



Community Service Masterplan Planning of Talibeng Palace, Karangasem, Bali

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Abstract. Talibeng Village in Sidemen District, Karangasem Regency, Bali Province, is a potential destination for natural, cultural, and spiritual tourism. The village consists of several banjars such as Celetiga, Delodyeh Kangin, Delodyeh Kawan, Talibeng, Sari, Dukuh, Wangsihan, and Wanasari, which are at an altitude of 350 meters above sea level. The majority of the population works as farmers, with rice fields and hills that provide beautiful scenery and great opportunities for tourism development. Although tourism in Karangasem Regency has grown rapidly, the potential for cultural and traditional tourism in Talibeng Village has not been fully maximized. One of the efforts made is the preservation of Puri Agung Talibeng, which has an important role in local history and culture. Through collaboration with the Civil Engineering Department of Polytechnic State of Bali, the development of the Puri Agung Talibeng masterplan aims to preserve and revitalize the palace, while enhancing its cultural, architectural and tourism appeal. The project seeks to create a development plan that is sustainable and sensitive to traditional values, by minimizing the adaptation of the functions, spaces, and architectural forms of the palace buildings.

Keywords: Arrangement, Community Service, Masterplan

1 Introduction

Talibeng Village in Sidemen District, Karangasem Regency, Bali Province, is a potential destination for natural, cultural, and spiritual tourism. It consists of banjars such as Celetiga, Delodyeh Kangin, Delodyeh Kawan, Talibeng, Sari, Dukuh, Wangsihan, and Wanasari located at an altitude of 350 meters above sea level. Monthly rainfall reaches around 2000 mm/month and the average air temperature is 250 Celsius. The area is dominated by rice fields, plantations, and residential areas, as well as some hills (Talibeng, 2024). The hilly location of the natural Sidemen area is very supportive for the development of tourism that highlights its natural beauty and cultural heritage. Like other regencies in Bali, Karangasem Regency has many tourist destinations that are widely known by domestic and foreign tourists. Currently, Karangasem Regency has a total of 20 tourist villages (Sudhana et al., 2021). One such destination is Talibeng Village, which is located in Sidemen District. Most Talibeng villagers work as farmers,

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with rice fields located to the west of the village providing a cool and beautiful view. To the east, hills that can be climbed with easy access add to the natural appeal of Talibeng Village. In addition to its natural potential, the villagers are also friendly to tourists. However, this potential has not been fully developed, especially in the aspect of cultural and traditional tourism (Talibeng, 2023). The increase in tourism in Karangasem has encouraged Talibeng Village to continue improving its environment and human resource management. It has also improved the economy as well as the community's awareness of preserving cultural heritage, such as efforts to organize and preserve Puri Agung Talibeng (Talibeng Palace).

Puri is defined as the residence of knights or those who hold the government, or the house of a respected nobleman in an area (Gelebet, 1981). After the independence of the Republic of Indonesia, the role of the puri is no longer the same. The social roles carried out by the Puri still persist today, although the puri no longer has formal power in the government. In general, puri has three main social roles, namely a cultural role, an economic role, and a political (Calvin, 2013). As a center of government, the residence of the king, and the center of Balinese culture, the existence of the puri from the past until now is very important. The buildings of the puri were designed for this purpose so that their presence in an environment (village) will make them a "landmark" as well as the center of the environment/area (Budihardjo, 2019). Today, Bali's palaces are equipped with important tourism support facilities. They enrich tourism and serve as guardians of Balinese culture, fostering a harmonious blend of tradition and modernity. As Bali attracts increasing global attention, the preservation and promotion of this unique cultural treasure remains paramount to the development of sustainable tourism and the cultural heritage (Supartini et al., 2024).

The community is increasingly aware of the importance of preserving traditional buildings, especially in improving the comfort of indigenous people in the Puri Agung Talibeng area. With the increase in tourism in Karangasem, maintaining the function and physical preservation of the building with the hope of making Puri as a tourist attraction. The existence of tourism will play a positive role in the preservation of old and historic buildings, with the process of adaptation of functions, spaces, and architectural forms kept to a minimum. Structuring efforts have begun with a focus on the Merajan Agung area, and will continue for the entire palace area with support from the Civil Engineering Department of Polytechnic State of Bali. This program is in line with the Polytechnic State of Bali Strategic Plan 2020-2024 which encourages the acceleration of the process of transferring science and technology to the community which contributes to improving the welfare of the community, encouraging the progress of the nation through community service, and participating in preserving the nation's culture, local wisdom and the world environment (sustainable development) (Rencana Strategis Politeknik Negeri Bali 2020-2024, 2020).

Polytechnic State of Bali as a higher education institution in Bali, is expected to address social, cultural, and applied technology issues in its surroundings. This emphasizes the importance of producing practical and innovative solutions to help communities overcome existing challenges. The main objective of the master plan is to preserve and revitalize Puri Agung Talibeng while enhancing its cultural, architectural, and tourism appeal. Through collaboration with various stakeholders, including the

Civil Engineering Department of Polytechnic State of Bali, the project aims to create a sustainable and culturally sensitive development plan, which integrates modern infrastructure with traditional values. Of course, this is in line with the outline of the Polytechnic State of Bali Community Service which continues to encourage the improvement of the quality and quantity of research-based community service in Indonesia and internationally with the principle of sustainable development (Bali, 2024).

2 Methodology

The methodology used in the master planning of Talibeng Palace, Karangasem, Bali includes several important steps. First, a site analysis was conducted through a detailed survey of the physical conditions, an evaluation of the landscape, topography, and existing infrastructure specific to Puri Agung Talibeng, as well as an analysis of the existing culture in Talibeng Village. Furthermore, cultural and historical research was conducted through interviews with representatives of the palace, in this case, the palace *Penglingsir*, and analysis of historical documents to understand the historical and cultural significance. Analysis was also conducted on the cultural role and function of the palace in Balinese society, focusing on architectural elements that can be preserved. The implementation method is carried out by organizing activities organized into several stages of work to facilitate their implementation and evaluation.

Then an analysis was conducted for the sustainability of the palace, by exploring the tourism potential analyzed through a SWOT (Strengths, Weaknesses, Opportunities, Threats) approach to assess existing strengths, weaknesses, opportunities, and threats, as well as visitor trends and economic impacts in the area. Consultation with stakeholders was also an important part, involving discussions with local authorities, community leaders, and experts from the Polytechnic State of Bali to identify their needs and concerns. Collaboration between the implementer and key partners in the design to jointly find solutions to field problems, by maintaining openness to partner input regarding space requirements and facility development. Focus Group Discussions (FGD) were needed to reach an understanding based on partner input regarding the design of the master plan.

3 Result and Discussion

3.1 Site Analysis

The existing condition of the palace has undergone significant changes, some of which deviate from the layout that refers to traditional Balinese architecture. The existing condition of Puri Agung Talibeng is as follows: a. The Pakuwudan area is located on the *kaja kauh* side and originally functioned as a parking lot for horses, spatially and functionally changed into a *bale banjar*/ community building; b. The Kerandan area has undergone major changes, with a two-story building; c. Betelan area has an additional function in the form of a car garage; d. The Keputren area, which originally

functioned as a building where princesses or daughters lived, currently functions as a residence for one of the palace family members; e. Saren Gede is one of the areas that is still preserved. There are also ancient buildings that still survive and are estimated to be 400 years old; f. Beji is a bathing area for members of the royal family, now physically and functionally gone; g. Merajan Agung is a sacred area for all members of the palace family, who live inside and outside the palace; h. Merajan Alit is a sacred area for a small number of members of the palace family until now it is still preserved; i. Saren Kauh area is a residential area for the palace family, parts of the building have changed from the palace style; j. Petandakan area has been changed; k. The Jaba Tengah area is currently a vacant lot, with no fence separating it from other areas; l. Saren Kangin area is a residential area for the palace family, most of the buildings have changed from the palace style; m. The Bencingah area is mostly a grass field, on the south side some buildings deviate from the palace style; n. Pemengkang area is currently dominated by empty land; o. Sumanggen Area There is no Sumanggen building which is usually used for pitra yadnya ceremonies. Currently, the Sumanggen area has residential buildings and the Telajakan side has changed its function; p. Pesenetan area used to function as a public kitchen of the palace, currently, it has changed its function as a residential building. The most drastically changed area is the Teba area on the *kaja* and *kangin* sides, which is now a residential area outside of the castle members.

The measurement phase of the existing conditions of the palace was carried out by a team consisting of 1 lecturer, 1 staff member, and 4 students. The measurement results obtained the boundaries and dimensions of the palace area, as well as the ground level. This data is important for design, where the measurement results will be copied into a 2-dimensional drawing (AutoCad) to be used as material in planning the masterplan drawing from FGD I.

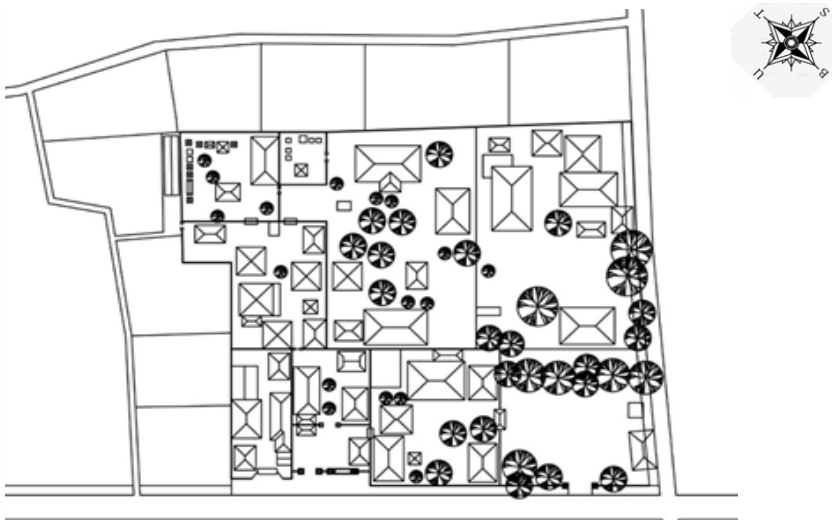


Figure 1. Drawing of existing palace layout plan

3.2 Focus Group Discussion I (Cultural and Historical Study)

The realization of spatial patterns and housing patterns in traditional villages as an artificial environment is closely related to the attitudes and outlook of Balinese life, inseparable from the joints of religion, customs, beliefs and religious systems that underlie aspects of life (Dwijendra, 2008). In designing a palace, there are special rules and regulations that bind the layout which certainly has values and hierarchy in its arrangement. The use of Sanga Mandala as the basis for determining the area and zoning, Tri Angga as a reference in determining the proportion and physical building (Gelebet N, 1981). The existing condition of the palace has undergone significant changes, some of which deviate from the layout that refers to traditional Balinese architecture. The physical condition of the buildings in Puri Agung Talibeng shows many changes from the original rules of Balinese Traditional Architecture. Only the Saren Gede and Merajan Agung areas are still preserved in their originality. Significant changes occurred on the east side of the palace, where telajakan, which used to be an important part of the palace's spatial layout, has been converted into housing for Talibeng villagers. In terms of landscape, the Bencingah area still retains its natural beauty, although many of the gates have disappeared.



Figure 2. FGD I activities

Ideas and inputs regarding the arrangement of the palace area in the form of developing a masterplan drawing of Puri Agung Talibeng after assessment by the palace representatives in FGD I to preserve the palace through rearrangement as it was originally established are expected to be a reference in building planning at Puri Agung Talibeng. In addition, the masterplan of the palace is accompanied by the arrangement of the gate in the palace environment adapted to traditional Balinese architecture. There are two sources of reference for making the master plan. The first is a sketch of the old layout plan of Puri Agung Talibeng from the Penglingsir Puri. The second is the layout plan of Puri Blahbatuh in Gianyar which has similarities with Puri Agung Talibeng because it is still related.

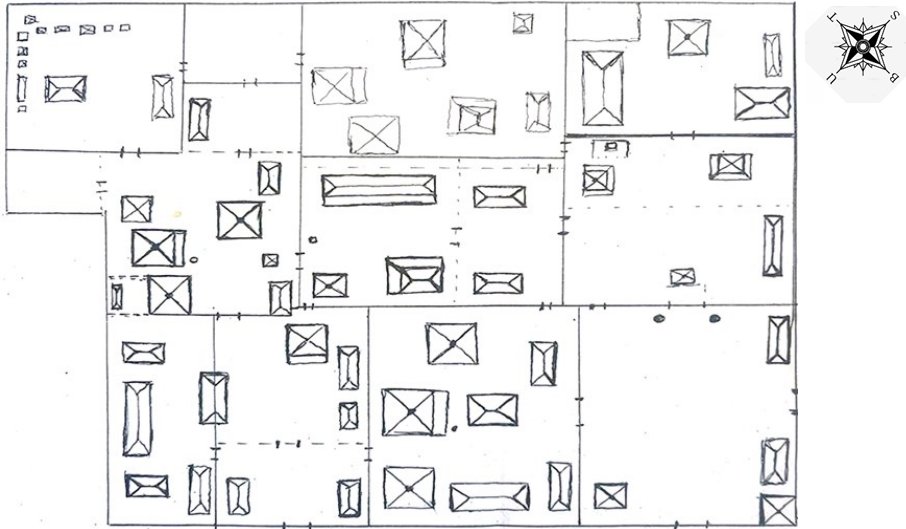


Figure 3. Sketch of Puri Agung Talibeng masterplan

3.3 Focus Group Discussion II (Sustainability Analysis)

During the second Focus Group Discussion (FGD II) at Puri Agung Talibeng, Karangasem, the conceptual drawings prepared by the Polytechnic State of Bali team were approved for further development. The partners emphasized that the planning approach, based on traditional Balinese architecture, embodies profound philosophical concepts such as *Tri Hita Karana*, which reflects the balance between God, humans, and nature; *Sanga Mandala*, symbolizing the nine cardinal directions; and *Kaja-Kelod* and *Kangin-Kauh*, which underpin spatial arrangement and functions in traditional Balinese architecture.

The tourism potential was analyzed using a SWOT approach. The strengths identified include the long-standing history of Puri Agung Talibeng, which serves as a significant attraction for tourists. However, weaknesses remain, such as the underdeveloped infrastructure of the palace as a tourist destination within Sidemen District. Opportunities arise from the increasing popularity of Sidemen District for its natural beauty, while its cultural potential remains largely untapped. Threats include changing perceptions of the role and function of the palace, as well as the relatively limited interest of visitors in the arts and culture of the Sidemen District.



Figure 4. FGD II activities

Based on this analysis, the partners expressed strong confidence in continuing with the master plan planning process. The focus will be on preserving the values of traditional Balinese architecture, particularly in sacred areas while adopting new functions for profane areas that support cultural tourism activities at Puri Agung Talibeng. The master plan is expected to align with current community values while respecting the philosophy and cultural customs of the region. This analysis demonstrates a clear strategy for preserving and revitalizing the historical and cultural significance of Puri Agung Talibeng, while adapting it to modern tourism needs, ensuring both the protection of cultural heritage and the promotion of sustainable cultural tourism.

The team proceeded to develop masterplan drawings, pre-design drawings of the kori agung, and kori alit that included floor plans, views, and 3D visuals. The accurate measurements of the kori agung and kori alit ensure proper implementation on the ground. Based on the Sustainability Analysis, most of the palace still maintains its authenticity. The development of new functions at Puri Agung Talibeng is only a small part in the profane area. As in the *bencingah* area is arranged with the addition of a stage for dance performances with the background of the *kori,agung* as well as the addition of a 1-story building on the south side of the *bencingah* which can function as a gong hall and toilet for tourists. This *bencingah* area becomes a kind of plaza, before exploring the *pemengkang* and *semanggen* areas that can later be reached by tourists. In ancient times, this area was a public area that could be accessed by the community, so there is no change in value in this design.



Figure 5. Puri Agung Talibeng masterplan

The design of the *kori* in Puri Agung Talibeng is adapted from the *kori* form used in the Merajan Agung area, which has a distinctive style. This distinctive feature is then applied consistently to the other buildings within the palace complex, creating a strong and cohesive identity within the overall palace design. Great care was also taken in the choice of materials, with the predominant use of brick and small elements of *padas* stone, harmonizing the building with its natural surroundings. This approach not only maintains visual harmony with the natural landscape but also maintains integrity to traditional Balinese design concepts. The combination of the *kori* design and material selection provides an authentic aesthetic impression while reinforcing the local cultural character of Puri Agung Talibeng.

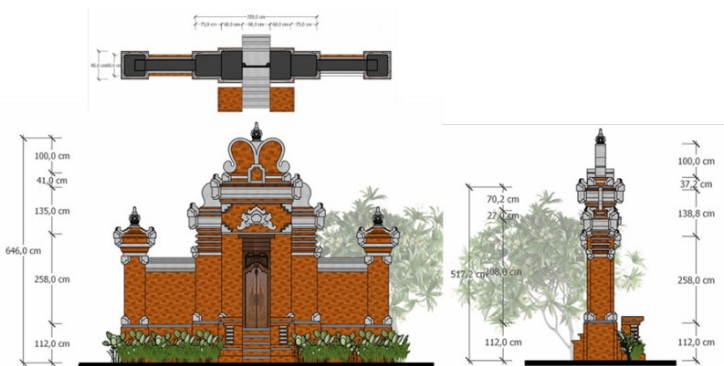


Figure 6. Plan and front view of Kori Alit

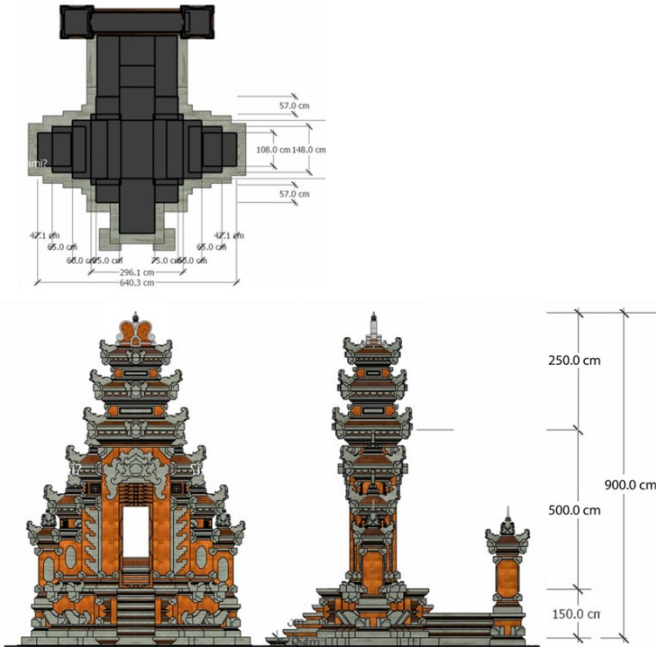


Figure 7. Plan and front view of Kori Agung

3.4 Focus Group Discussion III

In FGD III, the Community Service team together with partners from Kelian Merajan and Penglingsir Puri Agung Talibeng met again. The event took place on June 10, 2024, at Puri Agung Talibeng, Karangasem Regency. Penglingsir Puri Agung Talibeng expressed his gratitude for the master plan design and requested assistance for the temple area arrangement program. The Head of the Civil Engineering Department from Politeknik Negeri Bali, who was present at the event, expressed his commitment to support partners in the arrangement and development of the palace area. In addition, on this occasion, students and lecturers also installed signboards on buildings and temples in Merajan Ageng Puri Agung Talibeng.

4 Conclusion

Talibeng Village, with its natural and cultural potential, is an ideal destination for the development of nature-based, cultural, and spiritual tourism. While the village has significant natural attractions, its cultural and historical potential, particularly associated with Puri Agung Talibeng, has not been fully optimized for tourism. The planned masterplan aims to maintain and revitalize Puri Agung Talibeng as the cultural and historical center of the village while maintaining traditional Balinese architectural values such as the Tri Hita Karana concept. Through collaboration with Bali State

Polytechnic, the development of the masterplan is also geared towards creating modern infrastructure that is in harmony with local traditions, so that the Puri can function as an attractive cultural tourism destination. The project is expected to increase community awareness of the importance of cultural preservation while encouraging local economic growth through sustainable and culturally sensitive tourism.

Acknowledgment

Masterplan Planning Puri Agung Talibeng involves the collaboration of the community service team with partners as the key to success, to find joint solutions to problems in the field. The masterplan design has been adapted to field conditions, including challenges such as increasingly limited land availability, the complexity of spatial functions, and the dynamics of daily life. The concepts of *Tri Hita Karana*, *Tri Mandala*, and *Sanga Mandala* are applied in this masterplan, while still producing Balinese architecture that is relevant to the present. The author would like to thank the entire extended family of Puri Agung Talibeng, lecturers, students, and the extended family of Polytechnic State of Bali.

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