
THE STUDY OF SETTLEMENT PRESERVATION PATTERN FOR ENVIRONMENTAL SUSTAINABILITY IN CANGGU VILLAGE, BADUNG REGENCY, BALI PROVINCE

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ABSTRACT

KEYWORDS

Environment
sustainability, settlement
development,
preservation pattern

Canggu is one of the settlements Village in the southern coastal community in Bali which is currently experiencing very rapid tourism development. This village has a relatively flat topographic condition, as well as being one of the areas of Majapahit descent. The rapid development of tourist accommodation that currently occurs in Canggu, has an impact on the high conversion of land use, and the disruption of local community settlements. Seeing this fact, it is considered necessary to make an evaluation study on the development of spatial planning which will later be used as input in determining spatial land use control policies in Canggu Village. This research uses qualitative methods, case studies using field observation techniques and interviews, which are then compared with literature reviews in the form of regional spatial policy studies and relevant theories. The analysis was conducted on the residential area of Canggu Village, which aimed to determine the main causes of land use change and displacement of local community settlements. From the results of the analysis, which is then compared with literature studies, it is expected to be able to find a solution to preserve the urgency of local community settlements. The results of the analysis show that the implementation of spatial concepts sourced from culture is more respected by the community compared to local government policies. The hulu-teben concept as the basis for the preservation of settlement spatial values derived from the Tri Hita Karana cultural philosophy, is considered very effective and feared by the community because it is related to social sanctions that must be borne by the community, which are outlined in pararem.

INTRODUCTION

The conversion of residential or agricultural land into tourist accommodation buildings is one tangible form of the impact and consequences of increasing tourist visits to an area. Increasing demand for tourist facilities encourages land use conversion. Land use change or also called land conversion in the agricultural sector is a fairly complicated problem because on the one hand it can have a positive impact on other sectors but also have a negative impact on the sustainability of the agricultural sector. Meanwhile, land use change in the housing sector has a negative impact on the occupancy of local people who have long lived in the place, from their ancestral era to the present. Cultural values inherited from generation to generation will be disrupted due to the arrival of new cultures brought by tourists.

Setiawan (2016) stated that land use change or land conversion is a form of changing part of the function or the entire function of the area from its original function (as planned) to other functions that have a negative impact (problem) on the environment and the potential of the land itself. In the case of Canggu Village, land use change occurred throughout the village, since the construction of an alternative road connecting the Petitenget-Canggu area. Land use change in the sense of changes / adjustments to land use is caused by factors that are generally caused by the desire to meet the needs of life. Dwiprabowo, et al, (2014) also stated that the

level of land use is determined by: (a) Accessibility, (b) Economic growth, (c) Number of population, (d) Residential land needs, (e) Objectives of territorial development. Changes in land use that occur in one region will be different when compared to other regions depending on the conditions and development policies applied in the region (Todaro, et al., 2002). Two important factors affecting land conversion from agriculture to non-agriculture are industrial and settlement growth.

Based on data from the Central Bureau of Statistics of Badung Regency, the number of foreign tourist visits to Badung from the August 2022 period reached 276,659 people, of which 10% lived in Canggu Village. The area of Canggu Village is 418.52 Km² or about 7.43% of the land of Bali Island, with a population of 7,031 people (2022). If the number of indigenous people is added to the number of tourists visiting Canggu, it requires a large enough place to live. The green open space inside the village which was previously the lungs of the village, in order to accommodate the needs of tourists who are considered able to improve the community's economy in the future, is converted into a tourist facility building. This condition has a major impact on the spatial pattern of canggu village (Dewi, 2016).

The original settlement, which was originally built along the village road, is now displaced by art shops and tourist accommodation buildings. People who initially only rented land, are now starting to sell their land one by one due to the insistence of the capitalists. The Village Government and Local Government of Badung Regency began to see this phenomenon as a fairly serious spatial phenomenon, because in the Canggu village area there are also two large temples that are considered kahyangan jagat temples in Badung Regency. The existence of this temple must be supported by the existence of local people who understand with certainty the spatial value as a supporter of the existence of this sacred area. If the local community settlement is evicted, the temple builders will disappear, and gradually this sacred space is feared to be lost (Lake et al., 2018).

Badung Regency already has local regulations governing development in the canggu village area. However, the existence of this regional regulation is still unable to reduce land use change in Canggu Village. Land use change is even more rapid. When viewed from the side, determining the status of tourist areas becomes a very complex problem. On the other hand, the determination of the function of cultural heritage for the coast of Canggu requires a conservation effort on the kahyangan jagat temple. The extent of the boundaries of the cultural heritage area, has not been strictly regulated (Sudantra, 2018). The existence of two functions in one area makes local governments and village governments throw responsibility at each other in determining regional development policies. In the end, this condition makes investors freely build tourist facilities and take advantage of the existing area in Canggu Village.

Efforts to control new land use are limited to the implementation of permits in the form of permit documents which is one of the requirements that must be owned by the community, entrepreneurs / investors who will build tourist facilities in Canggu Village. However, the realization of development that occurs on the ground is still very uncontrollable. Seeing this fact, the customary government of Canggu Village considers it necessary to hold a study related to settlement preservation efforts. What efforts can be made to minimize land use change that occurs in Canggu Village, as well as what are the most dominant factors that cause land use change in Canggu Village. These findings can later be used as input in the formulation of village policies.

RESEARCH METHOD

This research uses qualitative methods. This method was taken because the focus of research began with the phenomenon of rapid land use change in Canggu Village. Data collection using observation methods is a technique that requires observation from the

researcher either directly or indirectly on the object of research (Umar, 2000: 51). In this study, observations were carried out descriptively, namely researchers tried to observe, record, record and document the phenomenon of land use change that occurred in Canggu Village. Data collection was conducted by deep interviews. Data obtained from observations, interviews, documentation, etc., are collected, then reduced by abstraction. After that, coding is made and grouping according to the type of problem. The abstracted data is then compared with related theories and regulations. To find out the development of Canggu Village, a comparative study was conducted based on maps obtained from Google Earth, then matched with interviews from local communities. So that later basic data will be obtained that illustrates the extent of the development of land use conversion, as well as what efforts have so far been made by the people of Canggu to maintain the existing spaces in housing and settlements of Canggu Village.

RESULTS AND DISCUSSION

Settlement Preservation and Environmental Sustainability

Settlement According to Hadi Sabari Yunus (1987) in Wesnawa (2015: 2) can be interpreted as a formation both human made or natural with all its completeness that humans use as individuals and groups to live either temporarily or permanently in order to organize their lives. In his book, Wesnawa (2015: 32) also suggests types of settlements that can be divided into two types of settlements. First is a settlement formed based on occupancy time, second is a settlement based on physical and non-physical characteristics. Residential areas are areas intended as residences / residential environments to support human life and livelihood activities. Regulation of the Minister of Public Works no.20/prt/m/2007 on analysis techniques of physical & environmental, economic and socio-cultural aspects in the preparation of spatial plans, defines how settlements can function as land carrying capacity, by first knowing the capabilities of the land.

Doxiadis in (Ekartaji et al., 2016) states that settlements are formed by five main elements, namely First, nature, biotic and abiotic environments, settlements will be largely determined by the existence of nature, both as an environment and as a resource. Second, humans (anthropos), the development of settlements is also influenced by humans as users of space. Third, society, society is formed as a result of human populations that form a community. Aspects of society that affect settlements include population density, social stratification, cultural structure, economic development, level of education, welfare, health and law. Fourth, the living space (shell) of living space concerns various elements where humans both as individuals and as a community group carry out their lives. Fifth, networks that support life (road networks, clean water networks, drainage networks, telecommunications, electricity).

The development of residential areas is not only limited to providing physical means of settlement, but needs to consider various aspects, especially the surrounding environment. Therefore, considering the environmental sustainability of a settlement needs to be done as an effort to maintain the existence of habitable settlements for residents. Environmental sustainability includes the ability to maintain environmental balance, maintain a balance of air and water quality, and minimize negative impacts on the environment. Based on Law No. 32 of 2009 concerning Environmental Protection and Management, sustainable development is defined as a conscious and planned effort that integrates environmental, social, and economic aspects into development strategies to ensure the integrity of the environment as well as the safety, ability, welfare, and quality of life of present and future generations. To realize this, a planned synergy involving stakeholders and the community is needed.

A new function that enters the settlement environment, can result in changes in settlement spatial patterns, as well as can have a negative impact on community regulations that have been inherited from generation to generation. Tourism activities, which currently affect the spatial

pattern of Balinese settlements, are one of the external indicators, in addition to internal indicators that trigger changes in spatial planning in Balinese society. Sustainable settlement is a concept rooted in three main pillars that aim to achieve inclusive growth and create shared prosperity for current generations and continue to meet the needs of future generations (Ayat, 2017). The three pillars are Economic, Social and Environmental Development and are interconnected and reflect the goals of community development and social and environmental stability. Economic sustainability seeks to encourage activities that promote long-term economic growth can be achieved without negative impacts on the environmental, social, and cultural aspects of society. Social sustainability is a form of social responsibility that significantly occurs when stable and unstable components of society require the revival of depleted resources. It combines the design of the physical environment with the social environment which then focuses on the different needs within a community and places special emphasis on providing the proper infrastructure and necessary support to the weaker parts.

The increase in population and the intervention of future residents can also encourage changes in the spatial pattern of a settlement. The migrant population needs a new residence, thus encouraging rapid land use conversion. How then the indigenous people integrate so that their territory remains sustainable and their territorial areas can still be maintained. One of the efforts that can be made to maintain the sustainability of the settlement environment is Preservation. This type of preservation is an effort to preserve the built environment in its original condition, and prevent the process of damage. The determination of the preservation strategy is carried out by taking into account the cultural significance of the object to be preserved. Preservation can also be interpreted as ongoing efforts to maintain and protect locations or objects that have beauty and preciousness to them. The determination of preservation efforts is preceded by determining the level of urgency of space in a settlement, including, analyzing cultural heritage areas in a settlement, second, analyzing the age or age of each zone in the settlement, third, recording the authenticity of the elements forming the mummification, and fourth is analyzing the scarcity of natural resources in the surrounding environment. After knowing this data, coordination can then be carried out to form the urgency of the preservation area in an area.

Existing Conditions of Canggu Village Settlements

Spatial Pattern of Canggu Village Settlement

Geographically, Canggu is located at 8°38'51" South Latitude and 115°08'07" East Longitude. This geographical location makes Canggu Village one of the icons of coastal villages in Badung Regency. The contour of the land is relatively flat, making the arrangement of the building period at the same ground level. The government system of Canggu Village consists of official villages and traditional villages. The Canggu official village is led by a village head (*perbekel*) who is in charge of carrying out official government affairs and the traditional village is led by a traditional *jero bendesa*. Based on the form of village government, Canggu Village is an autonomous village that carries out its own household within the bonds of the Unitary State of the Republic of Indonesia (Profile of Canggu Village, 2020). The boundaries of Canggu Village based on Badung Regent Regulation Number 45 of 2015 concerning the Determination and Affirmation of Canggu Village Area Boundaries, North Kuta District, Badung Regency are, the north is bordered by Tumbakbayuh Village, the west is bordered by Pererenan Village, the east is bordered by Dalung and Tibubeneng Villages, and the southern boundary is the Indonesian Ocean. Canggu is now growing into a tourist village that has been visited by tourists from various countries in the world. Physically, the Canggu Village Area can be seen in Figure 1 below.

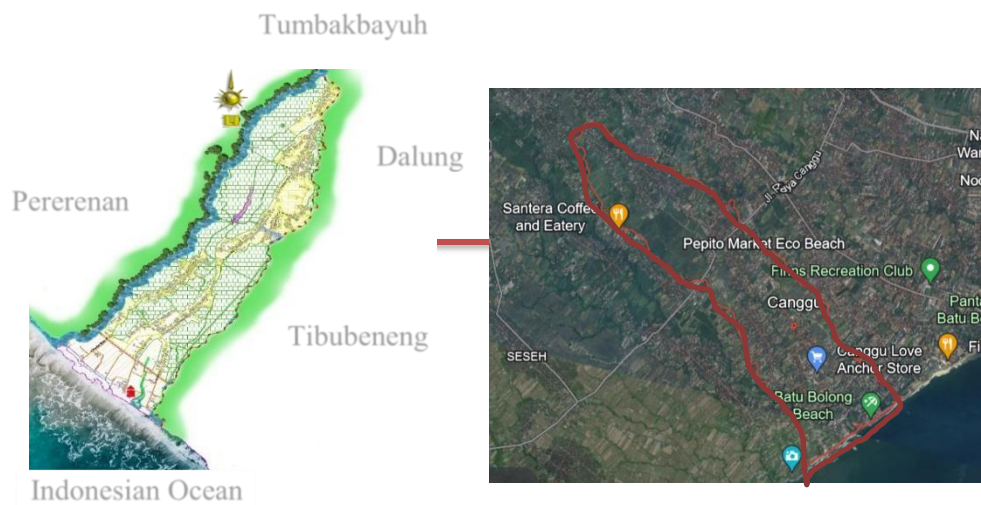


Figure 1. Canggu Village Residential Area, Badung Regency, Bali Province

Source: Redrawn based on Canggu Village profile data in 2013

The existence of beach tourist attractions and also the existence of several *Kahyangan Jagat* Temples, encourage increased tourist visits. On May 30, 2013, CNN (Cable News Network) ranked three beaches in Indonesia among the 100 best beaches from around the world in the "World's 100 Best Beaches". One of these beaches is Canggu Beach which occupies the 39th position (Wonderful Indonesia, 2015). The arrival of these tourists requires a variety of tourist facilities that will be used to support all tourist activities that come to Canggu Village. The high number of tourist visits also has an impact on changes in village settlement patterns (Widianti, 2017).

The relationships formed from human activities in their settlements are reflected through patterns that regulate and maintain the balance of nature. As revealed by Sri Narni in Mulyati (1995), it is stated that settlement patterns can be grouped into six types, including, 1). The settlement pattern extends (one-sided linear) along the road both on the left side and the right side only; 2). The pattern of parallel settlements (two-sided linear) is a settlement that extends along the road; 3). The cul de sac settlement pattern is a settlement that grows in the middle of a circular path; 4). The bagging settlement pattern is a settlement that grows in an enclave-like area formed by the road that fences it; 5). Curvalinier settlement pattern is a settlement that grows in the area on the left and right of the road that forms a curve; and 6). A circular settlement pattern is a settlement that grows around the open space of the city (Widyastini, 2013).

Settlement patterns are born because of culture that concerns the way of life, how to adapt to nature and the environment and the demands of meeting needs. Based on observations in Canggu, which were then compared with satellite images (google earth), the settlement of Canggu Village has a two-sided linear pattern along the left and right of the road, with the main road axis oriented towards the north south, as well as the mountain as the upstream axis and Batu Bolong beach as the south (downstream) axis. The basis for regulations in the development of spatial planning and building planning in Canggu Village is under the auspices of Badung Regency (Muthmainah et al., 2019).

All development policies implemented refer to local regulations in Badung. But on the other hand, Canggu also has customary institutions that also have the right to determine development, especially in terms of controlling space use. Archival data from the Canggu

Village *Musrenbang* published in the Canggu village profile in 2014 states that planning to develop Canggu Village into a tourism area began to appear in 1994. However, in the period from 1994 to 1998, not many accommodation developments were built in Canggu Village. The only accommodation built in Canggu at the end of 1998 is Hotel Tugu Batu Bolong. As shown in Figure 2 below.

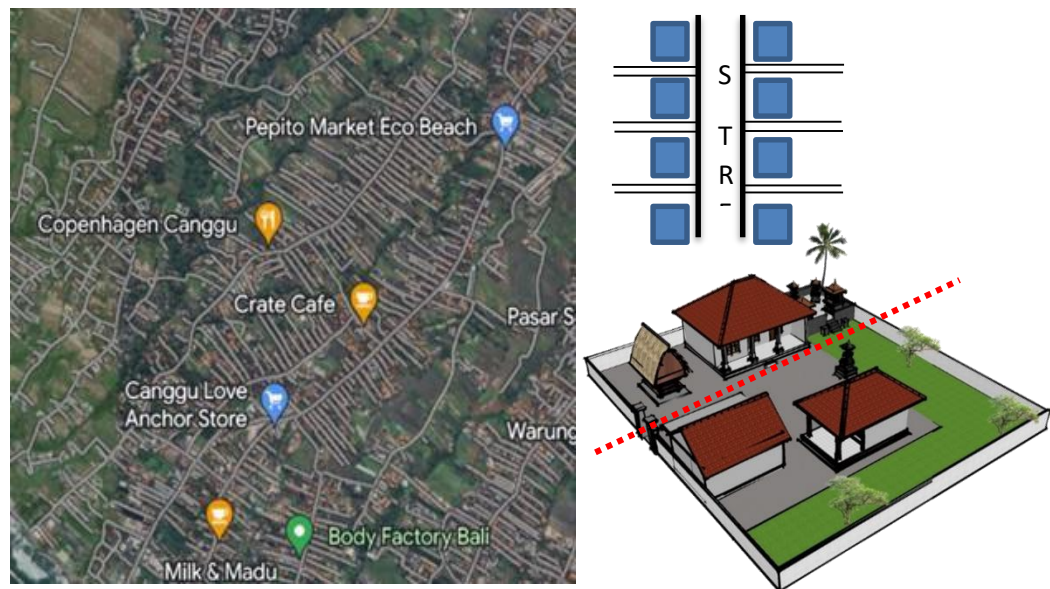


Figure 2. Settlement Pattern of Canggu Village
Source: Author's Interpretation, 2023

After the construction of Tugu Hotel in 1998, not much change was felt by the people of Canggu. The surrounding community began to try to offer the land owned for the construction of tourist facilities. In the end of 2003, the Regional Government of Badung Regency first issued a policy through the Decree of the Regent of Badung Number 637 of 2003 concerning the Detailed Spatial Plan of North Kuta District. This decree contains the determination of the function of the Canggu Coastal Area as a Tourism Area (article 11 paragraph 2). After the issuance of the Badung Regent Decree, it further emphasized the designation of tourist areas in Canggu, so that investors did not hesitate to invest. T

he peak phase of tourism facility development in Canggu occurred in 2014. People's houses began to function as places for tourists to stay. The construction of tourist facilities has been included in all banjars in Cangg. The three beaches in Canggu have diverse regional development patterns. Batu Mejan Beach is synonymous with café & restaurant which has barbeque facilities known as the Echo Beach area. Batu Bolong is synonymous with tourist accommodation areas, surfing areas, and cultural kawaan Batu Bolong Temple. Segara Beach is famous for its *jukung* port and fishing settlements that still exist today. The last Canggu Coastal Area to develop is the Catu Beach Area, which is still in the process of development. Tourist activities that develop in Catu Beach are surfing activities and café and bar facilities.

Typology of Buildings in Canggu Village Settlement

Typology is the study of types with categorization and classification activities to produce types. These categories and types of activities can also be seen in their diversity and uniformity (Iswati 2003: 124). Building typology is a study / investigation of the incorporation of elements that allow to achieve / obtain the classification of architectural organisms through various types. In architecture, typology is identified as an activity related to the classification or

grouping of architectural works with the similarity of characteristics or totality of specificities created by a society or social class bound to the permanence of fixed or constant characteristics. The similarity of these characteristics includes the similarity of basic forms, the basic nature of objects, the similarity of functions, objects, the similarity of historical origins / single themes in a period or period bound by permanence of fixed / constant characteristics. According to Rafael Moneo in (Damayanti et al., 2017), typology analysis is divided into three phases, namely: a). Analyzing typology by digging from history to find out the initial idea of a composition; or in other words knowing the origin or occurrence of an architectural object, b) Analyzing typology by knowing the function of an object, c). Analyze typology by finding the simple shape of a building through the search for basic buildings and basic properties.

Based on observations on the settlement of Canggu Village, the typology of buildings in Canggu Village can be divided into several types. When viewed from historical factors and cultural heritage buildings, Canggu Village has two *kahyangan jagat* temples and one fisherman temple which is very sacred by the community. From a function point of view, the buildings in Canggu Village are built based on various functions. The original building of the community is a traditional residential building that has a *natah* pattern (courtyard) as the central point of spatial orientation. Starting from *Sangguh* to *Natah*, it is a sacred area that often functions as a place for ceremonies and religious activities. This area is a protected area contained in every residential unit, where people outside the family or tourists are prohibited from using this space. Areas that are considered profane are the back area and areas located in the southwest or northwest area of the residential unit. Based on this analysis, it can be seen that the Canggu Village community has a high spatial value in its residential units. This has an impact on the surrounding residential environment. When preservation efforts are carried out, the first area that must be maintained by the community is a space that has cultural values. The area of cultural value exceeds 50% of the area of community residential units. This can be used as an important point in making basic conservation policies in Canggu. Another function is the building of tourist facilities consisting of villas, hotels, tourist cottages, beach clubs, cafes and restaurants, as shown in Table 1 below.

Table 1. Building Typology in Canggu Village

Typology Indicators	Characteristic	Note
History	<ul style="list-style-type: none"> ✓ Batu BolongCanggu Temple ✓ Batu Mejan Temple ✓ Segara Temple 	<i>Kahyangan Jagat</i> Temple is one of the determining factors for the sustainability of the Canggu Village residential environment, because this area is very sacred by the community
Function	<ul style="list-style-type: none"> ✓ Villa function ✓ Tourist lodge ✓ Hotel Functions ✓ Beach Club function ✓ Café and Restaurant Functions ✓ Occupancy function 	The buildings built in Canggu Village have a variety of functions. The initial building built was a community residential unit. However, after tourism entered Canggu Village, many types of tourist facility buildings began to appear.
Build the base and basic properties of the building	<ul style="list-style-type: none"> ✓ For limasan roofs, gable and flat roofs 	The physical shape of the building is mostly adapted to the tropical climate which has wide openings.

	<ul style="list-style-type: none"> ✓ Concrete wall elements, red brick, light brick, wood, bamboo ✓ The building period has a basic shape of square, rectangular, ✓ Basic properties of buildings, permanent, and semi-permanent 	<p>But in general, these buildings have the shape of a pyramid roof, a flat tap saddle. When viewed from the material that makes up the wall, it consists of concrete walls, red brick walls, light brick walls, wooden walls, and bamboo. Judging from the nature of the building, most of them are permanent buildings, but there are also semi-permanent buildings with knock down systems.</p>
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Source: Author's interpretation, 2023

Preservation of Canggu Village Settlement

Analysis of Settlement Preservation with the Application of Local Regulations Related to Spatial Zoning in Canggu Village

Settlement preservation is an effort to suppress the high conversion of green land functions, and also minimize the displacement of indigenous communities. The sustainability of the settlement environment through this preservation strategy will be realized if there is integration between stakeholders, communities and investors who own assets in Canggu. This preservation method can be done by first identifying zones that have sacred functions in the community, further reviewing applicable policies, and collecting input from the community, and investors. Emil Salim's opinion in the book *Sustainable Development the Role and Contribution of Emil Salim* (2010), stated that sustainable development is a process that optimizes the benefits of natural resources and human resources by harmonizing natural and human resources in development. The concept of sustainable development is based on five major main ideas, namely: First, continuous development, which is supported by natural resources, environmental quality, and humans who develop continuously. Second, natural resources (especially air, water, and soil) have a threshold, where their use will shrink their quantity, and quality. Third, environmental quality is directly correlated with quality of life. Fourth, that current patterns of natural resource use should not rule out the possibility of choosing alternatives or other options in the future. Fifth, sustainable development relies on transgenerational solidarity, so that welfare for the current generation does not reduce the possibility for the next generation to improve their welfare.

Starting from this, in 2021, the Badung Regency Government then established zoning regulations regulated in Badung Regent Regulation Number 9 of 2021 concerning the Detailed Spatial Plan of North Kuta District for 2021-2041, which also regulates the spatial planning of Canggu Village. In article 6 (six) of this policy, Canggu Village is classified into the BWP C subzone with details, namely, block C-5 covering an area of 110.03 Ha (one hundred ten point zero three hectares), block C-6 covering an area of 155.03 Ha (one hundred fiftyfive point zero three hectares), block C-7 covering an area of 87.13 Ha (eighty- seven point one three hectares), block C-9 covering an area of 72, 82 Ha (seventy-two point eight two hectares). Broadly speaking, this zoning bylaw regulates the use of protected zones and cultivation zones. The protected zone consists of, coastal boundary zone, river boundary zone, LS and KS zones, and green open space zones. The Cultivation Zone is further divided into several sub-sections, namely, housing sub-zone, trade and service sub- zone, office sub-zone, public service facilities sub-zone, agricultural zone, tourism zone, RTNH zone and other zones, as shown in the following Figure 3 below.

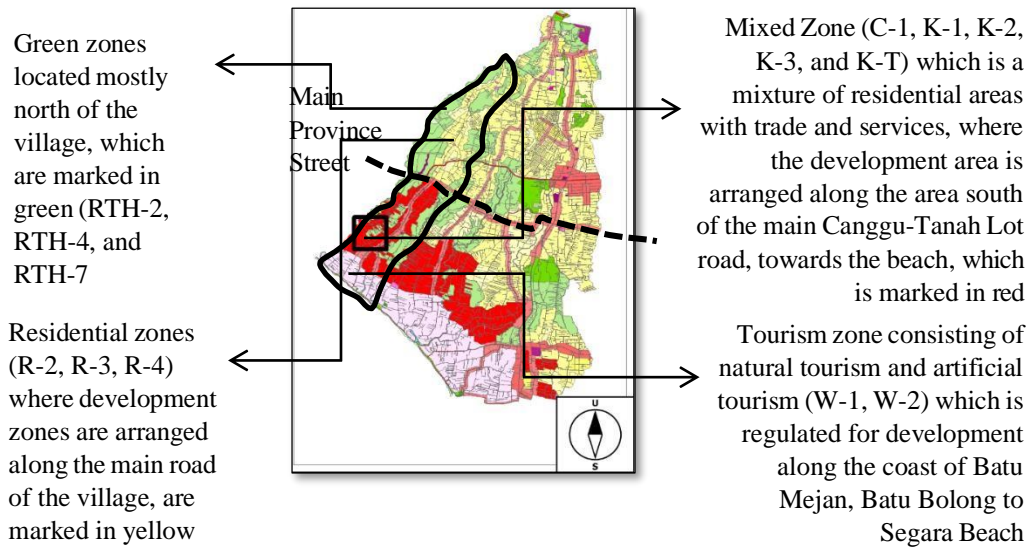


Figure 3. Badung Government Zoning Pattern for Canggu Village Settlement

Preservation analysis by applying the Pararem (local regulation) karang ayahan desa as an instrument to control the use of settlement space

Bali Provincial Regulation Number 4 of 2019 concerning Customary Villages (hereinafter referred to as Perda Desa Adat Di Bali) Article 1 paragraph (8) of Perda *Desa Adat* states "customary village is a unit of customary law community in Bali that has territory, position, original structure, traditional rights, own property, traditions, social manners of community life for generations in the bond of holy places (kahyangan tiga or kahyangan desa), duties and authorities and the right to regulate and manage their own household. Referring to the Regional Regulation, all traditional villages in Bali have privileges, namely the right to take care of all their own household affairs such as making awig-awig or pararem made according to development and needs, in addition to controlling the behavior of community members (krama desa) in traditional villages. *Awig-awig* is a set of regulations made by village and or *krama banjar* which is used as a code of conduct in the implementation of *tri hita karana*, according to the religious *dharma* of each traditional village. The arrival of migrants, investors and foreign tourists to Canggu Village, encourages the rapid conversion of green land functions. Badung Regent Regulation Number 9 of 2021 concerning the Detailed Spatial Plan of North Kuta District for 2021- 2041, as an official control instrument, is still ineffective in suppressing the rate of land use conversion (Jayantiari & Rwa, n.d.).

Seeing this phenomenon, official government officials then collaborated with customary institutions in each *banjar* to make policies related to controlling village development. This Customary Institution consists of three members. The first is *Baga Parhyangan*, in charge of arranging *parhyangan* (all matters related to holy places), religious ceremonies and infrastructure related to religious ceremonies in Canggu Traditional Village. Second, *Baga Pawongan* is in charge of coordinating *krama* (residents) both in terms of manners, as well as in various activities that take place in Canggu Village. While third, *Baga Palemahan* is in charge of regulating, and managing the village environment and also supervising the development in the Canggu Traditional Village environment. In this case, the *palemahan* also coordinates with the development office in the official government. One of the traditional *perarem* quotes of Canggu Village can be seen in the following quote.

“*Pidabdab Mautsaha Br. Canggu Warsa 2011-2016 Sargah V pidabdab baga palemahan warsa utama yang berbunyi “Ngutsahayang mangdane pelaba pura tur karang desa sane nenten wenten ngemolihang hasil, mangda kautsahayang ngemolihang jagi keolah olih krama Canggu, nanging nenten dados ke adol”.*”

The meaning is, the policy that regulates the use of business in 2011-2016, point number V, regulates *palemahan* (the surrounding environment where humans live), for who will use the *pelaba pura land*, or unproductive land for agriculture, is allowed to rent but cannot be sold to other parties outside the Canggu community.

Economic problems also have an inherent impact on environment and cultural problems. Due to the decision to lease the *pelaba pura* land to investors, the cultural activities of the Canggu people were disrupted. Another cultural problem that occurs on the Canggu Coast is the disruption of community access to the cemetery of Canggu Village due to the creation of underground access by the Intercontinental Canggu Hotel. The creation of this underground access resulted in the religious rituals of the Canggu people related to the use of graves, being disrupted. The hotel intends to make an underground connecting road totaling 2 (two) units. This access was built without the knowledge of the local community (Rimbung, 2014). The use of *Subak Catu* road access as an internal hotel access is also strongly protested by the community, because *Subak Catu* road is still actively used by the community as access to village cemeteries and ceremonial activities at *Pura Dalem Kahyangan*. This overlap of functions is minimized by customary institutions, especially such as *palemahan*, where when the official government cannot enter the environmental realm, customary institutions take over supervision.

The application of social sanctions against local residents is more effective when compared to the implementation of national legal sanctions. *Awig-awig* generally only contain points (basic rules) regarding traditional village life, while more detailed implementation rules are set forth in the form of *pararem*. *Pararem* is a decision of *paruman* (village meeting) of customary villages that has binding legal force. Judging from the qualifications, there are three groups of *pararem*: (1) *pararem penyacah awig*, namely meeting decisions which are the rules of implementation of *awig-awig*. (2) *pararem ngele / pararem lepas*, which is a meeting decision which is a new legal rule that has no basis in *awig-awig* but is made to meet the legal needs of the community (3) *pararem penepas wicara*, which is in the form of meeting decisions regarding a certain legal issue (case), both in the form of disputes and violations of law. Briefly a description of the preservation strategy in each spatial zoning of Canggu Village, can be seen in Table 2 below The matrix of preservation efforts by Canggu customary institutions is as shown in Table 2 below.

Table 2. Matrix of Canggu Village Settlement Preservation

Instituti ons (Adat)	Zoning R2,R,R4	Zoning RTH-2,RTH-4,RTH-7	Zoning C-1, K-1,K-2,K-3,K-T	Zoning W-1,W-2
<i>Baga Parhyangan</i>	Identification of parhyangan (sacred area), by establishing the radius of the boundary of the sacred area.	Preservation of green land (especially <i>pelaba pura</i> land) so that it is more economical, but does not change its main	Areas that can be converted but still must pay attention to sacred and profane areas	The <i>pelaba pura</i> area, and parhyangan on the coast, although it can function as a tourist facility zone, still cannot

		function as green open space		displace the sacred area and the existing sacred area
<i>Baga Pawongan</i>	Regulate, supervise and regulate migrant residents who do not have residence permits	Identify, organize and monitor people who make use of green open space	Identifying, socializing policies related to business activities, supervising the activities of business actors during activities in Canggu	Tourism business actors are required to report every employee and visitor who comes to their place of business to customary institutions, so that people who come do not damage the village settlement order
<i>Baga Palemahan</i>	Identify the initial plan for the construction of new tourist facilities, adjusting to the <i>awig-awig</i> related to development. Provide warnings to investors who do not follow the development provisions set by custom. Especially for residential functions, the main house is regulated to be bound by custom, so it cannot be traded to other parties, because it has ties of rights and obligations with custom	Preservation of green land by utilizing it as a jogging track, public parking area with natural vegetation or other functions of economic value, but does not change the main function as green open space	Referring to the Badung Regency Zoning Bylaw Year 2021, which is then combined with <i>awig-awig</i> supervision	Tourist facility buildings that exceed the capacity of 40 visitors, are not allowed to be built in yellow and red areas. In the event of illegal development, customary institutions have the right to dismantle by first giving a warning to business actors.

Source: Author's interpretation, 2023

CONCLUSION

Preservation is one of the strategies to restore settlements that experience environmental degradation due to rapid land use conversion. Bali has two systems of government, namely, official government under the auspices of the Government Service of the Republic of Indonesia, and autonomous customary government that has the right to regulate the internal affairs of its own village. The implementation of development policies that refer to national

and official policies, is often not right on target in the province of Bali. The results of the analysis on this study show that the implementation of spatial concepts sourced from culture at Canggu Village is more respected by the community compared to local government policies. The hulu-teben concept as the basis for the preservation of settlement spatial values derived from the Tri Hita Karana cultural philosophy, is considered very effective and feared preserved the settlement by the community because it is related to social sanctions that must be borne by the community. Development control is more effective if it cooperates with customary institutions in its implementation. The products of customary institutions in the form of awig-awig and perarem are more effective in controlling building development in Canggu, especially because of the existence of social sanctions that are directly strictly applied.

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