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Redesign of the Pulantara Landscape at Kanoman Palace Based on Vegetation Analysis

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ABSTRACT

*Pulantara is part of the Kanoman Palace complex in Cirebon and contains open spaces with potential to support social, educational, recreational, and cultural tourism activities. The existing condition indicates that some vegetation is not optimally organized, affecting the order and function of the space. This study aims to develop landscape redesign guidelines for Pulantara based on vegetation analysis. The study employed a descriptive qualitative method with a research-by-design approach. The analysis included an inventory of vegetation species, physical condition, strata, location, and ecological and architectural functions. The results of the analysis were used to determine vegetation management strategies consisting of retention, reorganization, reduction, and addition. The results indicate that Beringin (*Ficus benjamina*) and Angsana (*Pterocarpus indicus*) are retained due to their good condition and functions as shade providers and spatial-forming elements. Jati (*Tectona grandis*) and Loa/Loh (*Ficus rumphii* Blume) are directed for reorganization and maintenance, while additional Angsana and Teh-tehan (*Duranta erecta*) are introduced in areas requiring improved shading and spatial-forming functions. This strategy supports environmental quality and strengthens the visual character of the cultural landscape. The analysis results are then applied to the landscape redesign of Pulantara by considering the existing vegetation conditions and spatial needs of the area.*

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1. INTRODUCTION

The Kanoman Palace area in Cirebon is a site with historical and cultural values reflected in its buildings, open spaces, and landscape elements. Cultural landscapes are formed through the relationship between communities and their environment, allowing physical elements, including vegetation, to contribute to the character and identity of an area (Angelstam et al., 2021). Vegetation in historic areas also provides ecological functions and can support the character and quality of cultural landscapes (Ogletree et al., 2019). The management of historic landscapes needs to consider historical values, area character, and the condition of landscape elements to maintain their sustainability (Funsten et al., 2020). Pulantara is one of the areas within the Kanoman Palace complex that has potential as an open space supporting social, educational, recreational, and cultural tourism activities.

Based on the existing conditions, several parts of Pulantara are not optimally organized due to irregular vegetation growth. Some vegetation is in good condition and functions as shade providers and space-forming elements, while other vegetation requires reorganization and maintenance. Evaluation of vegetation conditions in historic areas is necessary because vegetation is a living element that continuously grows and changes, potentially affecting the character and function of space. Vegetation arrangement should also be adjusted to the function of the space and landscape character to support the quality of the area (Bagus et al., 2020).

Vegetation analysis is necessary to identify the species, condition, location, strata, and functions of vegetation within the Pulantara area. The analysis results can serve as a basis for determining management strategies, including retention, reorganization, addition, and selective reduction of vegetation that interferes with spatial functions. This management approach can help retain vegetation that still provides important functions while improving the quality of the area (Lian et al., 2024). The management of vegetation in historic landscapes should also consider the continuity of existing plant structures and appropriate maintenance strategies to respond to environmental changes (Andressa, 2022).

Previous studies on historic and cultural landscapes have emphasized the importance of identifying landscape characteristics, cultural values, and spatial elements as a basis for conservation and management. Mapping and inventory of historical cultural landscape elements can support the identification, protection, and maintenance of cultural landscape characteristics (Grunenberg & Hilpert, 2021). Digital documentation and information systems can also support the conservation and management of cultural landscapes by integrating natural, cultural, tangible, and intangible landscape information. In addition, the use of digital recording techniques can support the documentation and analysis of historic gardens and cultural landscapes in relation to heritage conservation (Hess et al., 2021). Therefore, integrating vegetation analysis with spatial documentation and landscape redesign can provide a basis for developing appropriate management strategies for cultural landscapes. However, studies that specifically integrate existing vegetation conditions and functions with landscape redesign guidelines for Pulantara, Kanoman Palace, remain limited. Therefore, this study aims to analyze the conditions and functions of existing vegetation as a basis for developing vegetation management and landscape redesign guidelines for Pulantara, Kanoman Palace, while considering the existing conditions and character of the area.

2. RESEARCH METHODS

This study employed a descriptive qualitative method with a *research-by-design* approach. The descriptive method was used to identify and describe the existing landscape conditions of Pulantara, Kanoman Palace, particularly the condition and functions of

vegetation. The *research-by-design* approach was used to translate the analysis results into vegetation management guidelines and landscape redesign (Nijhuis & Vries, 2015).

2.1 Research Location and Time

The study was conducted at Pulantara, Kanoman Palace, Cirebon City, West Java. The data consisted of primary and secondary data. Primary data were obtained through field observations and documentation of the existing conditions, particularly vegetation and landscape elements. Secondary data included site maps, technical drawings, project documentation, and literature related to cultural landscapes and the conservation of cultural heritage areas. These data were used to identify the existing conditions, potentials, and problems of the site as a basis for developing landscape redesign guidelines.

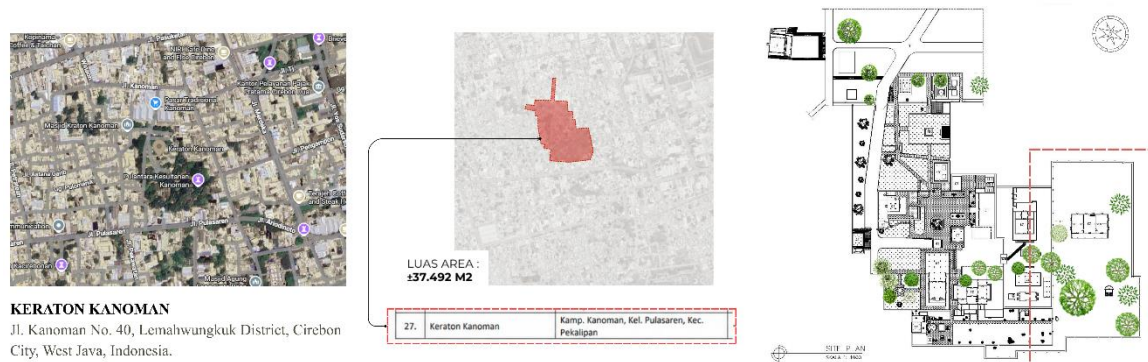


Figure 1. Research Location
(Source: Personal Documentation, 2026)

2.2 Data Collection

Data collection was conducted through field observations and documentation of the existing conditions of the site. The inventory covered vegetation, buildings, open spaces, circulation paths, and supporting facilities. Specifically, vegetation data included species, physical condition, location, strata, ecological functions, and architectural functions. Field inventory and spatial documentation can be used to identify vegetation characteristics and landscape conditions as a basis for subsequent analysis (Egerer et al., 2020).

The inventory results were used to identify the landscape character and problems related to vegetation conditions and arrangement. The data were then used as the basis for vegetation analysis and for determining vegetation management guidelines in the Pulantara area.



Figure 2. Existing Landscape Condition of Pulantara, Kanoman Palace
(Source: Personal Documentation, 2026)

2.3 Research Stages

The research stages consisted of existing condition inventory, vegetation analysis, development of vegetation management synthesis, and landscape redesign of Pulantara. The inventory was conducted to obtain an overview of the existing conditions of the site. Subsequently, vegetation data were analyzed based on their condition and functions within the space. The analysis results were used to determine vegetation management guidelines, which were then applied to the landscape redesign process. A research-by-design process can integrate site investigation, analysis, and design decisions into a connected landscape planning process (Charoenlertthanakit et al., 2020).

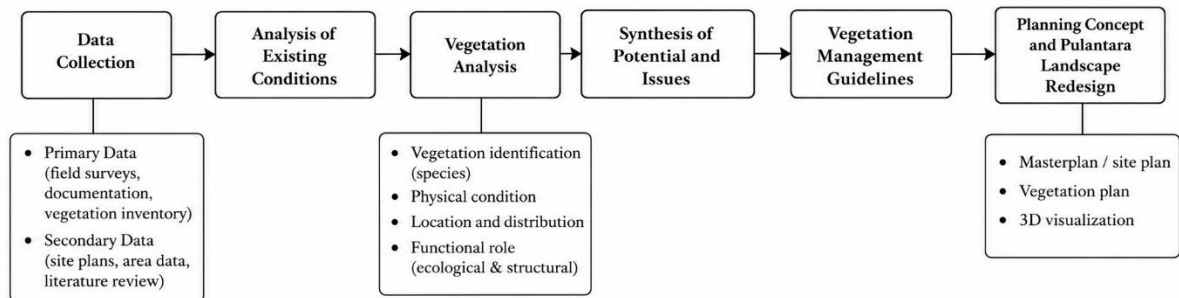


Diagram 1. Research and Design Stages
(Source: Personal Documentation, 2026)

2.4 Vegetation Analysis

Vegetation analysis was conducted to identify the species, physical condition, location, strata, ecological functions, and architectural functions of existing vegetation in Pulantara, Kanoman Palace. Identification was carried out through field observations and documentation by recording the characteristics and conditions of each vegetation element. The assessment of plant suitability and arrangement was used as one of the bases for determining vegetation management guidelines (Bagus et al., 2020).

The vegetation was then analyzed based on its condition and function within the space. Vegetation in good condition and providing important functions as shade providers or space-forming elements was directed to be retained. Vegetation that still provided functions but was considered less appropriately positioned was directed to be reorganized through arrangement and maintenance. Vegetation that interfered with spatial functions was directed to be selectively reduced, particularly undergrowth or vegetation without a primary function. Meanwhile, additional vegetation was proposed in areas requiring improved shading, spatial definition, and visual quality.

The classification of vegetation conditions and patterns can support landscape management decisions by providing indicators related to vegetation composition, distribution, structure, and connectivity (Carter et al., 2021).

Based on the analysis results, vegetation was classified into four management guidelines: retention, reorganization, reduction, and addition. The classification was then used as the basis for developing the vegetation management synthesis and landscape redesign of Pulantara.

2.5 Sintesis dan Perancangan

The results of the vegetation analysis and existing condition assessment were synthesized into vegetation management guidelines based on the level of intervention required. The synthesis classified vegetation into four management guidelines: retention, reorganization, reduction, and addition. The synthesis process considers the relationship between landscape

characteristics, spatial conditions, and management needs in developing appropriate interventions (Terêncio et al., 2021).

The synthesis results were subsequently translated into the landscape redesign of Pulantara through the development of a design concept, *site plan*, and design visualization. The design considered the existing vegetation conditions, spatial functions, site requirements, and landscape character of Kanoman Palace. Mapping and visualization can support the interpretation of spatial and visual characteristics in landscape design (2020). The *research-by-design* approach was used to translate the analysis results into design decisions so that the vegetation management guidelines could be directly applied to the landscape redesign (Nijhuis & Vries, 2015).

3. RESULTS AND DISCUSSION

3.1 Existing Landscape Condition of Pulantara, Kanoman Palace

Pulantara is one of the areas within the Kanoman Palace complex in Cirebon, consisting of open spaces and various landscape elements, including vegetation, circulation paths, buildings, and supporting facilities. Based on field observations, the open spaces in Pulantara have the potential to be developed to support social, educational, recreational, and cultural activities.

The existing condition indicates that vegetation is one of the dominant elements in the Pulantara area. Vegetation functions as a shade provider and space-forming element; however, several areas show irregular vegetation growth and relatively dense understory vegetation. The structure and composition of vegetation within a site can be influenced by environmental conditions and vegetation growth processes (Wijaya et al., 2021). These conditions cause several areas to appear less organized and require maintenance and arrangement according to their spatial functions. Vegetation in good condition continues to contribute to spatial quality and should therefore be considered in the redesign process. Meanwhile, irregularly growing vegetation requires further analysis to determine appropriate management actions. Vegetation arrangement should consider plant species, condition, function, and suitability to spatial requirements in order to support landscape quality.

Based on these conditions, vegetation analysis was conducted to identify the species, physical condition, location, strata, and functions of vegetation in Pulantara. The analysis results were subsequently used as a basis for determining vegetation management guidelines and landscape redesign in the Pulantara area of Kanoman Palace.



Figure 3. Existing Condition of Pulantara, Kanoman Palace
(Source: Personal Documentation, 2026)

3.2 Results of Vegetation Inventory and Analysis

The inventory results show that vegetation in Pulantara consists of several plant species with different characteristics, conditions, strata, and functions. The inventory was conducted based on observations of existing conditions and field documentation. The identified vegetation was then analyzed based on its physical condition, strata, and ecological and architectural functions as a basis for determining vegetation management guidelines. Analysis of vegetation characteristics based on species, structure, and growth condition is important for understanding the role of vegetation within a landscape (Prabowo et al., 2024).

Table 1. Vegetation Inventory Results

No.	Vegetation Species	Scientific Name	Strata	Condition	Function
1.	Beringin	<i>Ficus benjamina</i>	Tree	Good – No indication of severe damage to the main tree.	Shade provider, space-forming.
2.	Angsana	<i>Pterocarpus indicus</i>	Tree	Good – Has sufficient canopy and continues to provide shade.	Shade provider, space-forming.
3.	Jati	<i>Tectona grandis</i>	Tree	Poor – Irregular growth and relatively dense understory vegetation.	Shade provider, space-forming.
4.	Loa/Loh	<i>Ficus rumphii</i> Blume	Tree	Poor – Relatively dense and poorly managed understory vegetation.	Shade provider.

Source: Author's Documentation, 2026

Based on the inventory results, Beringin (*Ficus benjamina*) and Angsana (*Pterocarpus indicus*) are in good condition and function as shade providers and space-forming elements. These two vegetation types can therefore be retained because they continue to contribute to the spatial quality of Pulantara. Vegetation management that considers plant species, condition, and function can be used as a basis for determining the level of vegetation management required on a site (Bagus et al., 2020). The importance of individual vegetation species within the vegetation structure can also be considered in site management (Kuśmierski, 2022). Meanwhile, Jati (*Tectona grandis*) and Loa/Loh (*Ficus rumphii* Blume) are in poor condition and require reorganization and maintenance. Irregular vegetation growth was found around the Jati, while relatively dense understory vegetation was found around the Loa/Loh. These conditions should be addressed through maintenance and reorganization so that the vegetation can continue to provide shade and spatial functions without reducing the overall order of the area.

Based on the analysis, vegetation in Pulantara was classified according to the level of intervention required. Vegetation in good condition and with important functions was directed to be retained, while vegetation that still provides functions but requires management was directed to be reorganized. Reduction was applied selectively when vegetation was considered unsuitable for spatial requirements, while additional vegetation was proposed in areas requiring shade and space-forming functions.

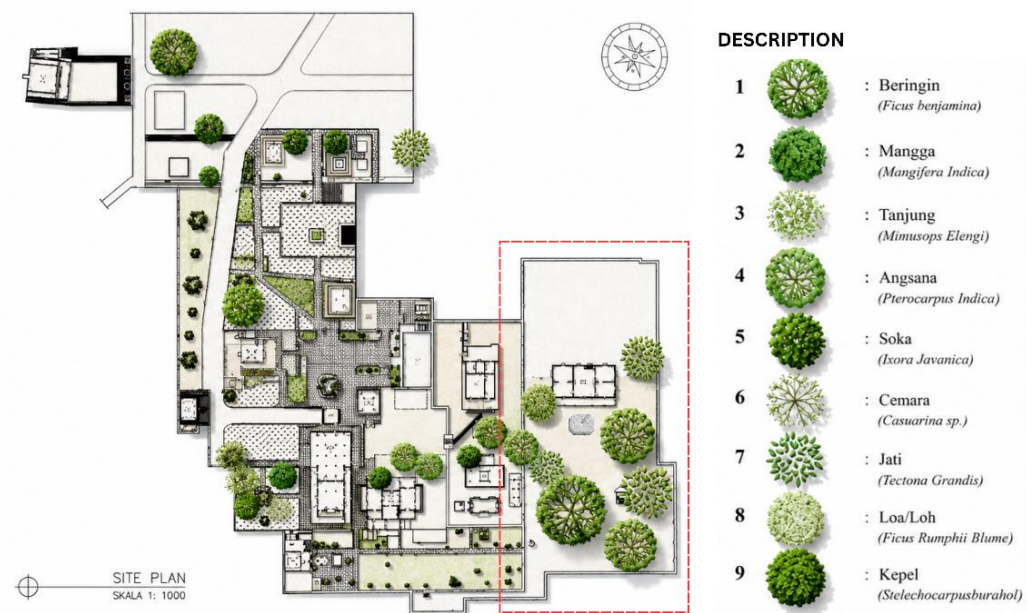


Figure 4. Existing Vegetation Map of Pulantara, Kanoman Palace
(Source: Rosmalia, D., 2016; 2021)

3.3 The Role of Vegetation in Landscape Character and Function

Based on the inventory results, vegetation in Pulantara functions primarily as a shade provider and space-forming element. Vegetation also contributes to the landscape character of the area (Awalia et al., 2017). Beringin (*Ficus benjamina*) and Angsana (*Pterocarpus indicus*) are in good condition and are therefore retained because they provide shade and help define spatial areas. Meanwhile, Jati (*Tectona grandis*) and Loa/Loh (*Ficus rumphii* Blume) require reorganization and maintenance because of their irregular growth conditions. Vegetation arrangement should consider the suitability of plant species and functions in relation to spatial requirements (Bagus et al., 2020).

The analysis results were used to determine vegetation management guidelines consisting of retention, reorganization, and addition in the landscape redesign of Pulantara.

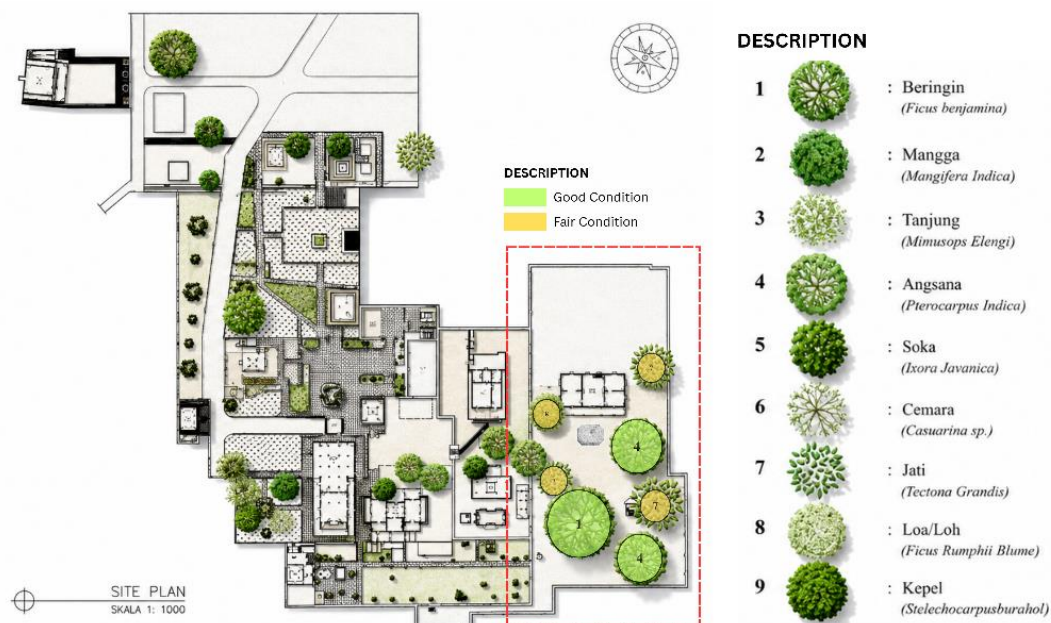


Figure 5. Vegetation Analysis Map of Pulantara, Kanoman Palace
(Source: Author's Documentation, 2026)

3.4 Vegetation Retention Guidelines

Based on the analysis of vegetation conditions and functions, Beringin (*Ficus benjamina*) and Angsana (*Pterocarpus indicus*) were directed to be retained. Both species are in good condition and function as shade providers and space-forming elements. Retention is implemented by maintaining their existing positions and conducting regular maintenance to ensure that their functions remain optimal.

This guideline was applied to the Vegetation Retention Map using the existing vegetation locations. Thus, vegetation with good conditions and functions remains part of the landscape redesign of Pulantara.

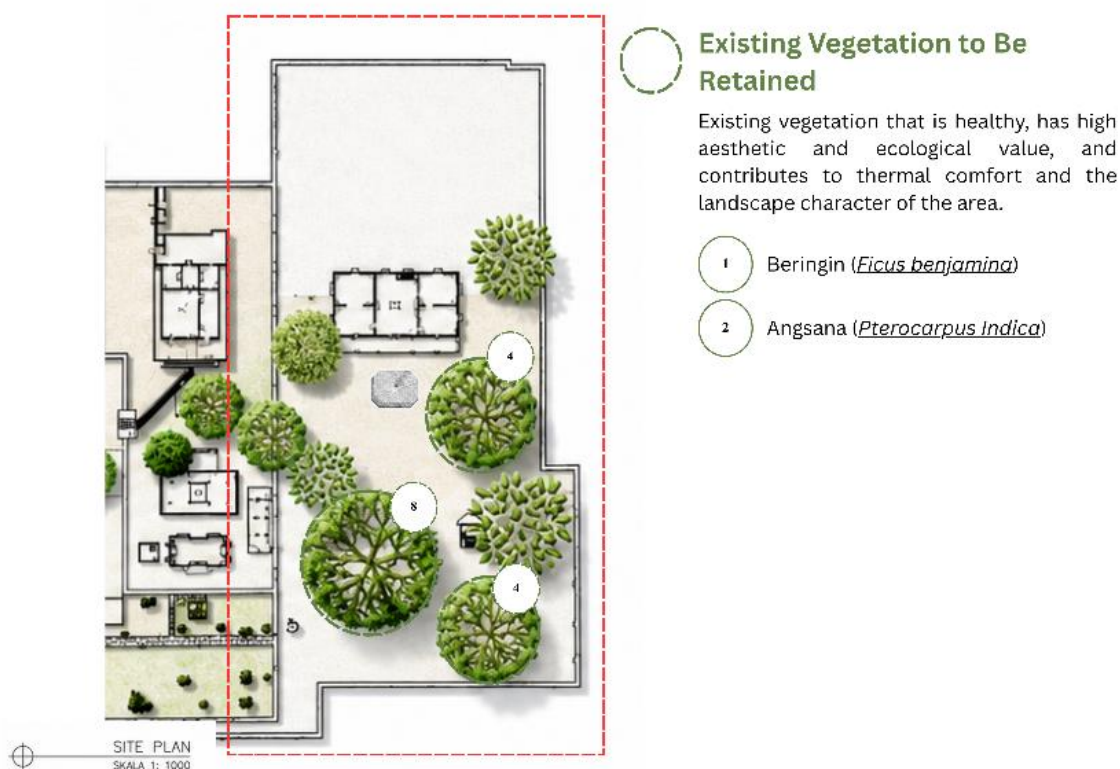


Figure 6. Retained Vegetation
(Source: Author's Documentation, 2026)

3.5 Vegetation Reorganization and Reduction Guidelines

Based on the analysis results, Jati (*Tectona grandis*) and Loa/Loh (*Ficus rumphii* Blume) are in poor condition and require reorganization and maintenance. For Jati, reorganization focuses on irregular vegetation growth, while for Loa/Loh, management focuses on controlling the relatively dense understory vegetation. Management actions include pruning, understory vegetation control, and regular maintenance while retaining the main vegetation that continues to function as a shade provider and space-forming element. Regular maintenance and appropriate management of vegetation are essential for preserving the authenticity and character of historic gardens (Jagiello, 2021). Vegetation that interferes with spatial order can be selectively reduced according to existing site conditions. These interventions aim to improve the order and spatial function of Pulantara while retaining vegetation that continues to provide benefits to the area. Regular maintenance and adaptive management are important for maintaining the ecological, cultural, and spatial values of historical garden landscapes (Kuśmierski, 2022).

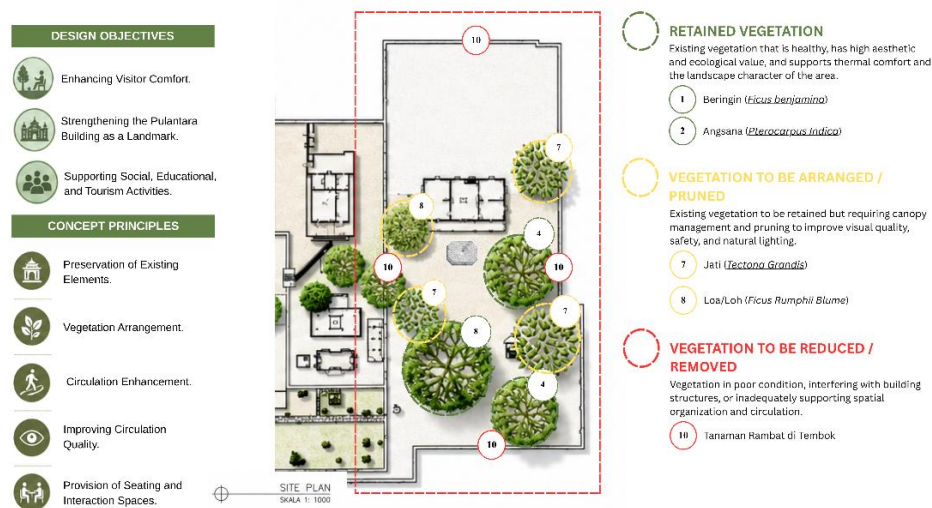


Figure 7. Vegetation Reorganization and Reduction Guidelines
(Source: Author's Documentation, 2026)

3.6 Vegetation Addition Guidelines

Vegetation addition in Pulantara, Kanoman Palace, is intended to improve shading, space-forming functions, and user comfort. The proposed vegetation consists of Angsana (*Pterocarpus indicus*) as a shade tree and Teh-tehan (*Duranta erecta*) as shrub vegetation.

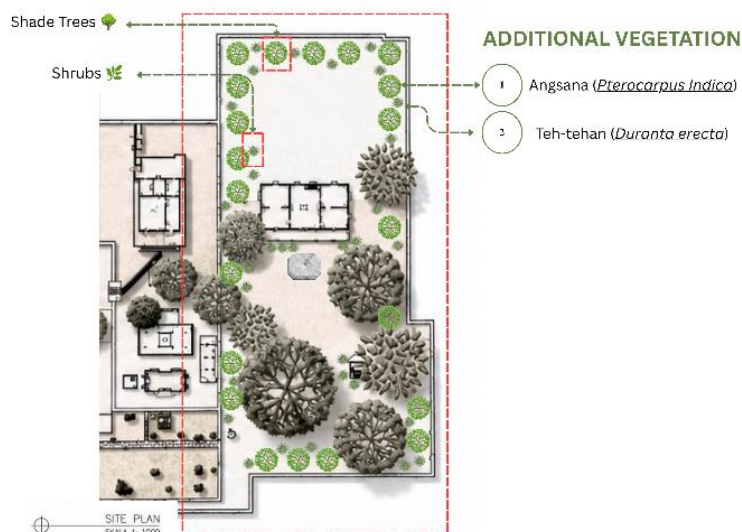


Figure 8. Vegetation Addition Guidelines
(Source: Author's Documentation, 2026)

Angsana is placed along the edges and boundaries of the Pulantara open spaces. As shown in Figure 8, several Angsana trees provide shade and strengthen the spatial structure and visual boundaries of the area. Meanwhile, Teh-tehan is placed along the edges of the space and around existing trees to strengthen spatial boundaries and maintain visual order.

The combination of these two vegetation types forms a vegetation structure, with Angsana functioning as a shade provider and space-forming element, while Teh-tehan functions as a spatial boundary. The addition of vegetation continues to retain existing vegetation so that the character of the Kanoman Palace area is maintained. Vegetation management in historic garden complexes should consider the ecological and cultural values of vegetation as an important component of the landscape structure (Kulesza & Lubiarz, 2021).

Table 2. Vegetation Addition Guidelines

No	Vegetation Species	Function	Location
1.	Angsana (<i>Pterocarpus indicus</i>)	Shade provider and space-forming.	Edge and boundary of open spaces.
2.	Teh-tehan (<i>Duranta erecta</i>)	Spatial boundary and space-forming.	Space edges and around trees.

(Source: Author's Documentation, 2026)

3.7 Vegetation Management Synthesis

The vegetation analysis results were synthesized based on the condition and function of each vegetation type. The synthesis produced four management guidelines: retention, reorganization, reduction, and addition. Vegetation in good condition and with important functions was directed to be retained, while vegetation requiring reorganization was managed through pruning and maintenance. Additional vegetation was proposed in areas requiring stronger shade and space-forming functions.

The synthesis served as the basis for determining the level of vegetation intervention in Pulantara. The results were then applied to the landscape redesign while considering the existing conditions and spatial functions. Management of cultural areas should consider existing conditions, cultural values, and landscape sustainability to maintain the character of the area.

Table 3. Vegetation Management Synthesis

Management Guideline	Basic for Consideration	Objective
Retention	Good condition and important functions.	Maintain landscape character and function.
Reorganization	Still functional but improperly positioned.	Improve spatial order and function.
Reduction	Unsuitable for spatial functions.	Reduce disturbance to the space.
Addition	Areas requiring additional vegetation functions.	Improve comfort and spatial quality.

(Source: Author's Documentation, 2026)

The synthesis results indicate that vegetation management in cultural heritage areas does not require the existing conditions to be maintained entirely without intervention. Instead, the level of intervention should be determined based on vegetation condition and function. This approach allows necessary changes to be implemented while retaining landscape elements that contribute to the character of the area. Management interventions are therefore carried out selectively by considering existing landscape elements so that changes continue to support the preservation of the cultural heritage area's character .

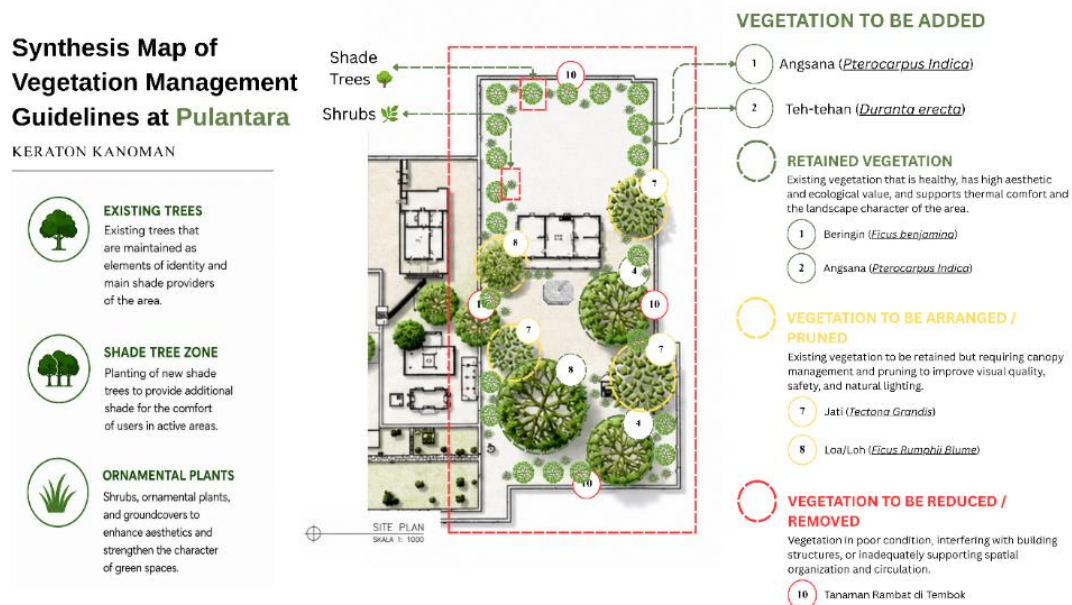


Figure 9. Vegetation Management Guideline Synthesis Map
(Source: Author's Documentation, 2026)

3.8 Landscape Redesign of Pulantara, Kanoman Palace

The results of the vegetation analysis and synthesis were subsequently applied to the landscape redesign of Pulantara. A landscape management approach that considers ecological functions and the connectivity of landscape elements can support sustainable conservation efforts.

Vegetation with good conditions and functions was retained, vegetation considered less suitable was reorganized, vegetation interfering with spatial functions was selectively reduced, and new vegetation was added in areas requiring improved functions. The *research-by-design* approach enables analysis results to be translated into design decisions through the design process. In landscape architecture, design can serve as a research strategy for generating knowledge through analysis and design development (Nijhuis & Vries, 2015). Thus, the redesign of Pulantara represents a synthesis between existing vegetation conditions and spatial development requirements.

The redesign retains vegetation structures that continue to provide functions and adapts new landscape elements to the existing conditions. Pedestrian paths, seating areas, open spaces, pergolas, and other supporting elements are positioned by considering existing vegetation so that changes to the existing landscape can be controlled. The final design, presented through the site plan and design visualizations, demonstrates the application of vegetation management guidelines to the spatial structure of Pulantara.



Figure 10. Comparison of Existing and Redesigned Site Plans
(Source: Author's Documentation, 2026)



Figure 11. Perspective of the Landscape Redesign of Pulantara, Kanoman Palace
(Source: Author's Documentation, 2026)

The analysis results therefore provide the basis for the synthesis of vegetation management and the landscape redesign of Pulantara, Kanoman Palace. A landscape approach to the conservation of historic areas can integrate character identification, planning, and landscape design to determine appropriate forms of intervention.

4. CONCLUSION

Based on the results of the vegetation inventory and analysis in the Pulantara area of Kanoman Palace, Cirebon, the existing vegetation plays an important role in providing shade, forming spaces, and supporting the landscape character of the area. The identified vegetation consists of Beringin (*Ficus benjamina*), Angsana (*Pterocarpus indicus*), Jati (*Tectona grandis*), and Loa/Loh (*Ficus rumphii* Blume), with varying conditions. Management guidelines were determined based on the condition and function of each vegetation type. Beringin and Angsana were directed to be retained because of their good condition and functions as shade providers and space-forming elements. Meanwhile, Jati (*Tectona grandis*) and Loa/Loh (*Ficus rumphii* Blume) were directed to be reorganized through pruning, understory vegetation control, and regular maintenance.

The findings indicate that vegetation management in Pulantara should be carried out selectively by retaining vegetation that continues to provide important functions and reorganizing vegetation that is less suitable for the spatial requirements. The recommended management includes regular vegetation maintenance, understory vegetation control, and the addition of vegetation in areas requiring shade and space-forming functions. These guidelines can serve as a basis for the landscape redesign of Pulantara while considering the existing conditions and the character of Kanoman Palace as a cultural landscape.

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REFERENCES

- Andressa, C. (2022). *A KLÍMAVÁLTOZÁS HATÁSAI A TÖRTÉNETI CHANGE ON THE LIVING HERITAGE OF*.
- Angelstam, P., Manton, M., Yamelnyets, T., Fedoriak, M., Washbourne, F. S. C., Kavtarishvili, M., Mun, J., Agnoletti, M., Dobrynin, D., Izakovicova, Z., Jansson, N., Kanka, R., Kopperoinen, L., Lazdinis, M., Metzger, M., & Gjorgieska, P. (2021). *Maintaining natural and traditional cultural green infrastructures across Europe : learning from historic and current landscape transformations*. 0123456789, 637–663. <https://doi.org/10.1007/s10980-020-01161-y>
- Bagus, I., Krisnayana, P., Wayan, N., Utami, F., & Mayun, I. A. (2020). *Evaluasi kesesuaian jenis dan penataan tanaman pada lansekap jalan di Jalan Dharma Giri Gianyar*. 6(1), 52–60.
- Carter, S. K., Christopher, L. E. B., Steven, T. D., Haby, T., Harms, B. R., Litschert, E. K. S. E., Miller, K. H., & Carter, S. K. (2021). Identifying Policy-relevant Indicators for Assessing Landscape Vegetation Patterns to Inform Planning and Management on Multiple-use Public Lands. *Environmental Management*, 426–443. <https://doi.org/10.1007/s00267-021-01493-8>
- Charoenlertthanakit, N., Wanitchayapaisit, C., Yaipimol, E., Surinseng, V., & Suppakittpaisarn, P. (2020). *Landscape Planning for an Agricultural Research Center: A Research-by-Design Case Study in Chiang Mai, Thailand*.
- Egerer, M. H., Wagner, B., Lin, B. B., & Kendal, D. (2020). New methods of spatial analysis in urban gardens inform future vegetation surveying. *Landscape Ecology*, 35(3), 761–778.

<https://doi.org/10.1007/s10980-020-00974-1>

- Funsten, C., Borsellino, V., & Schimmenti, E. (2020). *A Systematic Literature Review of Historic Garden Management and Its Economic Aspects*. 1–45.
- Grunenberg, S., & Hilpert, M. (2021). Elements of the Historical Cultural Landscape : Mapping Methods and Results in the District of Augsburg. *KN - Journal of Cartography and Geographic Information*, 71(2), 121–127. <https://doi.org/10.1007/s42489-021-00075-2>
- Hess, M., Ferreyra, C., & Sciences, H. (2021). *RECORDING AND COMPARING HISTORIC GARDEN ARCHITECTURE . VALUE OF SLAM-BASED RECORDING FOR RESEARCH ON CULTURAL LANDSCAPES IN CONNECTION WITH HERITAGE CONSERVATION*. XLVII(September), 301–308.
- Jagiello, M. (2021). *Do We Need a New Florence Charter ? The Importance of Authenticity for the Maintenance of Historic Gardens and Other Historic Greenery Layouts in the Context of Source Research (Past) and Taking into Account the Implementation of the Sustainable Development Idea (Future)*.
- Kulesza, P., & Lubiarz, M. (2021). *PROTECTION OF NATURE IN HISTORIC GARDEN COMPLEXES AS DEFINED BY POLISH LAW*. XIV(2), 291–306.
- Lian, J., Nijhuis, S., Bracken, G., Wu, X., Wu, X., & Chen, D. (2024). Landscape and Urban Planning Conservation and development of the historic garden in a landscape context : A systematic literature review. *Landscape and Urban Planning*, 246, 105027. <https://doi.org/10.1016/j.landurbplan.2024.105027>
- Nijhuis, S., & Vries, J. De. (2015). *Design as Research in Landscape Architecture*. 1983, 87–103.
- Kuśmierski, J. (2022). Management of herbaceous vegetation in historic gardens – the north landscape garden of Wilanów palace. *Geomatics, Landmanagement and Landscape*, 3, 17–30. <https://doi.org/10.15576/GLL/2022.3.17>
- Ogletree, S. S., Powell, R. B., Baldwin, R. F., & Leonard, P. B. (2019). *A framework for mapping cultural resources in landscape conservation planning*. April, 1–11. <https://doi.org/10.1111/csp2.41>
- Dudek-Klimiuk, J., & Warzecha, B. (2023). Smart historical gardens. *Landscape Online*, 98, 1114. <https://doi.org/10.3097/LO.2023.1114>
- Prabowo, S. H., Rahmadwiati, R., & Nufus, M. (2024). *Exploring the Vegetation Characteristics of Karst Landscapes : A Study of Community Forest in Tubokarto Village , Wonogiri , Indonesia*. 29(March), 593–608.
- Awalia, R. N., Arifin, N. H. S., & Kaswanto, K. (2017). Kajian karakter pembentuk lanskap budaya masyarakat adat Kajang di Sulawesi Selatan. *Jurnal Lanskap Indonesia*, 9(2), 91–100.
- Terêncio, D. P. S., Varandas, S. G. P., Fonseca, A. R., Cortes, R. M. V, Fernandes, L. F., Pacheco, F. A. L., Monteiro, S. M., Martinho, J., Cabral, J., Santos, J., & Cabecinha, E. (2021). *Science of the Total Environment Integrating ecosystem services into sustainable landscape management : A collaborative approach*. 794. <https://doi.org/10.1016/j.scitotenv.2021.148538>
- Wijaya, I. M. S., Putu, L., Kusuma, E., Ayu, I., & Pertiwi, E. (2021). *Struktur vegetasi di kawasan riparian Desa Bongkasa Pertiwi , Kecamatan Abiansemal , Kabupaten Badung – Bali Structure of riparian vegetation in Bongkasa Pertiwi Village , Abiansemal District , Badung Regency – Bali*. 25(2), 172–182.