

Cultural Heritage Conservation Strategy in Singaraja City, Bali: Strengthening City Identity Through Historical and Architectural Approaches

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Abstract: Singaraja city has a rich cultural heritage with significant historical, architectural, and social value. This study is a case study that focuses on three main heritage sites, namely the Buleleng Resident House, the State Junior High School Building 1 Singaraja, and the Buleleng Old Port, which represent the colonial heritage and local identity of the city. The main objective of this study is to formulate an integrated strategy for the preservation of cultural heritage, by identifying the main heritage elements and assessing their conservation challenges and opportunities as sub-objectives. A qualitative descriptive-analytical approach is used through field observations, interviews with local stakeholders, and document analysis. The findings show the need for a multidimensional approach that integrates historical conservation, cultural revitalization, community engagement, and cultural tourism development. This study aligns the findings with applicable policy strategies and contributes to the theory of heritage conservation in Indonesia through strategic recommendations for the sustainable management and promotion of urban heritage assets.

Keywords: cultural heritage; conservation; historical architecture; city identity

1. Introduction

Singaraja is one of the oldest cities in Bali, with historical roots before the Dutch colonial era. Before becoming the center of colonial administration, Singaraja was a major trading center that facilitated maritime trade between Bali, Java, and other Southeast Asian regions. During the Dutch occupation, the city was developed as the Buleleng Residency, with significant infrastructural changes that introduced European-style buildings, governance systems,

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and urban planning (Arta, Pageh, et al., 2021; Kurniawan & Arthana, 2018). This colonial influence is still visible today in Singaraja's cultural heritage, especially in structures such as the Buleleng Resident House (known by the local community as the "Resident House"), the Singaraja State Junior High School Building (often called the "Singaraja Old School"), and Buleleng Port (also referred to by locals as the "Old Port"). The mention of these local names reflects the historical and emotional connection of the people to the building and reinforces the cultural identity embedded in the physical spaces of the city (Agusintadewi et al., 2019; Kurniawan et al., 2025).

Here are the importance of the three buildings for the history of Singaraja City. The official residence of the Buleleng Resident, was the center of the colonial government in the Bali and Lombok regions, making Singaraja a very influential administrative capital in the eastern region of the Dutch East Indies. This house was not only the residence of Dutch officials but also a center for policy-making that had an impact on local government. Its existence reflects Singaraja's political and administrative status as the center of power, which has helped shape the city's identity and social structure to this day (Kurniawan, 2017).

The SMP Negeri 1 Singaraja, building became an important symbol for the development of formal education in North Bali in the early 20th century. Its existence shows how Singaraja has become a pioneer in the field of modern education in Bali while reflecting the process of social transformation and improving the quality of local human resources. This school building is a historical heritage that reflects the initial efforts to spread knowledge by the colonial government, and until now it is a reminder of Singaraja's role as an intellectual and cultural center (Arta, Yasa, et al., 2021; Pageh et al., 2015).

Buleleng Port is the starting point for the development of Singaraja City as a center of maritime trade and traffic in North Bali since the Dutch colonial period. Its role as an international port makes Singaraja a major port city that connects Bali with other regions, both at home and abroad. The presence of this port became the foundation for the city's economic, social, and cultural growth, making Singaraja a center of activities and an entrance to foreign culture in its time. These three buildings historically represent three important pillars of the formation of Singaraja City: government (Buleleng Resident House), education (SMP Negeri 1 Singaraja Building), and economy (Buleleng Port) (Aldian Roni et al., 2023).

However, in recent decades, rapid urban expansion and economic transformation have transformed the landscape of Singaraja. Government-driven infrastructure projects, commercial real estate development, and tourism-related business expansion have resulted in the reuse, abandonment,

or demolition of many historic buildings. Some colonial-era structures have been converted into hotels, restaurants, or commercial centers, while others have deteriorated due to a lack of maintenance and legal protection. This raises concerns about the sustainability of Singaraja's fostered heritage and the extent to which its historical character can be preserved amid ongoing modernization pressures (Gede et al., n.d.; Kurniawan et al., 2022; Kurniawan & Arthana, 2018).

Therefore, the conservation of heritage buildings is an important step in maintaining Singaraja's urban identity and strengthening its position as a cultural tourism destination. Research has shown that adaptive conservation of historic sites can support sustainable urban development, generate economic opportunities, and strengthen community involvement in heritage management (Agusintadewi et al., 2019; Kurniawan et al., 2022, 2025).

Examples of success include cities such as Malacca in Malaysia and Hoi An in Vietnam, where heritage-based tourism has been integrated with conservation policies to balance economic growth with cultural preservation. However, achieving this balance requires a comprehensive and collaborative approach, involving government agencies, private stakeholders, and local communities in developing policies that protect Singaraja's unique historical assets while accommodating contemporary urban needs (Melaka Historical City Council, 2008; *UNESCO World Heritage Sustainable Tourism Online Toolkit Guide 3 Developing Effective Governance Welcome to the UNESCO World Heritage*, n.d.).

Although the preservation of cultural heritage has been widely discussed, research in Bali has mostly focused on intangible heritage, such as traditional performances, ceremonial practices, and religious customs. In contrast, the conservation of physical cultural heritage, particularly historic buildings and heritage sites in Singaraja, has received far less scientific and policy attention. Previous studies on the conservation of Balinese heritage have largely emphasized the protection of temples, traditional dances, and local rituals, but comprehensive research on the conservation of urban heritage, including colonial environments and traditional buildings, is still underdeveloped.

Although many have cultural heritage, Singaraja does not yet have a clear and integrated management policy. The cultural heritage of Singaraja City can be judged not only by the number of historical sites that remain, but also by the historical, architectural, and social values contained in it. As the former capital of the Residency of Bali and Nusa Tenggara (Lesser Sunda) during the Dutch colonial period, Singaraja holds several important buildings that reflect the city's strategic role in the history of government and trade in the eastern region of Indonesia. Although not as much as other big cities such as Yogyakarta or Semarang, the architectural quality and social role of these buildings make Singaraja's cultural heritage have high value (Purniti, 2023).

While Law No. 11 of 2010 on Cultural Heritage provides a national legal framework for heritage conservation in Indonesia, its local implementation in Singaraja remains inconsistent. Current urban development plans do not adequately include conservation zoning regulations or guidelines for the adaptive reuse of historic structures. As a result, many significant heritage buildings are at risk due to commercialization, poor maintenance, or a lack of enforcement mechanisms. This highlights the urgent need for a structured policy framework that integrates heritage conservation with contemporary urban development strategies (Indonesia, 2014; Prabowo & Kustanto, 2019).

This study addresses two major gaps in the literature and policy discourse. First, existing research has not sufficiently examined how the historic urban landscape in secondary cities such as Singaraja can be preserved sustainably while accommodating urbanization. Second, there is a practical gap in implementing conservation strategies that are aligned with economic development and tourism initiatives. Unlike previous research that focused on static preservation, this study advocates an adaptive conservation approach, which allows historic buildings to retain cultural significance while supporting economic sustainability.

Therefore, this study specifically focuses on three selected heritage buildings in Singaraja City, namely the Buleleng Resident House, the State Junior High School Building 1 Singaraja, and the Buleleng Port. This study aims to: 1) Identify the elements of immovable cultural heritage in the three buildings that have historical, architectural, and social significance; 2) Assess the conservation challenges and opportunities of the three sites in the context of urbanization, tourism expansion, and the broader regulatory framework; and 3) Develop a policy-oriented conservation strategy based on case studies of the three buildings, which integrates historical preservation, economic viability, and community-based cultural tourism.

By providing a context-specific conservation framework, this research moves beyond conventional conservation approaches. Instead of treating heritage sites as static monuments, the proposed strategy emphasizes community-driven sustainable conservation, where economic and cultural values coexist. This approach aims to inform policy recommendations that apply directly to local governments, urban planners, and heritage stakeholders in Singaraja. Ultimately, this research offers an innovative model of heritage conservation that responds to contemporary urban challenges while fostering long-term cultural resilience (Kurniawan et al., 2022).

2. Literature Review

2.1 *Elements of Physical Cultural Heritage*

To identify elements of Singaraja City's enduring physical cultural heritage with historical, architectural, and social significance, this research must be grounded in existing theories and prior studies. The following discussion provides a review of the relevant literature that supports this research. Research on identifying elements of physical cultural heritage typically centers on the recognition of elements that contribute to the historical, architectural, and social order of a place. These elements can include buildings, sites, landscapes, or structures that represent the identity and historical context of a city (Bo et al., 2025).

The purpose of this identification is to understand the relevance of these elements in local culture and history. The identification process involves a combination of physical surveys, interviews with local people, and analysis of historical documentation. This approach is essential to building a comprehensive understanding, which in turn can inform future conservation efforts (Fathy, 2024).

Historical elements are very important because they are silent witnesses to the development of a region. Colonial-era heritage buildings, such as official residences, government offices, and old schools, have significant historical value because they represent the social and political landscape of the colonial era. The historical significance of a building can be understood through historical documentation, architectural style, and its social role in the past. These elements contribute critically to shaping the historical narrative of a city (Purwantiasning & Bahri, 2019).

Architectural elements have substantial value in reflecting the unique design and construction techniques of a period. The "Indies" architectural style and the use of local materials are characteristic of colonial-era buildings in Indonesia, including in Bali. In the context of Singaraja, this architectural style is visible in official residences, school buildings, and traditional markets, which utilize local materials such as brick and teak wood. Architectural features have aesthetic value that must be preserved because they are part of the city's visual identity (Agusintadewi et al., 2019; Kurniawan et al., 2025).

Socially meaningful elements are elements that reflect the interactions and activities of the community related to physical buildings. Traditional markets, temples, and places of worship not only function economically or spiritually but also become the main space for social interaction in society. On the other hand, elements that have social value are often overlooked in conservation efforts. These elements play an important role in maintaining the sustainability of local culture amidst the rise of modernization (Andreeva et al., 2017; Infield et al., 2018; Lubis, 2025).

Given the above literature, this study aims to apply an appropriate theoretical framework and methodology to identify immovable elements of physical cultural heritage in Singaraja City. Its main focus is on understanding the historical, architectural, and social significance of these elements. This methodology will include collaboration with local governments, communities, and academic institutions to ensure a comprehensive identification process. This research will provide a basic understanding to develop effective conservation strategies while contributing to strengthening the identity of Singaraja City amid modernization pressures.

2.2 Conservation, Preservation, and Transformation of Cultural Heritage in City Identity

In the study of cultural heritage, it is important to distinguish conceptually between conservation, preservation, and transformation, as each involves different approaches, objectives, and impacts on the sustainability of a building's or urban area's historical value and cultural identity. Conservation refers to the efforts of maintaining and managing cultural pillars to remain functional and relevant to the current context, without losing their historical and architectural value. Conservation can involve technical interventions, such as restoration or adaptation of functions, that are adapted to modern needs, but still retain the cultural essence of buildings (Rodwell, 2018; Stoica, 2021).

Preservation emphasizes more on efforts to keep cultural heritage in the most authentic condition possible. The focus is on physical and structural protection without significant changes, so that original values—both form, material, and historical context—remain intact. This approach is often used for buildings or sites that have very high historical value (Goussous, 2022; Siliutina et al., 2024).

Meanwhile, transformation refers to changes that occur in the function, form, or meaning of cultural heritage due to external influences, such as modernization, commercialization, or globalization. Transformation is not always negative, but it can obscure or even eliminate original cultural values if not done carefully. In many developing cities, transformation often occurs through the conversion of historic buildings into modern commercial facilities that sacrifice their original identity (Sun et al., 2021; Torabi & Berahman, 2021).

By understanding these three concepts, this study chooses to use the conservation approach as the main strategy, as it provides a space for integration between the preservation of historical values and the needs of modern urban development. However, preservation and transformation are also important frameworks to analyze the dynamics and challenges faced in the context of Singaraja as a heritage city.

In analyzing the challenges and opportunities of cultural heritage preservation in the dynamics of urbanization and modernization, it is important to draw on relevant past concepts, theories, and research to build a solid foundation for this research. Urbanization and modernization often pose significant threats to the preservation of cultural heritage, especially in the context of rapidly developing cities.

The pressures of infrastructure development, land conversion, and disregard for the historical value of buildings are among the main challenges in cultural preservation. In Indonesia's historic cities, unclear regulations, limited maintenance funding, and low public awareness significantly hinder preservation efforts. In addition, globalization has had a transformative impact on historic buildings, which often change their function into modern commercial facilities, contributing to the loss of their original cultural meaning. In this context, globalization can be seen as a force that facilitates the "transformation" of heritage, which can result in the change or replacement of cultural and historical values for the sake of economic development (Rodrigues & Pimentel, 2025; Senderos et al., 2025).

However, modernization also presents new opportunities for heritage conservation. The Historic Urban Landscape (HUL) approach, which combines local communities, modern technology, and sustainable tourism, can enhance conservation efforts. Combining local cultural elements with modern tourism development can strengthen cultural identity while offering economic benefits to local communities. However, this strategy requires careful planning to prevent the commodification or exploitation of cultural elements, which risks undermining their significance. Heritage conservation in urbanization can be successful if there is collaboration between the government, local communities, and the private sector. This approach includes providing economic incentives for the restoration of historic buildings and using digital technologies to promote these efforts (Sumarsono et al., 2024; Žuvela et al., 2023).

In developing a conservation strategy for Singaraja City that integrates historical, cultural, economic, and tourism dimensions, it is important to build on the theoretical foundations and relevant findings from previous research. Preserving cultural heritage has long been recognized as a means to strengthen urban identity. Cultural heritage is not just about physical objects; it is a reflection of the values, history, and identity of the community that owns it. In the Indonesian context, preserving cultural elements such as historical buildings and local traditions helps to foster a sense of pride and belonging in the community (Putra & Wirawibawa, 2023; Seyfi et al., 2020). However, it is important to clarify which cultural elements are being preserved. Although this study refers to Balinese cultural identity, much of the heritage in Singaraja,

especially the colonial-era buildings, is rooted in colonial history, raising the question of whether local communities truly identify with colonial elements. Do Balinese people consider these colonial buildings to be part of their own identity, or do they represent an imposed colonial ideology? This question touches on broader debates in cultural studies and heritage conservation, where the relationship between colonization, cultural identity, and historical interpretation is complex and multifaceted. There has been much research on this subject, including work that critiques the role of colonial architecture in shaping postcolonial identities (Kurniawan & Arthana, 2018b).

This issue becomes particularly relevant when considering how these colonial structures were perceived by the local population. To what extent can these buildings, embodying colonial history, be considered “their” historical and cultural elements? At a more fundamental level, this paper should address how the ideology of colonization manifested in architecture interacts with the identity of local communities. To date, the intersection of culture, identity, and colonialism in heritage preservation has not been adequately explored in this context, and this should be a focal point of future research (Prabowo & Kustanto, 2019; Rebec et al., 2022).

The integration of historical and cultural elements in urban planning is not only important to strengthen local identity but also plays an important role in attracting tourists. As Geng et al., (2023) show, a holistic approach that combines historical preservation with economic sustainability is key to conservation success. Shehata (2022) also highlights the importance of conducting thorough documentation and research to explore historical values and increase public appreciation of cultural heritage. In Bali, Kurniawan et al., (2023); and Wirawan (2021) found that cultural festivals and traditional art activities serve as valuable tools to strengthen people’s connection with their historical and cultural heritage. This strategy has proven effective in fostering public awareness, especially among the younger generation.

Economic and tourism strategies contribute significantly to supporting the preservation of cultural heritage. Putra & Wirawibawa (2023) emphasize that the involvement of the private sector in the management of cultural sites offers a viable solution to the government’s budget limitations. Culture-based tourism has great potential to encourage economic growth while preserving cultural heritage. Abdul Aziz et al., (2023) argue that cities that successfully integrate cultural heritage into sustainable tourism models, such as Malaysia and Macau, not only preserve their heritage but also increase regional income.

Community participation is an important factor in the success of conservation strategies. As noted by Prihandoko et al., (2022), the level of community involvement significantly affects the outcomes of conservation

programs. In Europe, Seyfi et al., (2020) observed that involving local communities in the restoration of cultural sites strengthens their sense of belonging and creates opportunities for local economic development. Similarly, research by Abdul Aziz et al., (2023) and Chan et al., (2020) in Malaysia emphasizes the importance of public education in raising awareness about the cultural and economic benefits of conservation. Public education initiatives, such as training and counseling programs, can help communities understand that preservation is not solely the responsibility of the government but is also part of their social obligations.

In summary, this literature review provides the basis for developing an integrated conservation strategy for Singaraja City that considers historical, cultural, economic, and tourism aspects. By discussing the complexity of colonial architecture, local identity, and community involvement, this study aims to provide recommendations for conservation strategies that not only preserve the cultural acuity but also strengthen the identity of Singaraja City in the face of modernization. Such a strategy will promote cultural sustainability and generate tangible benefits for local communities.

2.3 Research Urgency and Novelty

The conservation of immovable physical cultural heritage, such as historic buildings and cultural sites, is a significant issue amid the rapid urbanization and modernization of cities. Singaraja, with its long history and rich culture, faces increasing challenges in preserving its cultural identity. Ongoing urbanization, inadequate maintenance, and limited public awareness pose a major threat to the sustainability of cultural heritage elements in cities.

While Singaraja's Dutch colonial buildings may be more than 100 years old, its neglected state is currently a matter of urgent concern. Without immediate action, this element of cultural heritage is at risk of being lost, leading to a diminished sense of identity and historical value for the city. Despite the building's long-standing existence, there are still significant gaps in research and documentation, especially in the development of comprehensive conservation strategies. To date, there has been no holistic approach that identifies elements of the immovable cultural particle in Singaraja or integrates historical, cultural, economic, and tourism aspects into conservation plans (Wirawan, 2021). One of the main challenges is the lack of community participation in these efforts. Education and active involvement of local communities are essential to ensure the sustainability of conservation initiatives. In addition, Singaraja has considerable potential to utilize culture-based tourism, which can support heritage conservation and improve the economic well-being of local communities (Agusintadewi et al., 2019).

The novelty of this research lies in its multidimensional approach to conservation. It not only focuses on the historical value of Singaraja's cultural elements but also considers its architectural and social significance. By combining the Historic Urban Landscape (HUL) theory, cultural value theory, and community participation theory, this study proposes a conservation strategy tailored to the local context of Singaraja. The integration of these theories is critical in guiding the development of balanced strategies that go beyond mere physical conservation. It emphasizes the importance of sustainable economic development through cultural tourism. However, the application of these theories should be clearly outlined in the paper, showing how they inform conservation methodologies and approaches. This will help clarify how they interact within the framework of the research.

This research is expected to provide academic and practical insights for local governments, communities, and other stakeholders involved in the preservation of cultural heritage in Singaraja. These findings aim to contribute to the broader literature on cultural conservation, particularly regarding Indonesia's immovable physical cultural heritage, and offer innovative solutions to the challenges presented by urbanization and modernization.

3. Method

This study uses a qualitative approach with a descriptive-analytical method to explore and analyze the conditions, challenges, and opportunities related to the preservation of immovable physical cultural heritage in Singaraja City. The use of qualitative approaches is aimed at providing a deeper understanding of the experiences, perceptions, and subjective dynamics surrounding heritage preservation, while descriptive-analytical methods are used to systematically identify, interpret, and analyze key elements of cultural heritage and related challenges and opportunities (Agusintadewi et al., 2019; Aryawan et al., 2019; Purwita, 2010).

In this study, three cultural heritage buildings in Singaraja City were deliberately chosen as case studies, namely the Buleleng Port Building, the Buleleng Resident House, and the State Junior High School Building 1 Singaraja. Therefore, the preservation of all three is essential to maintain the collective memory, the identity of the city, and the continuity of the local historical narrative. The analysis is focused on these three buildings to provide a more targeted and in-depth understanding of the practices of preserving physical cultural heritage in the region in general (Agusintadewi et al., 2019; Kurniawan et al., 2025).

Primary data in this study was obtained through intensive field observation which was carried out for two weeks in July 2024, covering the

central area of Singaraja City and the surrounding area. Observations were conducted systematically daily for 6 to 8 hours, using a walking transect approach as well as live recording to ensure the accuracy and sharpness of the empirical data. The main focus of this activity is the identification of physical elements of cultural heritage, such as colonial buildings, traditional markets, and other historical sites that represent the architectural and social value of the region.

The purpose of these observations is to document the existing conditions of buildings, architectural morphological characters, and social meanings contained in each heritage element. As a complement to the observation data, in-depth interviews were also conducted with various key stakeholders, including 1) local government representatives to explore the conservation policies and programs that have been implemented; 2) members of the local community to explore perceptions, participatory experiences, and local wisdom related to conservation; and 3) academics and cultural preservation experts to gain scientific perspectives and evidence-based recommendations. The active involvement of all stakeholders is crucial in producing a holistic analysis, as it allows for the integration of in-depth multi-level and interdisciplinary perspectives on the dynamics of cultural heritage preservation in Singaraja City (Parma et al., 2021; Wirawan, 2021).

Secondary data is collected from various sources, including urban planning documents such as regional spatial plans and strategic plans for cultural heritage management, as well as related regulations such as Law Number 11 of 2010 concerning Cultural Heritage and related regional regulations. In addition, academic literature—including journal articles, books, and previous research reports—is reviewed, especially those focusing on the theory and practice of cultural preservation, and relevant case studies (Kurniawan et al., 2022; Wirawan, 2021).

The data collected was analyzed using a descriptive-analytical approach, starting with the identification of cultural heritage elements with historical, architectural, and social significance (Tabel 1). The analysis then focuses on the challenges these elements face, such as lack of maintenance, modernization pressures, and inadequate community engagement. Finally, the study explores opportunities for conservation by integrating cultural, economic, and tourism factors. The results of this analysis are intended to provide strategic recommendations to preserve Singaraja's cultural identity through the protection and management of immovable physical cultural heritage.

Table 1. Summary of Historical Timeline and Condition of Historic Buildings in Singaraja

No	Building	Year Built	Original Function	Current Use/ Conditions	Significance of Heritage
1	Buleleng Resident House	1910	Dutch colonial residences for local governors	Government ceremonies and official meetings; Well maintained	High historical and architectural value; Symbols of colonial government and authority
2	SMP Negeri 1 Singaraja Building	1915	Elite educational institutions for Balinese youth	Used as a junior high school; Some are damaged	High educational and social value; forming the intellectual and political elite of early Balinese
3	Buleleng Port	1846	Maritime trade port connecting Bali with Java	Partially active; most of the old infrastructure is damaged	High economic and historical value; Main sites of colonial-era trade and cultural exchange

Source: Kurniawan (2024)

4. Results and Discussion

4.1 Identification of Cultural Heritage Elements in Singaraja City that Have Historical, Architectural, and Social Value

Identifying cultural heritage elements is an important first step in efforts to preserve cultural heritage in Singaraja City. The city has buildings and sites that reflect the historical evolution, architectural uniqueness, and social significance in the lives of its people. This study uses a case study of three main buildings, namely the Buleleng Resident House (Former Buleleng Residency Building), the State Junior High School Building 1 Singaraja (Former SMP Negeri 1 Singaraja Building), and Buleleng Port. Discussions will be prepared separately for each building so that each case study is analyzed in depth (Agusintadewi et al., 2019; Kurniawan, 2017). Each building will be examined based on three main categories, namely: 1) Historical Value, 2) Architectural Value, and 3) Social Value. This approach will provide a clearer understanding of the significance of each building as well as its role in the context of the cultural heritage of Singaraja City as a whole.

4.1.1 Buleleng Resident House

a. Historical Value

The Buleleng Resident House, or the Former Buleleng Residency Building (Photo 1), was built in 1910 on an area of $\pm 2,500 \text{ m}^2$. This building is a symbol

of Dutch colonial administrative power in the North Bali region and marks the strategic role of Singaraja as the administrative capital of the Dutch East Indies in the Bali and Lombok regions. During the colonial period, this building functioned as the office of the Resident, who was a high-ranking colonial official who represented the Dutch government authority in the region (Kebudayaan, 2021; Kurniawan et al., 2025).

As the center of government, this house is the location of important decision-making that affects regional policies, the tax system, and local power structures. Interactions between colonial officials and Balinese traditional leaders took place inside this building, reflecting a hierarchical system of government in which local power was incorporated into the colonial administrative structure, but remained under the strict supervision of Dutch authorities (P. K. Buleleng, 2025; Kurniawan et al., 2025).

Currently, the building is still used as an office of a local government agency under the management of the Buleleng Regency Government. Although it has undergone several minor renovations, such as roof repairs, window sills, and repainting, the original structure and architectural character have been preserved to maintain its historical authenticity (Wirawan, 2021).

b. Architectural Value



Photo 1. Buleleng Resident House 1930s (left) 2025 (right). (Photo: KITLV, Kurniawan)

Architecturally, the Buleleng Resident House is one of the important examples of colonial architecture in Bali. Built around 1928, it adopts the Indisch style—a blend of classical European architecture with adaptation to tropical climates and the use of local materials. Design characteristics include symmetrical facades, large columns, spacious balconies, and high roofs with

good natural ventilation systems. These elements show the adaptation of colonial architecture to the tropical context of Bali (Putra & Wirawibawa, 2023).

The materials used are mostly sourced from the local environment, such as corals and teak, which are combined with colonial construction techniques to produce sturdy and functional structures. The layout of the building is designed to support two main functions: the front serves as a government administration room, while the back serves as the private residence of the Dutch Resident. This spatial planning emphasizes the dual function of the building as a center of power and official colonial residence while reflecting the logic of structured and hierarchical colonial governance (Agusintadewi et al., 2019; Wahid, 2018).

The building's position in the heart of the city also strengthened its role in the formation of the urban layout of Singaraja, making it an important axis in the development of colonial infrastructure and urban planning of the time.

c. Social Values

As a symbol of colonial power as well as the center of government, the Buleleng Resident House plays an important social role in the history of Singaraja. This building became a space for interaction between colonial authorities and local community leaders, as well as a place for decision-making that had a wide impact on the socio-political life of the local community. In the past, this house was often an arena for diplomacy and negotiations between Dutch officials and Balinese nobles (P. K. Buleleng, 2025; Kurniawan et al., 2025).

In the contemporary context, this building has social value as a collective reminder of the community's colonial past and the process of forming local identity. It also serves as a historical landmark that holds an important narrative in the history of government in North Bali. The Resident's House is an important historical reference point, fostering public awareness of colonial history and becoming a means of historical education for the current generation (Arta, Pageh, et al., 2021; Kurniawan et al., 2025).

However, although it still functions as a government building, there are no interpretive facilities such as historical information boards, educational tours, or public engagement strategies that can communicate the important value of the site at large. The absence of adaptive reuse efforts outside of ceremonial functions is also an obstacle to making this building an active part of city life. Therefore, a comprehensive conservation approach is needed, including the integration of historical values in urban planning policies, increased public access, and protection against possible transfer of functions that may threaten the authenticity of buildings (S. D. K. Buleleng, 2023; Kurniawan, 2017).

4.1.2 SMP Negeri 1 Singaraja Building

a. Historical Value

The SMP Negeri 1 Singaraja building, which was built in 1908, was one of the early milestones in the development of formal education in the North Bali region (Photo 2). The building originally functioned as the Hoogere Burger School (HBS), a secondary school during the Dutch colonial rule that was intended for European elites and selected indigenous people. With a land area of 9,680 m², this building is a concrete representation of the modernization of education in Bali through the application of the Western education system (Pageh et al., 2015).

The presence of this institution is a turning point in the dynamics of local knowledge. The education system that was implemented—based on literacy, numeracy, and Dutch language mastery—shifted the traditional Balinese learning system that was previously oriented towards religious and social-communal values. In the colonial context, this school building was not only a place of education but also an instrument for the formation of local elites who would later become intermediaries of the colonial bureaucracy and pioneers in various nationalist movements (Pageh et al., 2015; Surya & Fikriya, 2022).

In Singaraja's social history records, the building's role as an educational institution created the foundation for significant social transformation. HBS alumni play an important role in the government, trade, and intellectual development sectors in Bali. The historical value of this building is also reflected in the sustainability of its function as an educational institution, which is still active today, although it has undergone several renovations to adapt to the needs of the times without losing its historical character (Tesar & Pangastuti, 2024).

b. Architectural Value

Architecturally, this building is a representative example of the Indisch style, which is a combination of Dutch colonial architecture with local elements adapted to the tropical climate. The characteristics of the Indisch style in this building can be seen in the symmetrical structure of the building, the existence of a wide veranda, high ceilings, and maximum natural ventilation. Local adaptation is reflected in the use of gable roofs that respond to high rainfall conditions, large ventilation for air circulation, and the use of local materials such as red bricks and teak wood as the main construction materials (Ardiyanto et al., 2015).

The presence of elements such as classical-style columns and oversized windows reinforces the building's function as a learning space that supports thermal comfort as well as natural lighting. The building's architecture also reflects the utilitarian values typical of colonial educational buildings, which emphasize functional efficiency, simple aesthetics, and structural durability (Arntsen & Hrynyszyn, 2021; Roslan & Said, 2020).

Although it is more than a century old, the structure of this building is relatively stable. However, limited conservation treatment and lack of routine maintenance are challenges in maintaining their architectural value. The visual and functional integrity of this building needs to be preserved through an adaptive conservation approach (Agusintadewi et al., 2019).



Photo 2. This school building combines elements of Dutch Colonial Architecture and the Indisch Architectural Style in 1920 (left) 2024 (right) (Photo: KITLV, Kurniawan)

c. Social Values

As one of the oldest modern educational institutions in Singaraja, the SMP Negeri 1 Building has deep social value. Its presence reflects the transition of Balinese society from traditional education patterns to a formal education system based on the Western curriculum. This building became a symbol of social change, a place for the formation of a new intellectual network that played an important role in the process of modernizing Balinese society (Pageh et al., 2015).

The social function of this building is not only limited to a place of learning but also as a collective space that forms the educational identity and social memory of the local community. The collective memory of the alumni and the generations who received education in this place binds historical values with contemporary social dynamics. However, the physical degradation and lack of relevant space utilization today show the weak integration of this building in the life of modern society (Agusintadewi et al., 2019; Kurniawan, 2017).

Efforts to preserve this building must prioritize a revitalization strategy based on social functions. Reuse as an educational museum or community learning center is a strategic alternative that can revive social values and strengthen their relationship with society. The conservation of this building is not only important for physical preservation but also as a form of care for the educational heritage and collective memory of the people of North Bali (Agung et al., 2020).

4.1.3 Buleleng Port

a. Historical Value

Buleleng Port was built in 1846, during Dutch colonial rule, on an area of approximately 8,530 m². The existence of this port is an important symbol of Singaraja's strategic position as a center of international trade and colonial administration in North Bali. As the main export-import gateway and the entry point of foreign cultural influence, the port served as a central point in economic growth and cultural exchange at the time (Pebriyanti, 2020).

The main functions of the port include the export of commodities such as coffee, tobacco, and spices, as well as the import of goods from Europe and Asia. Infrastructure such as customs offices, storage warehouses, and dock systems exhibited strict administrative oversight by the Dutch colonial authorities. This port not only supported economic activities but also became a means of political control, as well as spreading ideas of modernization and colonial resistance (Aldian Roni et al., 2023).

As trade activities develop, Singaraja has undergone significant demographic changes. Merchant communities from Java, Sulawesi, and China began to settle down and interact with the local community. This transformation encourages the formation of a more cosmopolitan and dynamic social order. Not only is the port a center for the distribution of goods, but it is also an entry point for progressive ideas that later inspire the spirit of nationalism in Bali (Aryawan et al., 2019).

Although commercial activity has declined dramatically since the end of the 20th century, the port still retains a high historical value. Some complementary buildings such as warehouses and port offices have suffered structural degradation, but some have been converted into maritime exhibition and education venues. With high potential as a heritage tourist destination, the revitalization of this port needs to be carried out in an integrated manner so that it not only becomes a passive monument but also functions as a lively educational public space (Pageh et al., 2022).

b. Architectural Value

The Port of Buleleng reflects the distinctive characteristics of Dutch maritime colonial architecture, with a functional approach and the use of local materials that are adaptive to the tropical climate. One of the important buildings in this complex is the colonial-era storage warehouse built with a simple yet sturdy structure. The materials used include coral and teak wood, showing a construction strategy that combines durability and efficiency (Aldian Roni et al., 2023).

These warehouses are designed to accommodate the needs of export-import logistics, with efficient layouts and adequate ventilation. The façade of the

building maintains the colonial style with the shape of a gable roof, large glazed windows, and distinctive support columns. In addition to the warehouse, there are the remains of a stone pier and a watchtower that reinforce the aesthetic and historical value of the port area (Agusintadewi et al., 2019).

The design of the port area shows integrated planning, with connectivity between the sea, docks, warehouses, and administrative offices. These elements reflect the adaptation of colonial architecture to the needs of trade as well as the tropical climate of North Bali. Although most of the structures have been damaged or unused, their architectural value remains important as a representation of the colonial industrial heritage (Pebriyanti, 2020).

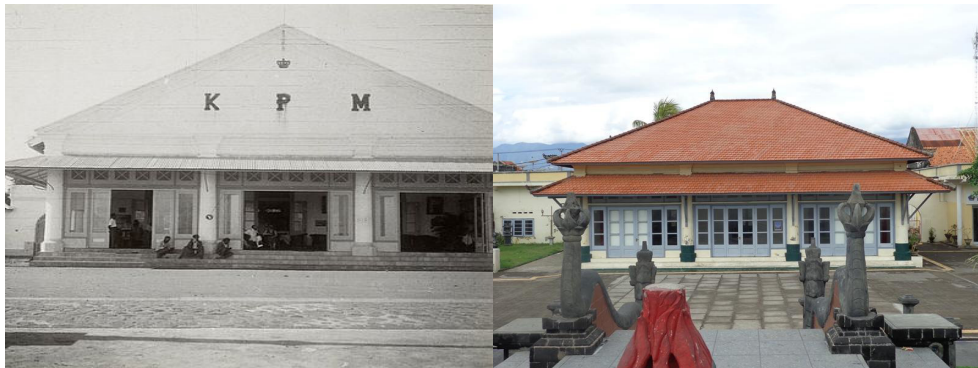


Photo 3. The KPM (Koninklijke Paketvaart Maatschappij/Royal Parcel Delivery Company) Office Building has been converted into the colonial-style Sunda Ketjil Museum in Buleleng Port, in 1920 (left) 2024 (right) (Photo: KITLV, Kurniawan)

c. Social Values

As the main maritime node in North Bali, Buleleng Port (Photo 3) has a deep social value in the collective memory of the Singaraja people. The port not only creates employment opportunities for fishermen, dockers, and small traders but also facilitates cultural exchanges between local and foreign communities. The existence of the port has also shaped the city's identity as a center of economic and cultural activities since the colonial era (Aldian Roni et al., 2023; Pebriyanti, 2020).

The multicultural interactions that occur around the port area create a diverse and dynamic social environment. Maritime traditions, such as annual maritime festivals and coastal cultural rites, continue to be preserved as part of an intangible heritage that strengthens the social cohesion of the community. However, the integration of ports into the narrative of contemporary social identity has not been optimal, due to the lack of community involvement in efforts to preserve the area (Kebudayaan, 2021; Kurniawan & Arthana, 2018).

The spread of the city and the development without regulation have eroded many parts of the port's historical spatial layout. Therefore, the conservation of the port of Buleleng must be carried out with a landscape-scale approach that integrates industrial heritage, coastal areas, and culture-based tourism strategies. Without a holistic approach, the port risks being functionally fragmented and losing its historical narrative as an important economic and social node for Singaraja (Putra & Wirawibawa, 2023).

4.2 Analysis of Challenges and Opportunities in Cultural Heritage Conservation in the Dynamics of Urbanization and Modernization

4.2.1 Challenges in Heritage Preservation

a. Urbanization and Land Use Transformation (HUL Theory Perspective)

The rapid urbanization of Singaraja has led to significant changes in land use, affecting the preservation of cultural supply sites. Uncontrolled development, weak zoning regulations, and pressure for new infrastructure projects have resulted in spatial fragmentation, where historic buildings are increasingly surrounded or replaced by modern structures. The absence of a comprehensive heritage-sensitive urban planning policy exacerbated this problem, leading to the gradual loss of Singaraja's historic urban identity.

The conservation of historic buildings in Singaraja faces several significant challenges. Many buildings, including the Official House of the North Balinese Residents, the Old School Building, and the buildings within Buleleng Port, suffered damage due to age, exposure to tropical climatic conditions, and inadequate maintenance (Aldian Roni et al., 2023). In some cases, structural integrity is compromised, requiring immediate intervention. Additionally, urban expansion and infrastructure development put increasing pressure on historic sites, often leading to demolition or alterations. Some Dutch colonial buildings and traditional markets have been partially demolished or reused for commercial development without conservation considerations. The lack of strict heritage zoning policies means that many historic sites are at risk of being overshadowed by high-rise buildings and modern urban functions (Kurniawan et al., 2025).

While some local stakeholders recognize the value of heritage conservation, others prioritize economic and urban development over preservation efforts. The main issue is public engagement and awareness. While it's often assumed that neglect is caused by a lack of public understanding, the reality is more complex. Economic constraints, shifting land use priorities, and unclear policies also contribute to heritage degradation. In addition, government funding for conservation projects is still insufficient, thus limiting the scope of conservation initiatives (Adhika & Putra, 2020; Andiani & Wiendiyati, 2019).

b. Appreciation and Documentation of Weak Culture (Cultural Value Theory Perspective)

Despite its historical and architectural significance, many of Singapore's cultural heritage sites remain underestimated by policymakers and local communities. Intangible cultural connections—such as historical narratives, traditional uses, and symbolic meanings of these sites—are often overlooked. This leads to a lack of proper documentation and interpretation of heritage, making it difficult to raise awareness of its importance. Unlike intangible heritage such as dances and rituals, physical cultural heritage in Singaraja receives less academic attention and public engagement, resulting in inadequate conservation policies and fragmented preservation initiatives (Agusintadewi et al., 2019; Wirawan, 2021).

c. Low Community Involvement in Conservation (Community Participation Theory Perspective)

One of the important obstacles to the success of cultural heritage conservation in Singaraja is the low level of community participation. Many heritage preservation efforts are top-down, initiated by the government or external agencies, with minimal involvement from local communities. Without adequate public involvement and incentives, conservation is often perceived as a government responsibility rather than a collective effort. The absence of community-based heritage programs results in a lack of awareness and ownership among local populations, making it difficult to sustain preservation initiatives in the long term. Many historic sites have been abandoned or reused without local input, leading to cultural detachment and disinterest in preservation efforts (Kurniawan, 2017; Wirawan, 2021).

4.2.2 Opportunities for Heritage Conservation

a. Sustainable Conservation Strategy through Urban Planning (HUL Theory Perspective)

The implementation of heritage-sensitive urban planning can be a strategic opportunity to integrate conservation efforts with urban development. By adopting a Historic Urban Landscape (HUL) approach, Singaraja can develop zoning regulations that prioritize adaptive reuse of historic buildings, buffer zones around heritage sites, and incentives for heritage-friendly development. The revitalization of heritage districts, where historic buildings are converted into cultural centers, boutique hotels, or creative centers, can preserve their historical value while supporting economic growth through tourism and local businesses (Ningsih et al., 2022).

b. Strengthening Cultural Narratives and Public Awareness (Cultural Value Theory Perspective)

Reinforcing the cultural significance of heritage sites through education, documentation, and storytelling can increase public appreciation and support for conservation efforts. Integrating cultural heritage into school curricula, museum exhibitions, and digital heritage initiatives can help maintain cultural memory across generations. Augmented Reality (AR) and digital archives can be used to provide an interactive historical experience, allowing the public to engage with Singapore's cultural heritage more dynamically. Heritage storytelling initiatives, such as guided history tours or community heritage festivals, can also foster a deeper emotional connection with these sites (Boboc et al., 2022; Campos et al., 2023).

c. Increasing Community Engagement and Economic Incentives (Community Participation Theory Perspective)

Empowering local communities through participatory conservation programs and providing economic incentives can increase engagement and ensure long-term sustainability. Programs such as heritage tourism cooperatives, involvement of local businesses in conservation projects, and heritage-friendly policies for small businesses can make cultural preservation more economically viable. In other historic cities, a community-based conservation model has been successfully implemented by allowing residents to manage heritage cafes, cultural workshops, and handicraft markets in restored historic buildings. This model can be adapted for Singaraja to combine heritage conservation with economic benefits for the local community (Keitumetse, 2014; Obot et al., 2022).

4.2.3 Towards a Hybrid Conservation Approach for the Future

Drawing from the perspective of postmodernist Robert Venturi, the future of Singaraja's cultural heritage does not have to be a binary choice between preserving the past or embracing modernity. Instead, a hybrid approach that combines historical preservation with contemporary functionality can be a realistic and sustainable solution. This means allowing for certain adaptations while retaining the core architectural and cultural values of the heritage site. Historic buildings can incorporate modern functions such as co-working spaces, art galleries, or boutique hotels without sacrificing their historical character. This is in line with international best practices where heritage buildings are adapted to meet the needs of today's urban while retaining their original essence (Li et al., 2021; Shi & Huang, 2025).

By integrating urban planning strategies (HUL Theory), cultural identity strengthening (Cultural Value Theory), and community empowerment

(Community Participation Theory), Singaraja can develop a comprehensive and dynamic heritage conservation framework that balances preservation with sustainable development (Cernea, 2001; Jingsen & Muyun, 2021).

The analysis concludes that the challenges of preserving cultural heritage in Singaraja—ranging from urban encroachment and weak cultural recognition to low community participation—can be overcome through a multi-layered approach. The integration of HUL theory, cultural values, and community participation provides a structured framework for analyzing these challenges and formulating effective solutions (Landscape, n.d.; Sumerata et al., 2020). By implementing heritage-sensitive urban policies, strengthening public appreciation through education and storytelling, and encouraging community-driven conservation models, Singaraja can strengthen its cultural identity while aligning with the goals of modernization and urban development. This hybrid conservation model ensures that cultural heritage remains relevant, economically viable, and functionally adaptable in the future landscape of Singaraja.

4.3 Conservation Strategy Integrating Historical, Cultural, Economic, and Tourism Aspects to Strengthen the Identity of Singaraja City

4.3.1 An Integrated Approach to Cultural Heritage Conservation in Singaraja

To strengthen the identity of Singaraja City through cultural heritage conservation, an integrated strategy is needed that considers historical, cultural, economic, and tourism aspects holistically. This multidisciplinary approach not only guarantees sustainable preservation efforts but also supports the development of cities that are in harmony with local values (Parma et al., 2021; Rahmawati & Arsudipta, 2022).

In the historical context, conservation must begin with the identification and documentation of historic buildings that represent the colonial heritage of the city, accompanied by legal protection through official recognition as cultural heritage under national regulations. In addition, the restoration of the building must be carried out accurately and historically, maintaining the authenticity of architectural elements and paying attention to structural integrity. The use of local materials is a major concern because, in addition to having architectural and cultural value, these materials also demand a traditional conservation approach that preserves the original character of the structure. Challenges such as the authenticity of interventions can be overcome by educating the public about the value of local materials, as well as reusing materials from old buildings to reduce waste while preserving heritage elements (Wirawan, 2021).

In the cultural aspect, significant preservation involves the revitalization of traditions and rituals tied to historical sites, as well as the use of heritage buildings as centers of cultural activities that still respect their historical value.

The functional transformation of a building, such as the conversion of a school into a museum, demands careful design considerations so as not to lose its original character. Integrating heritage education into the local curriculum is also a strategic step to build the awareness of the younger generation on the importance of cultural preservation (Sartika et al., 2024; Zhang, 2019).

From an economic perspective, conservation approaches should encourage sustainable strategies by developing history-based tourism products, encouraging the involvement of local business actors in the cultural economy, and facilitating private sector participation through Corporate Social Responsibility (CSR) programs as technical and financial support for restoration projects (Lin et al., 2024; Sengupta, 2017).

Meanwhile, tourism can also serve as an effective instrument of preservation by hosting annual festivals, developing interactive digital platforms that contain information and virtual tours, and improving accessibility to heritage sites through public transport infrastructure and adequate visitor facilities (Siddiqui et al., 2022; Vecchio et al., 2025). Thus, the preservation of cultural heritage in Singaraja is not only an effort to preserve the past but also a dynamic strategy for strengthening the city's identity and supporting inclusive and sustainable development (Photo 4).

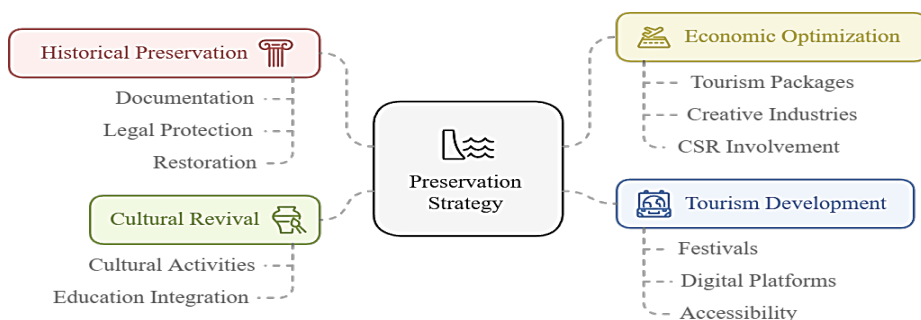


Photo 4. Integrated Approach Scheme for the Conservation of Cultural Heritage (Photo: Kurniawan)

4.3.2 Conservation Implementation Strategy

a. Buleleng Resident House

The Buleleng Resident House in Singaraja is one of the cultural heritage sites that has historical, architectural, and social value. Built during the Dutch colonial period, this building serves as a testament to the administrative history of North Bali while displaying a distinctive colonial architectural style adapted to the local climate and materials. However, the house faces challenges such as structural damage, the risk of improper reuse, and inadequate maintenance

efforts by the responsible parties. Strategic conservation efforts are needed to ensure its long-term sustainability (Purwita, 2010; Putra & Wirawibawa, 2023).

A clear distinction between preservation and conservation is crucial in determining intervention strategies for cultural heritage. Preservation focuses on maintaining buildings in their present state, while conservation includes restoration, adaptation, and sustainable use. These differences are crucial in formulating an approach to this building and other historic buildings in Singaraja (Kurniawan & Arthana, 2018).

The conservation strategy of the Buleleng Resident House includes the following steps (Table 2):

Table 2. Implementation Strategy for the Conservation of Residential Buildings

No	Conservation Measures	Strategy	Activities
1	Restoration and Maintenance	Structural Restoration	Restore damaged parts (e.g., roofs, walls, floors, and ornaments) while maintaining their authenticity.
		Routine Maintenance	Implement preventive maintenance (e.g., repainting, minor repairs, humidity control).
2	Documentation and Research	Historical Documentation	Record the building's administrative history and cultural significance.
		Architectural Research	Conduct a study of colonial architectural styles to guide accurate restoration.
3	Adaptive Reuse for Public Engagement	Cultural Center	Repurpose the building into a cultural center featuring historical artifacts of North Bali.
		Educational Uses	Organize educational tours for students and tourists.
4	Community Engagement	Local Participation	Train local communities in conservation practices.
		Awareness Campaign	Promote public awareness of the importance of heritage conservation.
5	Legal Policies and Support	Protection of Cultural Heritage	Registering buildings based on Law No. 11 of 2010 concerning Cultural Heritage.
		Urban Planning Integration	Ensure spatial policies protect structures from commercial redevelopment.
6	Private Sector Involvement	Public-Private Partnerships	Offer incentives such as tax deductions, branding opportunities, or joint management agreements for private funding in restoration efforts.

Source: Kurniawan (2024)

b. Conservation Strategy of SMP Negeri 1 Singaraja Building

The old school building in Singaraja is one of the earliest modern education symbols in North Bali. However, structural degradation, the threat of conversion into commercial facilities, and a lack of preservation funds have put this historic site at risk. A conservation-based approach is needed to ensure buildings remain cultural and educational assets (Agusintadewi et al., 2019) (Table 3).

Table 3. Conservation Implementation Strategy of the State Junior High School Building 1 Singaraja

No	Conservation Measures	Activities
1	Restoration and Maintenance	Preserve original architectural elements (e.g., wooden windows, tile roofs, and wall ornaments) using local materials and techniques.
		Allocate government and private funds for ongoing maintenance.
2	Documentation and Research	Record the historical significance and stories of alumni related to the school.
		Publish findings in books, articles, and digital archives.
3	Utilization of Education	Turn the school into an educational museum about the history of North Bali education.
		Organize heritage workshops and exhibitions for students and visitors.
4	Community Engagement	Encourage local community participation in restoration efforts through volunteer programs and crowdfunding initiatives.
5	Legal Policy and Protection	Register schools based on Law No. 11 of 2010 concerning Cultural Heritage.
		Integrate building conservation into the city's urban planning framework.
6	Private Sector Collaboration	Enter into partnerships with private entities for sponsorship, brand rights, or co-use agreements.

Source: Kurniawan (2024)

c. Buleleng Port Conservation Strategy

Buleleng Port was historically the main gateway to international trade in North Bali during the colonial period. However, modernization pressures and a lack of conservation efforts have led to setbacks. A comprehensive conservation approach is needed to restore its historical significance while integrating it into Singaraja’s modern urban development (Kurniawan, 2017; Pebriyanti, 2020) (Table 4).

Table 4. Buleleng Port Conservation Implementation Strategy

No	Conservation Measures	Activities
1	Restoration of Historic Infrastructure	Restore existing structures (e.g., warehouses, docks) while retaining original architectural elements.
		Apply conservation techniques to prevent further damage.
2	Documentation and Research	Doing documentation of the history and architecture of the port.
		Publish digital and print materials to raise awareness.
3	Cultural Tourism Development	Integrating Buleleng Port into Singaraja's cultural tourism strategy.
		Develop heritage tours that educate visitors about its historical significance.
4	Community Engagement	Encourage public participation through volunteer programs and skills training initiatives.
5	Legal Policy and Protection	Registering Buleleng Port as a national cultural heritage based on Law No. 11 of 2010 concerning Cultural Heritage.
		Formulate local policies that balance modernization and conservation.
6	Private Sector Investment	Build a tourism-based partnership that offers brand rights, co-managed tour services, or heritage-themed commercial spaces.

Source: Kurniawan (2024)

4.3.3 Policy Recommendations

To ensure the sustainable preservation of Singaraja’s cultural heritage, the following policy recommendations are proposed:

- a. Preservation Master Plan – Local governments should develop a comprehensive master plan that integrates the protection of historic buildings, cultural revitalization, and the promotion of heritage-based tourism. This plan must be aligned with urban development policies and ensure long-term sustainability.
- b. Special Regional Regulations – Establish and enforce specific regulations to effectively protect and manage historic buildings. These include zoning policies, building conservation incentives, and stricter enforcement of heritage protection laws.
- c. Technological Innovation – Driving the use of modern technologies, such as 3D scanning, GIS-based mapping, and virtual tourism, to improve heritage documentation, conservation, and public engagement.

By implementing an integrated strategy, Singaraja can preserve its historic buildings while utilizing its cultural and economic potential through tourism. This will strengthen the city's identity as the center of North Bali's cultural heritage and ensure its sustainability for future generations.

5. Conclusion

This study concludes that Singaraja City has a significant cultural heritage in the form of historical buildings that represent important historical, architectural, and social values in the course of urban development, including the Buleleng Resident House (government), the State Junior High School Building 1 Singaraja (education), and the Port of Buleleng (trade). However, conservation efforts for these buildings still face serious challenges, including pressure on urban development, weak conservation regulations, ineffective supervision, and low community involvement.

Based on the results of the analysis, several strategic recommendations were formulated to strengthen the preservation of cultural heritage in Singaraja, such as the integration of preservation into the urban spatial plan through the establishment of conservation zones and the application of the principle of adaptive reuse, community capacity building through conservation education and training, and institutional strengthening through the establishment of a city-level cultural management body. In addition, the development of sustainable cultural tourism and partnerships between the government, academia, and the private sector are also suggested as collaborative strategies based on field data. This approach aims not only to protect the physical buildings but also to strengthen the city's identity and make cultural heritage an asset of sustainable development.

However, this study has several limitations, especially in the limited geographical scope of Singaraja City and the limited time of data collection, which has an impact on the depth of analysis of long-term conservation factors. Therefore, future research needs to expand the scope of the region to regions with different cultural characteristics to produce a more comprehensive understanding. Further research is also recommended to explore the use of digital technologies, such as 3D modeling and GIS, in the conservation of cultural heritage, particularly in remote areas, as well as to examine the effectiveness of community-based conservation policies that actively involve young people as agents of sustainable preservation.

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