solid theoretical foundation and connects this study with previous research or existing concepts.

Public - Private Partnership Concept (PPP)

In this section, the fundamental concepts of Public - Private Partnership (PPP) will be discussed to provide a foundational understanding of how this model is applied in cultural heritage preservation. The explanation will cover the definition, principles, and framework of PPP used to support the implementation of preservation projects, particularly in the context of cultural site preservation.

The definition of Public-Private Partnership (PPP) refers to a collaboration between the public sector (government) and the private sector (companies or non-governmental organizations) in providing services or developing infrastructure that benefits the public interest. In the context of cultural heritage preservation, PPP allows the private sector to participate in the conservation of cultural sites or temples through funding, technology, and expertise, while the public sector oversees the process to ensure that

conservation goals align with regulations and cultural values (Jelinčić et al., 2017).

The main goal of PPP is to optimize available resources, including finances, expertise, and operational capacity, where the private sector can provide technical skills and funding, while the public sector ensures that the project aligns with public policies and legal standards. In cultural heritage preservation, this approach aims to address the limitations of government budgets and enhance the effectiveness of conservation through the collaboration of both sectors (Boniotti, 2023).

The fundamental principles underlying the Public-Private Partnership (PPP) collaboration consist of several key elements that must be understood in the implementation of preservation projects. These principles ensure that both sectors-public and private-work together effectively to achieve common goals in cultural heritage conservation (Žuvela et al., 2023):

- **Balanced Risk Distribution:** One fundamental principle of PPP is the equitable distribution of risks between the public and private sectors. The government often faces political and legal risks, while the private sector is more likely to deal with financial and technical risks. In cultural heritage preservation, this risk-sharing ensures that each party understands its responsibilities, minimizing potential issues in the future.
- **Mutual Benefit:** PPP aims to create equal benefits for both parties. The private sector gains financial rewards and reputation, while the public sector ensures the sustainability and preservation of cultural heritage without imposing a heavy burden on the national budget. This mutual benefit motivates both parties to collaborate efficiently.
- **Clear Roles:** Each party in a PPP has a clearly defined role in the project. The government is responsible for ensuring that the project complies with public policies and regulations and providing necessary administrative and regulatory

support. The private sector, on the other hand, is responsible for providing the resources, expertise, and funding for the project.

- **Transparency and Accountability:** For PPP to succeed, transparency must be maintained throughout all stages of the project, from planning to implementation and maintenance. The government ensures that decisions made in the project are accountable to the public, while the private sector is expected to openly report the project's progress and achievements.
- **Sustainability:** Sustainability is a fundamental principle of PPP, ensuring that the project can continue to operate and provide benefits in the long term. In cultural heritage preservation, sustainability includes the physical preservation of the site as well as maintaining its cultural relevance for future generations.

The framework for implementing Public-Private Partnerships (PPP) in cultural heritage preservation involves several stages that need to be described in detail, including planning, design, financing, implementation, and maintenance. Each stage in this framework has a specific goal and actively involves both sectors (Abdou, 2024).

- **Planning:** In the planning stage, the government and the private sector collaborate to define the scope of the preservation project, conservation goals, and the necessary stages. At this point, needs analysis, site selection, and the organization of task and responsibility allocation are carried out to design an effective framework.
- **Design:** After planning, the design stage begins with the physical design of the site and its supporting infrastructure. This design considers factors such as the authenticity of the site, the conservation techniques used, and the integration of modern technology in the preservation process.
- **Financing:** Financing is a crucial element in PPP. In this stage, the private sector may

provide a significant portion of the funds for the development and preservation of the site, while the public sector may offer support through fiscal incentives or subsidies. This financing model allows preservation projects to proceed despite limited government budgets.

- **Implementation:** The implementation of the preservation project involves the physical construction and restoration based on the agreed design. The private sector will play a key role in carrying out the construction and conservation, while the public sector monitors the project to ensure compliance with standards and regulations.
- **Maintenance:** After the project is completed, the maintenance stage involves ongoing collaboration between the government and the private sector to ensure the site remains preserved in the long term. Maintenance may include physical upkeep, structural monitoring, as well as activities that support cultural sustainability, such as community education and eco-tourism programs.

Various PPP models used in the practice of cultural preservation include Build-Operate-Transfer (BOT), Build-Own-Operate (BOO), Design-Build-Finance-Operate (DBFO), and Joint Cost Construction (JCC) (Christin & Petrus, 2022):

- **Build-Operate-Transfer (BOT):** This model requires the private sector to build and operate the preservation project for a specified period before eventually transferring the management of the project back to the government. This model is suitable for preservation projects that require long-term maintenance after construction.
- **Build-Own-Operate (BOO):** In this model, the private sector builds, owns, and operates the preservation project without transferring it back to the government. It allows the private sector to profit from managing and operating the project for an extended period.
- **Design-Build-Finance-Operate (DBFO):** This model involves the private sector in

the design, construction, financing, and operation of the preservation project. It promotes efficiency in resource use and facilitates the application of the latest technology in the conservation process.

- Joint Cost Construction (JCC): This model is often used in joint preservation projects between the public and private sectors, where the construction costs are shared between both parties, and the management of the project is carried out collaboratively.

Through these various models, PPP aims to create outcomes that benefit both parties while ensuring effective and sustainable cultural heritage preservation.

The Concept of Preserving Cultural Heritage

Cultural heritage preservation is the effort to maintain and protect the cultural, historical, and identity values of a society, which are reflected in sites, buildings, artifacts, and other cultural traditions. This process requires not only physical conservation techniques but also approaches that involve the preservation of cultural, social, and economic values. In the context of preserving historic sites, such as temples, it is essential to integrate various conservation approaches and ensure sustainability in the implementation of preservation activities (Adishakti, 2016).

Cultural heritage preservation encompasses various approaches, each focusing on specific aspects of cultural sites. The following are some of the approaches used in cultural heritage preservation (Araoz, 2013):

- Conservation: Physical conservation focuses on the restoration or repair of structures and artifacts that have been damaged. The goal is to maintain the physical authenticity of the site by returning damaged elements to their original condition, while preserving the integrity of the original materials and building structures. In the preservation of temples, for example, this may involve processes such as cleaning, structural reinforcement,

or repair of lost or damaged decorative elements.

- Preservation: Functional preservation involves efforts to maintain or adapt historical sites to meet contemporary needs without compromising their original cultural value. This approach involves adapting spaces or buildings for modern purposes, such as transforming a temple into an educational tourist attraction or museum, while still preserving its cultural and historical significance. This approach allows the site to remain relevant in modern society without erasing the historical or cultural meaning it holds.
- Reconstruction: Reconstruction is a more aggressive approach that involves efforts to rebuild parts of a site that have been lost or completely damaged. While this may provide a visual representation of what the site looked like in the past, reconstruction often sparks debates about authenticity and the historical value that may be lost in the process. In temple preservation, reconstruction is only carried out if deemed necessary to restore the physical sustainability of the site, but it must be done cautiously to avoid undermining its historical value.
- Revitalization: Revitalization focuses on giving new functions to existing cultural sites so that they can serve as centers for cultural activities or other community-beneficial purposes. The revitalization process aims to breathe new life into a site in a way that not only preserves its historical value but also provides economic and social benefits to the surrounding community. For example, the revitalization of a temple could involve opening it up for cultural tourism or educational programs, while maintaining its historical significance.

Conservation zoning is a crucial principle in the management of cultural sites, aimed at protecting historical sites from the negative impacts of modern development that could damage or alter the original character of the site. In the context of cultural heritage preservation, such as temples, zoning divides

the surrounding area into several zones with varying levels of protection (Gumelar & Rully, 2022):

- Core Zone is the central area of the historical site, possessing the highest cultural value, and must be protected with the utmost care. In this zone, only preservation and conservation activities are permitted. Any new construction or alterations to the site should be strictly prohibited in this zone. This approach ensures the site's authenticity is maintained.
- Buffer Zone is the area surrounding the core zone that serves to protect the site from the negative impacts of external development. In this zone, activities that do not harm the integrity of the site are allowed, such as the construction of support facilities like museums, information centers, and parking areas. This zone also functions to mitigate the effects of increased visitor numbers that could affect the physical condition of the site.
- The Development Zone is a more flexible area where broader development and the establishment of other facilities can take place without jeopardizing the cultural value of the site. In this zone, more open development is permitted, but it must still adhere to sustainability principles and not disrupt the cultural and historical functions of the site. This zone may include areas for commercial or educational facilities that support preservation efforts.

A thorough understanding of zoning is essential in the planning and implementation of preservation projects involving both the public and private sectors, as seen in the PPP model. This zoning provides clear guidelines on which areas can be developed and which areas must be strictly protected, ensuring that the preservation objectives are met while allowing for responsible development and use of the surrounding areas.

Previous studies aimed to investigate the role of Public-Private Partnerships (PPP) in

mitigating the risks associated with the adaptive reuse of cultural heritage buildings in Egypt. Cultural heritage buildings in the country face serious threats due to neglect, indifference, and lack of resources, leading to degradation and the loss of potential utilization. This research identifies and analyzes the various risks associated with the adaptive reuse of cultural heritage buildings, as well as how government authorities and architects/developers can manage these risks through risk-sharing within PPP schemes (Othman & Mahmoud, 2022).

Another study compares the management of cultural heritage by the public sector and through Public-Private Partnerships (PPP) in India, focusing on two heritage sites in Delhi: Humayun's Tomb and Safdarjung's Tomb. Using a qualitative, case-study-based approach, the research analyzes four main aspects: heritage conservation, tourist visits, visitor interpretation, and funding. Data was collected through in-depth interviews with various stakeholders, including the Archaeological Survey of India (ASI), Aga Khan Trust for Culture, travel agencies, tour guides, as well as surveys of tourists. The primary objective of the research is to determine the most effective management model to promote heritage-based tourism in India (Aggarwal & Suklabaidya, 2017).

In Italy, although collaboration between the industrial and cultural sectors holds significant importance, its implementation remains limited in the context of cultural heritage. As a country with many UNESCO World Heritage Sites and one of the largest holders of cultural heritage worldwide, Italy possesses a wealth that is a crucial part of its national identity and the quality of life of its people. However, due to the sheer number of these sites, adequate conservation often becomes a challenge. To address these constraints, the contribution of public-private partnerships needs to be enhanced, especially through approaches like *Mecenatismo* (cultural patronage) and sponsorship. These strategies can play an important role in supporting the promotion and

ensuring the preservation of cultural heritage to maintain its relevance for future generations (Ventura et al., 2016).

Based on the literature review above, this study fills the gap in previous research by presenting an effective collaborative approach based on PPP at the local level, such as in the case of the Kimpulan Temple, which successfully integrated conservation zoning, function revitalization, form adaptation, and the strengthening of cultural meaning into the modern development project.

This research offers an integrated PPP-based preservation model that combines the conservation of cultural sites with modern development simultaneously, using the function, form, and meaning (F-B-M) approach, alongside the application of digital technology as an innovation for the sustainability of cultural heritage.

Methodology

This study uses a qualitative approach with a case study method to explore the success of integrated preservation at the Kimpulan Temple site based on the Public-Private Partnership (PPP) model. The data sources include primary data, such as in-depth interviews with relevant stakeholders and direct field observations, as well as secondary data, including project documents, official reports, and relevant literature reviews. Data were collected through observation, in-depth interviews, and document analysis to obtain a comprehensive understanding. This approach is designed to provide an in-depth view of the effectiveness of the PPP model in supporting sustainable cultural preservation.

The research was conducted through several systematic steps, starting with the identification of the main issues related to integrated preservation based on the PPP model at the Kimpulan Temple site, followed by the formulation of research objectives and questions and an initial literature review to understand relevant concepts and theories. The research then employed a qualitative

approach with a case study method, focusing on aspects of function, form, and meaning, as well as the role of PPP in preservation. Data were collected through field observations to understand the physical condition and spatial arrangement, in-depth interviews with stakeholders such as UII representatives, government officials, architects, and the local community, as well as analysis of planning documents and project reports.

Field observation data was conducted with digital reconstruction (photogrammetric scanning, H-BIM-based 3D modeling) to ensure accuracy. Collection of written opinions of key informants about the preservation process carried out at that time (2009-2010). Triangulation was carried out in in-depth discussions through Focus Group Discussions with key informants (2024).

Figure 3. Photogrammetric scanning of the Kimpulan Temple shape
Source: Mutaqi, 2023

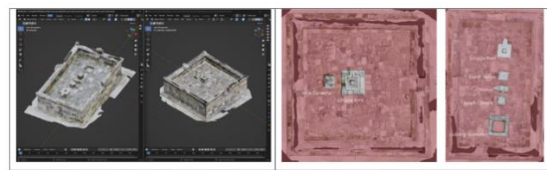
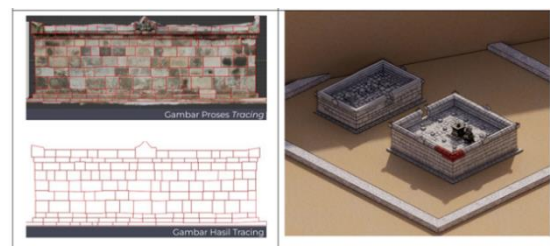


Figure 4. Rock tracing and digital reconstruction
Source: Mutaqi, 2023



The data collected were analyzed through structuring, categorizing, and triangulation processes to ensure the validity and reliability of the findings.

Figure 5. FGD of Kimpulan Temple Research with key informant

Source: Mutaqi, 2023



The analysis results were interpreted to answer the research questions and highlight the relationship between the role of PPP and the success of preservation in terms of sustainability, which were then compared with theories and findings from previous research to identify novelties. The study concludes with the formulation of conclusions, practical recommendations for replicating the model, and the systematic writing of the research report.

Result and Discussion

Study of Cultural Dialogue of Stakeholders

One key finding from this study is the exploration of cultural dialogue conducted by stakeholders, such as university representatives, government officials, archaeologists, architects, and the local community, to align their perspectives in responding to the issues arising from the unexpected discovery of artifacts at the Kimpulan Temple site. This discovery occurred in the midst of the construction of the UII Library and Museum building, presenting significant challenges because the artifacts were located in the central area, requiring changes in spatial planning and building design.

In the discussions, the main focus of the stakeholders was to reach a consensus on the preservation zoning, which included the core zone for maximum artifact protection, the buffer zone for supporting functions, and efforts to maintain the primary function of the library building. The complexity of the situation was exacerbated by the limited space, as half of the

area had to be allocated for the core and buffer zones.

Key informants as stakeholders involved are those who in 2009 experienced the dialogue process, such as Prof. Edy Suandi Hamid (UII), Dra. Ary Setyastuti (BP3 DIY), Drs. Marsis Sutopo (IAAI), Hanif Budiman, Ph.D (Landscape Architect), Ar. Ariadi Susanto IAI (Architect) and Dr. Revianto Budi Santosa (Researcher, Cultural Figure), as well as researchers, and preservation activists, such as Dr. Agus Tri Harcahyo (Researcher Archaeologist), Arif Budhi Sholihah, Ph.D (Architectural Researcher), and Muhammad Jamil (Researcher, Librarian UII). They expressed their opinions and told their roles in their respective capacities.

The agreement reached highlights the success of cultural dialogue as a collaborative approach to overcoming these challenges. The stakeholders agreed to integrate artifact preservation with the building design, including adjustments to the spatial layout to create a conservation museum in the buffer zone, protect the core zone with architectural protective design, and maintain the library's function as a center for learning.

Impact of Dialogue Results and Implications

The outcome of this cultural dialogue has two significant impacts. First, the success in building consensus among stakeholders demonstrates that a dialogue-based approach can bridge the interests of cultural preservation and development needs. Second, the design changes resulting from this dialogue, including the integration of preservation zones into the building structure, prove that preservation does not have to sacrifice modern functions; rather, it can create architecture that is more culturally meaningful.

Evidence of the success of the dialogue process is the acceptance of the decision to preserve Kimpulan Temple by the UII academic community so that the library building construction process took place

simultaneously with the restoration process of Kimpulan Temple artifacts (Marzuki, 2012).

Furthermore, this finding provides an important lesson that design adaptation based on cultural dialogue can overcome spatial limitations while ensuring the continuity of both the function and significance of historical sites. This approach could serve as a model for future preservation projects.

Integrated Development and Restoration Strategic Decisions

Another important decision resulting from the dialogue among stakeholders was the simultaneous construction of the UII Library and Museum building alongside the restoration of the Kimpulan Temple artifacts. In this agreement, the government and the university decided to fund their respective responsibilities according to their capacities while still maintaining a comprehensive physical integration framework.

The construction process was carried out using a self-management approach, where each party was responsible for the technical execution based on the roles and functions that had been agreed upon. However, to ensure synergy in design, implementation, and the final outcome, both parties worked under an Integrated Project Management system. This approach facilitated the consolidation of schedules, resource allocation, and the harmonization of the cultural preservation needs with the operational requirements of the Library and Museum building (Noor, 2012).

This decision not only reflects the efficiency of the collaboration between the government and the university but also demonstrates that an integrated work model can overcome the technical and administrative complexities of projects involving both cultural heritage preservation and modern infrastructure development. It results in a balanced outcome between the preservation of the Kimpulan Temple artifacts as the core and buffer zones and the function of the library as an educational and research facility. This approach ensures

that both cultural and functional aspects of the project are addressed without compromising either, contributing to a sustainable and harmonious development.

New Interpretation of Zoning and Spatial Reconciliation

Another significant decision relates to the progressive approach to interpreting zoning, which has traditionally been measured based on spatial territory. In the case of the Kimpulan Temple, the buffer zone is no longer applied horizontally and separately; instead, it is interpreted progressively, layering together with the core zone at its edges.

This interpretation becomes an innovative solution, allowing for the reconciliation of space between the preservation needs of the temple and the management of modern facilities. This approach resulted in a multifunctional circulation area that continues to protect the historical value of the core zone, while providing space for supportive activities in the buffer zone. The outcome is a more efficient spatial arrangement without compromising preservation principles, offering a balance between conservation needs and modern operational functions.

Aspects of Function, Form and Meaning in the PPP Model for Preserving Kimpulan Temple

The Public-Private Partnership (PPP) model has a significant influence on the preservation of cultural heritage, particularly in terms of the function, form, and meaning of cultural sites such as the Kimpulan Temple. The following is an explanation:

- **Function (Utilization):** In the context of the preservation of the Kimpulan Temple, the PPP model enables the optimal utilization of the cultural site without compromising its historical value. Through cooperation between the government and the private sector, the temple, which was originally at risk of deterioration due to lack of funding and attention, can now be leveraged for various educational and tourism functions.

The establishment of museums and facilities related to research and education ensures that the temple's function as a historical site remains active while providing social and economic benefits to the community. This approach also ensures that the utilization of the site remains relevant to contemporary developments.

- **Form (Physical Restoration):** In terms of physical restoration, the PPP model provides the private sector with access to invest in restoration with strict standards. This collaboration allows the Kimpulan Temple to be restored with a careful approach, where the private sector plays a role in financing and managing the project while the government ensures that the restoration is carried out in compliance with applicable preservation regulations. The result is a well-structured restoration that restores the physical form of the temple without damaging the valuable original elements while ensuring the long-term sustainability of the structure.
- **Meaning (Cultural Significance):** The PPP model also contributes to the preservation of the meaning and cultural values of the site. Through the integration project between the development of modern facilities (such as museums and management centers) and the preservation of the temple, the cultural value of the Kimpulan Temple can be respected and passed on to future generations. This collaboration also enables local communities to become more involved in the preservation process, raising awareness about the importance of cultural heritage and giving them a sense of ownership of their history. In this way, the preservation of the cultural meaning of the site is carried out not only physically but also through activities that strengthen the collective understanding of the cultural heritage.

Overall, the PPP model plays a crucial role in ensuring that the function, form, and meaning of cultural sites such as the Kimpulan Temple

are protected and can develop in a balanced manner by involving parties with the resources and interests in preserving that cultural heritage.

Implications of the PPP Model on Cultural Preservation

The Public-Private Partnership (PPP) approach has several positive implications for the sustainability of cultural preservation, particularly in the context of preserving the Kimpulan Temple. The following are the emerging implications:

- **Sustainability of Funding:** One of the main challenges in cultural preservation is the sustainability of funding. Through the collaboration between the public and private sectors, funding for the preservation of the Kimpulan Temple can be more secure, as the private sector can provide the necessary investment for restoration and long-term management. This cooperation allows the preservation project to be carried out cost-effectively, and the private sector can benefit from managing tourism or museum facilities, thus creating a sustainable funding cycle.
- **Improved Quality of Management and Administration:** Through the PPP approach, the management of the Kimpulan Temple is not solely dependent on the public sector, which is often limited in resources but also leverages the expertise and management skills of the private sector. This includes aspects such as physical site maintenance, visitor facility management, and improved marketing. This model helps ensure that the site is not only preserved but also managed to high standards that support long-term preservation.
- **Empowerment of Local Communities and Socio-Economic Impact:** This collaboration has a positive impact on the surrounding community. With the PPP project, the involvement of local communities in activities related to preservation, tourism, and site management can enhance their understanding of the importance of cultural

heritage and open new economic opportunities through ecotourism, creative industries, and support services. This not only supports cultural preservation but also empowers the community to actively participate in maintaining the site.

- **Integration of Modern Facilities with Preservation:** In the case of the Kimpulan Temple, the application of PPP enables the integration of modern facilities such as museums, management centers, and educational spaces that support the public's understanding of cultural heritage. This approach not only preserves the physical aspects of the site but also ensures that the historical and cultural values contained within it remain relevant to contemporary developments without sacrificing traditional elements.
- **Development of More Effective Policies:** The PPP approach also strengthens the involvement of the government in developing more effective policies and regulations related to cultural preservation. With the support of the private sector, which has a vested interest in the success of the project, existing policies are more likely to be implemented consistently and sustainably. Moreover, this collaboration can encourage the development of more comprehensive and evidence-based cultural preservation policies.

The research has added several data that provide information on the research process carried out and the validity of field data, interviews with key informants, and triangulation processes through FGD. The results are supported by the results of previous research (Bouty et al., 2019), ongoing benefits until now (Prianto & Lestari, 2023), and can be obtained benefits for the development of architectural knowledge, especially related to the preservation of cultural heritage that meets modern development.

Overall, the PPP approach to the preservation of the Kimpulan Temple has profound implications for the sustainability of cultural preservation. This approach helps create an

ecosystem that supports preservation in physical, functional, and social aspects, ensuring that the Kimpulan Temple can endure and evolve as a living and relevant part of cultural heritage.

Conclusion

The conclusion of this study indicates that the implementation of the Public-Private Partnership (PPP) model in the integrated development with the cultural preservation of Kimpulan Temple has successfully created a synergy between the conservation of cultural heritage and the development of modern infrastructure. Through collaboration between the government, universities, and the private sector, this project has been able to address challenges related to funding, management, and the sustainable physical preservation of Kimpulan Temple. The progressive interpretation of preservation zoning and the reconciliation of space involving multifunctional circulation areas demonstrate that adaptation to contemporary developments does not have to sacrifice the historical and cultural values of the site.

The application of the PPP approach also contributed to the improvement of management quality, efficient governance, and the empowerment of local communities, which will ensure the continuity of cultural preservation in the future. Overall, this project serves as a concrete example of successful development that not only prioritizes physical and functional aspects but also preserves the cultural significance embedded in Kimpulan Temple, making it a relevant example of cultural heritage preservation in Indonesia.

References

- Abdou, M. (2024). Heritage conservation and the limitation of public-private partnerships. *Cultural Trends*. <https://doi.org/10.1080/09548963.2023.2189514>
- Adishakti, L. T. (2016). Pengantar Pelestarian Pusaka. *Pengantar Pelestarian Buadya*.

- Aggarwal, M., & Suklabaidya, P. (2017). Role of Public Sector and Public Private Partnership in heritage management: a comparative study of Safdarjung Tomb and Humayun Tomb. *International Journal of Hospitality & Tourism Systems*.
- Ahmad Saifudin Mutaqi, R. R. W. (2023). Merekonstruksi Candi Terkubur. Studi Kasus: Eskavasi dan Pemugaran Candi Kimpulan di Universitas Islam Indonesia (UII). *ATRIUM Jurnal Arsitektur*, 9(2), 137–147. <https://doi.org/https://doi.org/10.21460/atrium.v9i2.199>
- Araoz, G. (2013). Conservation Philosophy and its Development: Changing Understandings of Authenticity and Significance. *Heritage & Society*. <https://doi.org/10.1179/2159032x13z.0000000010>
- Arda, G. S. U. F. (2018). *Modul Pelatihan Teknis Pemugaran Cagar Budaya* (Y. A. M. N. R. W. D. Ibrahim; (ed.); Pertama). Pusdiklat Pegawai Kemendikbud. <http://www.pusdiklat.kemdikbud.go.id>
- Boniotti, C. (2023). The public–private–people partnership (P4) for cultural heritage management purposes. *Journal of Cultural Heritage Management and Sustainable Development*. <https://doi.org/10.1108/JCHMSD-12-2020-0186>
- Bouty, R. F., Sholihah, A. B., & Agustiananda, P. A. P. (2019). Preservation of Conclusion Temple With “Historic Urban Landscape” Technique in The Islamic Indonesia University Environment. *International Journal of Architecture and Urbanism*. <https://doi.org/10.32734/ijau.v3i1.775>
- Christin, D., & Petrus, I. N. (2022). IMPLEMENTASI PUBLIC-PRIVATE-PARTNERSHIP (PPP) DALAM PELESTARIAN KAWASAN CAGAR BUDAYA PERKOTAAN. *Jurnal Potensi*. <https://doi.org/10.37776/jpot.v2i1.831>
- Ciptahening, A. N., Nugroho, N. E., & Phienweij, N. (2019). Geological Investigation and Risk Assessment for Disaster Management of Merapi Volcano and Surrounding Area, Yogyakarta Special Territory, Indonesia. *Sustainable Civil Infrastructures*. https://doi.org/10.1007/978-3-030-02032-3_5
- Gumelar, G. K., & Rully. (2022). EVALUASI KEBIJAKAN PELESTARIAN ZONASI DAN CAGAR BUDAYA DI KAWASAN DATARAN TINGGI DIENG. *Jurnal Teknik Sipil Dan Arsitektur*. <https://doi.org/10.36728/jtsa.v27i1.1495>
- Hidayat, S., & Rusman, A. (2022). Perlindungan Hukum Cagar Budaya. *Jurnal Universitas Suryakencana*.
- Ilman Noor. (2012). *Laporan Manajemen Proyek Perpustakaan UII*.
- Jelinčić, D. A., Tišma, S., Senkić, M., & Dodig, D. (2017). Public-private partnership in cultural heritage sector. *Transylvanian Review of Administrative Sciences*. <https://doi.org/10.24193/TRAS.SI2017.5>
- Kiswiranti, D. (2018). Estimasi Magnitudo Paleoearthquake Dengan Metode Magnitude Bound. *Jurnal Fisika Indonesia*. <https://doi.org/10.22146/jfi.30252>
- Marzuki, I. W. (2012). PANDANGAN CIVITAS AKADEMIA UII MENGENAI CANDI KIMPULAN DI KAMPUS TERPADU UII YOGYAKARTA. *PAPUA*, 1, 65–72. <https://doi.org/https://doi.org/10.24832/papua.v4i1.77>
- Othman, A. A. E., & Mahmoud, N. A. (2022). Public-private partnerships as an approach for alleviating risks associated with adaptive reuse of heritage buildings in Egypt. *International Journal of Construction Management*. <https://doi.org/10.1080/15623599.2020.1742626>
- Panca Putra, I., Setyastuti, A., Pramumijoyo, S., Indrajaya, A., Sesaria Mochtar, A., & Degroot, V. (2019). Candi Kimpulan (Central Java, Indonesia): Architecture

and Consecration Rituals of a 9th-Century Hindu Temple. *Bulletin de l'Ecole Française d'Extrême-Orient*.
<https://doi.org/10.3406/befeo.2019.6297>

- Prianto, J. S., & Lestari, S. (2023). Rekreasi Edukasi di Direktorat Perpustakaan dan Museum UII serta Candi Kimpulan. *Buletin Perpustakaan Universitas Islam Indonesia*.
- Riyanto, S. (2005). Beberapa Sumbangan Pemikiran Bagi Konsep "Rencana Pelestarian Situs Kedulan." *Berkala Arkeologi*.
<https://doi.org/10.30883/jba.v25i1.916>
- Sugiyanto, S.S., B. (2022). ERA BARU DALAM KEMITRAAN PENGELOLAAN CAGAR BUDAYA: STUDI KASUS KALIMANTAN. *Naditira Widya*.
<https://doi.org/10.24832/nw.v16i2.508>
- Supratikno Rahardjo. (2024). BEBERAPA PERMASALAHAN PELESTARIAN KAWASAN CAGAR BUDAYA DAN STRATEGI SOLUSINYA. *Jurnal Konservasi Cagar Budaya*, 7(2).
<https://doi.org/https://doi.org/10.33374/jurnalkonservasicagarbudaya.v7i2.109>
- Ventura, C., Cassalia, G., & Spina, L. Della. (2016). New models of Public-private Partnership in Cultural Heritage Sector: Sponsorships between Models and Traps. *Procedia - Social and Behavioral Sciences*.
<https://doi.org/10.1016/j.sbspro.2016.05.361>
- Žuvela, A., Šveb Dragija, M., & Jelinčić, D. A. (2023). Partnerships in Heritage Governance and Management: Review Study of Public–Civil, Public–Private and Public–Private–Community Partnerships. In *Heritage*.
<https://doi.org/10.3390/heritage6100358>