

# Sustainable Landscape Study of Sindang Barang Cultural Village, Bogor Regency

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## ABSTRACT

Sindang Barang Cultural Village is a local cultural settlement located in Tamansari District, Bogor Regency, covering an area of approximately 8,600 square meters. The village comprises 29 traditional Sundanese buildings and is characterized by a harmonious atmosphere and a community that strongly upholds inherited cultural traditions. Beyond its function as a cultural tourism destination, Sindang Barang serves as a living settlement where daily activities are closely intertwined with the preservation of Sundanese values passed down through generations. Its existence is crucial in the context of cultural conservation, as it provides a tangible example of the coexistence of traditional architecture, cultural practices, and environmental harmony. This study aims to examine the ecosystem conditions of Sindang Barang Cultural Village within the context of community life. A descriptive research method was employed, utilizing direct observation and literature review through general observations of the settlement. The findings indicate that Sindang Barang Cultural Village exhibits a distinct Sundanese residential landscape character, physically expressed through the form, layout, and continuity of traditional Sundanese architecture.

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## 1. INTRODUCTION

Indonesia is known as a country consisting of many islands, which has a wealth of traditions, culture, and customs of the people spread throughout the archipelago. Indigenous peoples are norms that have been held from generation to generation until now and are considered sacred by certain community groups. This sacredness is not only reflected in the belief in God Almighty, but also in efforts to maintain balance and harmony with their environment (nature). Culture in an area essentially influences the formation of residential environments. Community habits related to the surrounding environment are usually different from the culture of other communities, so that the arrangement of space in community settlements is greatly influenced by the outlook on life of the local population. Cultural landscapes describe the relationship between natural heritage and cultural heritage in a broad spatial unity and long time. Natural heritage includes natural forms such as mountains, mountain ranges, forests, lakes, and deserts. Meanwhile, cultural heritage is the result of human work in the form of traditions, beliefs, and lifestyles (Indonesian Heritage Conservation Charter, 2003). Cultural landscapes can be understood as a representation of community life in managing their environmental

systems, so that harmony with nature and the preservation of cultural identity are realized. The diversity of flora and fauna, their ecosystems, and cultural richness are potential and can serve as a basis for sustainable development (Wakyudi, 2021).

Architecture in Indonesia is known as traditional or vernacular architecture which is created and developed by local communities based on the knowledge, culture, and traditions of the people in the area. Traditional architecture shows the relationship between humans and their history in the field of buildings and settlements. Traditional architecture reflects the cultural values, beliefs, and needs of the local community by utilizing materials from the surrounding environment and building techniques that have been taught from generation to generation. This is because tradition is the spirit of a culture and without tradition it is impossible for a culture to live and last (Artininggrum, 2012).

Traditional architecture is influenced by the location, culture, and function of the building. The differences in traditional buildings depend on the use of natural materials, unique decorations, and spatial arrangements that maintain the style of the past and the application of reuse methods in designing new buildings, so that the building can be considered as one of the manifestations of traditional architecture. Traditional architecture is the result of human work, creativity, spontaneity and emotion as one of the elements of human culture, as well as the interaction between the natural physical environment and the skills and abilities of society to form knowledge (Zain, 2014). The importance of preserving and understanding cultural heritage in the architectural design process to create buildings that reflect the identity and needs of the local community (Lake, 2016).

The cultural values of a community influence the evolution of traditional architecture that emerges from the living habits of its people. Traditional architecture is a building concept that emphasizes aspects of local traditions and culture. These aspects of local culture and tradition include factors such as location, weather, materials, culture, beliefs, and others. Settlements are one of the results of cultural landscapes. Cultural landscapes are the result of complex historical processes (Rapoport, 1992). Traditional settlements are one of the landscapes of the face and character of the site formed from the life activities of its people which are part or the total living environment of humans and other creatures. One type of landscape is a cultural landscape that is closely related to the cultural community that occupies the landscape (Lavrenova, 2019).

The development of culture-based vernacular architecture in its application is inseparable from aspects of curiosity, both from economic, social, and environmental aspects. However, vernacular architecture now faces the challenge of modernization. The current of modernization has the greatest influence on changes in the cultural landscape in Indonesia (Awalia et al., 2018; Nur et al., 2022). It is crucial to understand the various characteristics and assess the destruction of the formed cultural landscape, in order to minimize concerns about the cultural landscape (Hasibuan et al., 2017; Asrina et al., 2017; Lavrenova, 2019; Nasution et al., 2019). One cultural landscape significantly impacted by the current of modernization is the landscape of traditional indigenous community organizations (Chanet et al., 2022; Nur et al., 2022). Therefore, sustainable landscape studies are crucial as a culturally based architectural conservation approach in Indonesia. A relational approach has been applied to understand the sense of place inherent in traditional houses or settlements (Ahmet, 2013; Kidd and Evans, 2010; Lavrenova, 2019). The landscape character approach has also been studied to uncover and understand traditional settlement landscape patterns in various indigenous communities in Indonesia (Agustine and Gunawan, 2016; Hasibuan et al., 2017; Asrina et al., 2017; Istiqamah et al., 2020; Nur et al., 2022; Pratiwi et al., 2019). This approach is essential for determining local government policies in preserving traditional settlement landscapes, which are gradually undergoing changes in patterns, materials, and activities of indigenous communities. One of the traditional settlement landscapes that has a fairly large area is the traditional settlement landscape of the Sundanese people.

One of the traditional settlement objects of the Sundanese people is the Sindang Barang Cultural Village, a miniature local cultural object located in Tamansari District, Bogor Regency, with an area of 8,600 square meters. The Sindang Barang Cultural Village area contains 29 traditional Sundanese cultural buildings known for their beautiful atmosphere and the people who firmly maintain their traditions. This village is not only a tourist destination, but also a living space where people live their daily lives while maintaining Sundanese cultural values that have been passed down from generation to generation. As a miniature Sundanese cultural village, the existence of the Sindang Barang village is very important in the context of cultural preservation, because this village offers a real example of how architecture and culture can go hand in hand while maintaining natural harmony. Based on this background, it is necessary to conduct research on sustainable landscape studies with the aim of this study being to examine the sustainable landscape in the Sindang Barang Cultural Village, Bogor, an effort to find an approach to the preservation and conservation of nature and culture.

## 2. METHOD

The research location is in the Sindang Barang Cultural Village, Jalan Raya Sindangbarang, Pasir Eurih Village, Tamansari District, Bogor Regency, West Java.



Figure 1. Research location

The method used in this research is descriptive, conducted through observation and literature review. The observation method involved observation and interviews with managers at the research location. The interviews involved direct interaction with the managers of the Judi Barang cultural village area to gather information about the area's management and sustainability. Literature was also reviewed from various relevant sources on the research topic.

## 3. RESULTS AND DISCUSSION

### 3.1. Condition of the Sindang Barang Village Settlement

The traditional settlement of the Sundanese people is depicted in the pattern of traditional Sundanese villages in general, which are grouped with the location of the houses one after another, having two rows facing each other separated by a yard or courtyard (Adiwilaga, 2010 in Ilham et.al, 2012). The settlement is an area known as a traditional residence, where the buildings still use natural materials taken from the environment around the village. This area has clear boundaries and a shape that has meaning in accordance with the architecture of traditional Sundanese houses.

The Sindang Barang village settlement area has a different character from the Sindang Barang cultural village area. The conditions around the Sindang Barang village area have a modern residential character. Houses around the Kampung Jadang Barang area have been built with facades and use different materials than the buildings in the Sindang Barang village. The Sindang Barang cultural village is part of the surrounding villages in the umbulan or babakan category that maintains Sundanese customs and culture. In Sundanese society, the formation of villages through a process that begins with the emergence of umbulan (a settlement unit consisting of approximately 1-3 houses and their surroundings), then babakan (4-10 houses). From babakan, it develops into lembur (10-20 houses), then kampung (more than 20 houses). Finally, the village is formed as a development of kampung or a collection of several kampungs. (Ekadjati, 1995).

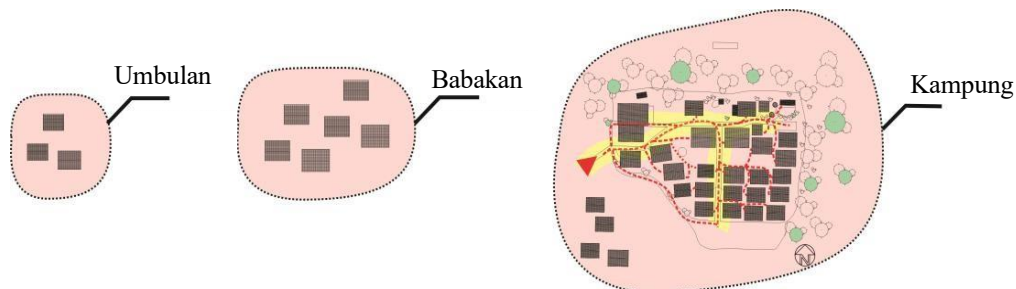


Figure 2. The beginning of the formation of the village  
Source: Ekadjati, Edi S (1984)

The initial process of village formation typically consists of one to three houses, called umbulans. Several umbulans then form a babakan, generally consisting of five to six houses. A settlement unit, called a kampung, consists of dozens of houses, open spaces, places of worship, rice barns, livestock pens, gardens, rice paddies, and other surrounding physical infrastructure closely related to the settlement. The layout of traditional settlements is influenced by cultural and traditional values, including aspects of mutual cooperation in development and environmental maintenance, traditional philosophies that oversee and protect the community, the use of local materials, spatial patterns that facilitate social interaction and traditional community activities, and family values that emerge in daily life (Wenda, 2021)

### 3.2. Landscape Characteristics of the Sindang Barang Cultural Village Settlement

Cultural landscapes have characteristics that reflect the communities within them. The traditional culture of indigenous peoples is the accumulation of efforts to harmonize humans and nature, shaped by their environment. Cultural landscapes represent a fusion of the dynamics of human life and natural formations. Within them lies human wisdom in managing social systems and organizing space within their environment (Platcher & Rossler, 1995). Landscape characteristics are patterns of elements that appear repeatedly in a particular landscape, which are formed from the interaction between nature and human activities. Landscapes with prominent characters can be influenced by the interaction between the main features and supporting features in the landscape. Landscape characteristics include tangible and intangible aspects of several periods, individual and group aspects provide a historical character and help provide cultural understanding. Landscape character is measured from the distance of scale patterns and the relationship of details and site materials, to understand the cultural landscape, it can be studied based on 13 components of the cultural landscape. (Page, et al, 1998:53). The physical characteristics of a settlement demonstrate a unique cultural identity that depends on the local social community, creating an atmosphere that demonstrates the socio-cultural diversity that is its distinctive characteristic (Savitri & Ekomadyo, 2021)

The character of a place as an element of location values that is widely studied in terms of physical (building elements) and non-physical concerns feelings and experiences that shape views or assessments of the area. This can be connected to the phenomenon of genius loci which reveals how humans perceive their place of residence and create meaning. Place is considered a deeper form than space not only from a physiological perspective, but also from a psychological and even spiritual perspective. This situation is influenced by several factors, such as cultural background, relationships between people, and existing preferences. Therefore, the meaning of appreciating a place is not only limited to fulfilling functional needs, but also involves feelings of enjoyment, connection, appreciation, and the desire to maintain or preserve existing artifacts (Ali et al., 2022).



Figure 3. Layout of Sindang Barang Cultural Village  
(source: Google Earth, 2023 and Analysis, 2025)

The character of the Sindang Barang cultural village settlement landscape physically still displays traditional Sundanese buildings including bale riung, leuit, pesanggrahan in the form of Sundanese houses, Tajug (mosque/prayer room). Each building faces each other and is separated by a yard in the form of an open field and yard.



Figure 4. Buildings in the Sindang Barang Cultural Village  
Source: Personal documentation, 2024

Field observations indicate that the buildings in the Judi Barang cultural village are currently in need of repair and minor maintenance. Several of the buildings that have been damaged and demolished include the imah gede, a traditional Sundanese house. Traditional architecture reflects local culture, which generally implements environmentally friendly architectural concepts because the community lives in harmony with nature (Handayani et al., 2021).

### 3.3. Settlement Pattern of Sindang Barang Cultural Village

The development of traditional architecture with a foundation of cultures and norms that are very sacred in traditional societies will greatly influence the behavior of space or place in each region. Thus, the life and behavior of a traditional society is a reflection of the development of its traditional architecture. The pattern of traditional Sundanese villages is generally arranged by paying attention to the concept of place and customs. These villages often have houses facing the main road or a place of worship located in the center of the settlement. According to Anwar Adlwillaga (2010) the traditional settlement pattern of Sundanese people generally shows that the houses are built side by side, with two rows facing each other and separated by a yard that has a divan and several rows of houses. The majority of ordinary houses have a fairly large yard, but there are some that do not have it, so that the boundaries of the yard area between one house and another are less clear. In this West Java area, besides rows of houses and open areas, there are also other buildings such as mosques, meeting places (bale patemon), rice storage areas (lumbung), livestock pens, public toilets (MCK), gardens, fish ponds (balong), rice fields, and various other physical facilities that are closely related to the residence.

The Sindang Barang cultural village in Bogor is a miniature Sundanese settlement that maintains its traditions since ancient times. The settlement pattern depicted in the Sindang Barang cultural village in Bogor reflects Sundanese customs and traditions, connected to the surrounding landscape. The landscape around the Kampung Sindang Barang area remains pristine, with elements including rice fields, gardens, and yards directly connected to the community's settlements as spaces.

Sindang Barang Cultural Village is one of the 20 traditional villages in West Java. Sindang Barang Cultural Village is one of the communities that still maintains the local cultural aspects of the Pajajaran kingdom, where there are 78 historical sites of Pakuan Sindangbarang, traditional ceremonies (Serentaun traditional ceremony, Neteupken traditional ceremony, Pabeasan traditional ceremony, and various other traditional ceremonies), and various traditional Sundanese arts (Prasetyo, 2011). The settlement of Sindang Barang cultural village is surrounded by rice fields and mixed gardens that function as a food supply as well as functioning as a yard. Based on the beliefs of the Sundanese people, the philosophy of this village settlement pattern has the concept of weak-cai, Luhur handap. Lemah-cai has the meaning where weak is the element of land which means a place for people to live while cai is water which means rice fields that have springs for the continuation of the community. While Luhur Handap: A concept that literally means top-bottom, this concept shows the hierarchy of placement of a location based on its level of importance/function. (Kustianingrum et al., 2013). The Sindang Barang cultural village settlement has several water sources that are used by the community for household needs and agricultural activities by the surrounding community. Traditional Sundanese architecture has its own aesthetic and exotic value, seen from its originality and uniqueness. These values can be marketed to tourists as the region's authentic potential (Nuryanto et al., 2016).

### 3.4. Sustainable Development of Sindang Barang Village Landscape

The sustainable development of the Sindang Barang Cultural Village is carried out through revitalizing facilities, increasing collaboration, and diversifying cultural tourism activities involving the local community, such as arts training and providing educational tour packages for schools. Development also focuses on utilizing historical and environmental potential, holding traditional competitions, and establishing accommodations to support the local economy and preserve Sundanese cultural heritage:

#### a) Holistic Design Approach

Manage the landscape in an integrated manner, taking into account various biophysical and social elements. A holistic development approach in the Sindang Barang cultural village must integrate the biophysical and socioeconomic elements of the surrounding community.

#### b) Collaboration Between Stakeholders

Involving various parties such as local communities, professionals, and the private sector to ensure sustainability is integrated into landscape planning and management. The problem of the Sindang Barang cultural village lies in the sustainability of the area's landscape. The landscape of the Sindang Barang cultural village has not experienced much change. However, there is damage to buildings that are not maintained so that collaboration is needed by stakeholders to carry out development through planning in accordance with the preservation and tourism development policies of government agencies.

#### c) Adaptive Design

In developing the landscape of the Sindang Barang cultural village, a study of the surrounding area's development is necessary to formulate a design that adapts to the surrounding conditions. This requires designing a landscape that is resilient and adaptable to local climate conditions.

## 4. CONCLUSION

The residential landscape of Sindang Barang Cultural Village is one of the local cultural miniature objects located in the Tamansari District, Bogor Regency. There are 29 traditional Sundanese cultural buildings known for their beautiful atmosphere and the people who really maintain their traditions. The character of the residential landscape of Sindang Barang Cultural Village physically displays traditional Sundanese buildings including imah gede, bale riung, leuit, pesanggrahan in the form of Sundanese house buildings, Tajug (Mosque/prayer room). The typology of residential buildings in Sindang Barang Cultural Village has the form of hunan jolopang, Julang Ngapak, Capit Gunting and gado bangkong. The sustainable landscape design approach of Sindang Barang Village includes a holistic design approach, collaboration between stakeholders and adaptive design.

A study of sustainable landscapes in the Sindang Barang cultural village in Bogor Regency requires research on the role of the community around the Sindang Barang cultural village in preserving the culture of the settlement as an effort to conserve the area.

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