

PAPER NAME

**125913557.pdf**

AUTHOR

**Ni G. A. Diah Ambarwati Kardinal**

WORD COUNT

**5465 Words**

CHARACTER COUNT

**28492 Characters**

PAGE COUNT

**9 Pages**

FILE SIZE

**3.0MB**

SUBMISSION DATE

**Sep 16, 2024 12:18 PM GMT+8**

REPORT DATE

**Sep 16, 2024 12:19 PM GMT+8**

### ● 8% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

- 8% Publications database
- Crossref database
- Crossref Posted Content database
- 0% Submitted Works database

### ● Excluded from Similarity Report

- Internet database
- Bibliographic material
- Quoted material
- Cited material
- Small Matches (Less than 10 words)

# Spatial Macro Pattern of Belandingan Bali Aga Village

Ni G. A. Diah Ambarwati Kardinal, I Komang Gede Santhyasa, I Nyoman Harry Juliarthana, Komang Wirawan  
 Urban and Regional Planning Department, Faculty of Engineering  
 Universitas Hindu Indonesia  
 Bali, Indonesia  
 diahkardinalpwkunhi@gmail.com

**Abstract**—Fifteen Bali Aga Village is designated as a supporting village for geopark batur which has been declare as world geopark by UNESCO. One of the fifteen village is Belandingan village. Information about Belandingan village is difficult to obtain. Even though Belandingan village also keeps the uniqueness that is not inferior to other Bali aga villages. One of them is the uniqueness in the pattern of spatial. The purpose of this study was to identify the geographical character of Belandingan Village and identify the macro spatial pattern of Belandingan village as Bali Aga Mountain village. Research uses qualitative descriptive exploratory methods. Data were obtained through field's observations, interviews and literature studies. The results showed that the village referred to the hills north of the village as the upstream of the village not the mount batur. The spatial macro pattern is based on the concept of tri hita karana and tri mandala.

**Keywords**—Bali Aga mountain village; spatial pattern; Tri Mandala; Tri Hita Karana

## I. INTRODUCTION

One of the uniqueness of Bali that enriches its culture is the presence of old villages or Bali Aga Village, namely a society that adheres to the tradition of *pra Hindu majapahit* [1]. Bali has an order in various aspect of life, including in terms of settlements. Not Only the shape of building uniqueness, but also the spatial pattern of the village [2].

Adati Bali's settlement pattern is embodied in the philosophy and concept of community based on religion (Hinduism), digested according to the local (local genius) wisdom of the local community. The reflection of the pattern varies where the geographical factors contribute of the form of typology in its settlement pattern. The Typology of settlements patterns is such, it is a place for a sustainable settlement according to idealism, social culture, and behaviour of its people. Settlement patterns in Bali in general can be viewed from regional patterns, village patterns dan residential unit. Characteristic of Balinese settlement patterns where the high area (mountains, hills) as upstream area (luan) and low area as downstream area (teben) [3].

The term Bali Aga is defined as a distant and marginalized group. Some experts refer to it as Bali Mula or Bali Kuna which means native Balinese or ancient. Thus the meaning of the term Bali Aga was then represented as an indigenous

population who were still carrying out cultural research that came from before the birth of Bali by the South Balinese. Then Reuter also determined that Bali Aga's terminology was because there were places of holy gods in Balinese cosmology, as well as air sources [4].

Belandingan is Bali Aga Mountain Village in Bangli regency. It's secluded and still rarely visited by the community course in the difficulty of getting information about the village. Its seem to race against time (modernization) to get information about the spatial pattern of the Belandingan village because it seems that in certain parts there are changes that threaten the existing typology.

The village of Belandingan estimated existed since of ancient Bali era, before the arrival of Mpu Kuturan (The Famous Priest). The forms of houses in those days in the form of simple houses called *kubu* can still be found today. Settlement patterns are divided into housing blocks based on line of patrilineal (*dadya*). Some blocks of houses seem to have twin god's shrine. Village spatial patterns resemble linear patterns where the main road of the village extends from the north south which is the center of traditional settlements. But the direction of facing the house does not directly face the main road but to the small streets that are in front of the block, then in the block the yard becomes one and there is no building block. The environmental pattern is close to a linear pattern with road trajectories that form spatial patterns that correspond to the transits of the transits location and natural condition. In addition to the main village complex there are also houses that spread in the farm area to form sub-environments.

Belanding village includes 15 villages supporting Mount Batur tourism area based on Destination Management Organization (DMO) [5]. 15 villages are among others:

- Batur utara village
- Batur Selatan village
- Batur Tengah village
- Pinggan village
- Kintamani village
- Songan A village
- Songan B village

- Abang Songan village
- Abang Batudinding village
- Buahan village
- Trunyan village
- Suter village
- Sukawana village
- Belandingan village
- Kedisian village

Mount Batur itself was declared as the world geopark by UNESCO on September 22, 2013 so that Mount Batur became the first world Geopark in Indonesia. This status makes the people of Belandingan Village want to organize their area into a tourist village. In structuring it into a tourist village, the uniqueness of the spatial pattern of village, social culture, and architecture must be protected. The lack of data on the village as a reference in structuring as a tourist village is a major concern. This is urgent to be done so that the community has complete documentation and we are not late as happened in Sukawana Village which has lost its traditional houses.

## II. LITERATURE REVIEW

7 Villages in Bali are divided into two types, namely Bali Mountains (Bali Aga) and Bali plain villages. Bali Aga Village is mostly located in a mountainous area located in the central part of the island of Bali. The number is less than the Balinese plain village.

Parimin in Ganesha revealed that the main physical characteristics of that Bali Aga mountain village is the wide open space which extends (linearly) from north to south (kaja-kelod), with divides the village into two parts [5]. In diametric position, namely at the north end (kaja) located Pura Puseh (Temple for Lord Wisnu), in the centre located Bale Agung temple (a place of worship for Lord Brahma), and in the south (kelod) located Dalem temple (a place of worship for Lord Siwa). Public facilities or infrastructure are in the middle of the village and residents' lot are on the left and right sides of the village main road. Indicate the characteristics of the village environmental space arrangement in the Bali Aga Mountains generally.

Traditional settlement patterns regionally Bali has universal values that distinguish sacred and profane areas, and in physical form there is an upstream (luan) and downstream (teben) area. Besides the existence of universal values, local values and geographic influences also give their own color to their settlement patterns, as seen in the patterns of Bugbug, Tenganan, Pengotan, Trunyan, Julah or other traditional villages [6]. Settlement patterns are shown in Figure 1.

Characteristic of the settlement pattern is Bali where the area is high (mountain, hill) as upstream area (luan), and low area as downstream area (teben). Distinctive patterns of residence from the smallest units to regional scale settlement patterns are exemplified by Bali's natural topographical conditions where rows of hills and mountains that divide Bali

into the South and North parts form the order and orientation of how they live. The order pattern and orientation of traditional settlements is based on the concept of "tri hita karana" which places *parhyangan*, *pawongan*, and *palemahan* in a harmonious and harmonious manner in its settlement pattern.

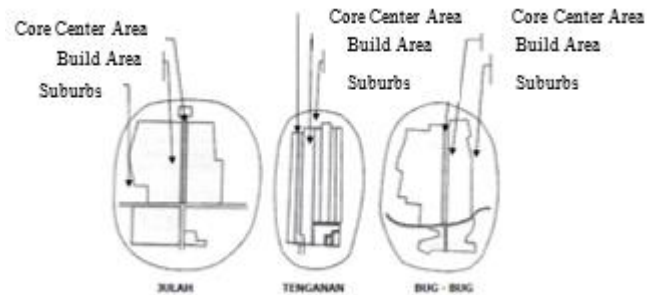


Fig. 1. Morphology of Bali traditional housing.

Understanding Balinese traditional culture is a manifestation of the regulation of people's behaviour based on Hinduism with 3 (three) basic framework elements, that is Tatwa or philosophy, *Susila* or ethics and Upacara or ritual. Whereas according to Meganada in Dwijendra, explained that Balinese culture cannot be separated from Hindu Values that have 3 (three) framework elements (*tatwa*, *susila* and upacara) for his people to achieve goal (Dharma), that is "Moksartham Jagadhita Ya Ca Iti Dharma" [7].

In everyday life for habituation related to *tatwa*, *susila* and *upacara* are more directed towards the realization of achieving human harmonist relations (*bhuana Alit*) with God (*bhuana agung*), giving birth to several concepts in creating harmonious relationships. These concepts include:

### A. Concept of 8 Tri Hita Karana

9 *Tri Hita Karana* come from words Tri means three, *Hita* means happiness and *Karana* means cause. So *Tri Hita Karana* can be interpreted as three causes of happiness. The parts of *Tri Hita Karana* consist of *Parhyangan*, *Pawongan* and *Palemahan*. Or in other terms can be said as *Atma* (living substance or soul / spirit), *Prana* (energy) and *Angga* (body. Physical), *Bhuana agung* (a vast universe cannot be described by humans) and *bhuana alit*, but both have the same elements, namely *Tri Hita Karana*, therefore humans are made a reflection. The conception of *Tri Hita Karana* underlies the formation of the cosmos from the most macro (great *bhuana / universe*) to the most micro (*bhuana alit / human*). The division of *Tri Hita Karana* can be seen in the table below.

TABLE I. TRI HITA KARANA IN COSMOS HIERARCHY

Arrangement of Elements	Spirit /Atma	Energy /Prana	Physical /Angga
Universe (Buana Agung)	Paramaat man (God)	that moves nature	Five element of Panca Maha Buta
Village	Kahyangan Tiga (village Temple)	Pawongan (villagers)	Palemahan (village area)
Banjar	Parhyangan (Banjar Temple)	Pawongan (banjar member)	Palemahan (banjar area)
House	Shrine (pemerajan)	All family member	Home yard
Humans (Buana Alit)	Atman (Human spirit)	Prana (energy of sabda bayu idep)	human body

B. Tri Mandala Concept

Tri Hita Karana which regulates the balance or harmony of humans with their environment, arranged in a composition of bodies / angga, has a derivative concept called Tri Angga. Tri Angga's word comes from the word Tri, which means 3 and Angga which means body, which emphasizes three physical values, namely Utama, Madya and Nista. In the universe or the bhuana agung, this division is called Tri Loka, namely Bhur Loka (earth), Bhuah Loka (space) and Swah Loka (Heaven). The three values are based vertically, where the utama value at the top / sacred position, madya in the middle and nista in the lowest position.

Tri Angga's conception applies from the macro (universe / bhuana agung) to the most micro (human / bhuana alit). On the scale of the mountain region has an utama value, the plains are madya and the sea is nista. Tri Angga can be seen in the table below.

TABLE II. TRI ANGGA IN COSMOS HIERARCHY

Composition/ Element	Utama Angga Sacral	Madya Angga Neutral	Nista Angga dirty
Universe	Swah Loka	Bwah Loka	Bhur Loka
Area	Mountain	Plain	Sea
Settlement/ Village	Kahyangan Tiga	Settlement	Cemetery
Resident	Shrine	Tegak Umah	Back Yard
House	Roof	Column/wall	Floor/foundation
Human	Head	Body	Feet
Phase/time	Future (watamana)	Present (nagata)	Past (Atita)

Tri Angga, which gives directives for value management vertically (horizontally called Tri Mandala), also has an upstream-Teben value system, which is a guideline for values in achieving the alignment goal between the bhuana agung and bhuana alit. Hulu - Teben has an orientation including: Based on the axis of the earth, namely the direction of kaja - kelod (mountain and sea) Direction of high - low (tegeh and lebah).

Based on the axis of the East - West sun (direction of sunrise and sunset)

Hierarchy of values based on the earth axis (kaja / gunung - kelod / sea), gives the Utama value in the north (mountain) and nista in the south (sea) direction, while based on the sun axis, the main value in the direction of sunrise and nista in the direction of the sunset. If these two systems are combined, the Sanga Mandala pattern will be formed, which divides space into nine.

The concept of the Sanga Mandala spatial structure is also come from the nine manifestations of God in maintaining the balance of nature towards a harmonious life called the Dewata Nawa Sanga.

Sanga Mandala's spatial conception is a consideration in zoning activities and layout Buildings in the yard of the house, where activities are considered primary, activities located in the main area of Utamaning utama (kaja - kangin), activities that are considered dirty in nistaning nista (kelod - kauh), and activities in the Madya. For more details, the figure below.

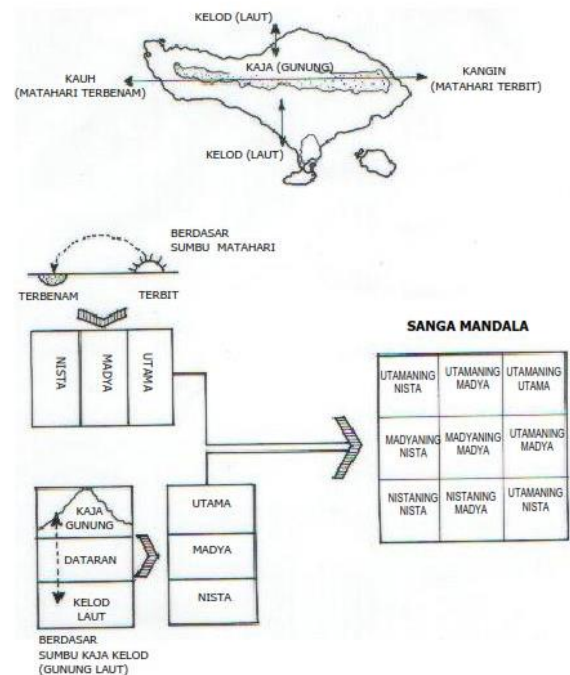


Fig. 2. Space orientation image and Sanga Mandala concept.

In the village scale the concept of Sanga Mandala places sacred activities (Pura Desa) in the utamaning area (kaja / west - kangin / east), the location of Pura Dalem and the cemetery in the nistaning nista (kelod / - kauh) area, and settlements in the Madya area. This concept is usually seen in housing using the Catus Patha concept (crossroad pattern). Whereas Anindya in the village area, the Tri Mandala concept places activities that are sacred in the main area, worldly activities (social, economic and housing) in the middle area, and activities that are considered dirty or contain waste are in the area blasphemous [6].



### III. METHODS

This research is included in non-experimental research because certain actions are not tested to get certain results. The research method used is descriptive qualitative exploratory method. In the process of collecting research data by conducting primary and secondary surveys.

Research begins with observation to the village to get an overview of macro space patterns. Interviews are conducted to community leaders to understand existing values.

Data collection is carried out by taking several floods which are considered to represent the settlement pattern, namely the flood and swift floods. Changes that occur are obtained through interview information as outlined in the village morphology map.

The analysis uses a descriptive comparative method to compare the traditional patterns and changes that occur in the pattern of the village space so that the changes that occur in the main, intermediate and insulting zones occur.

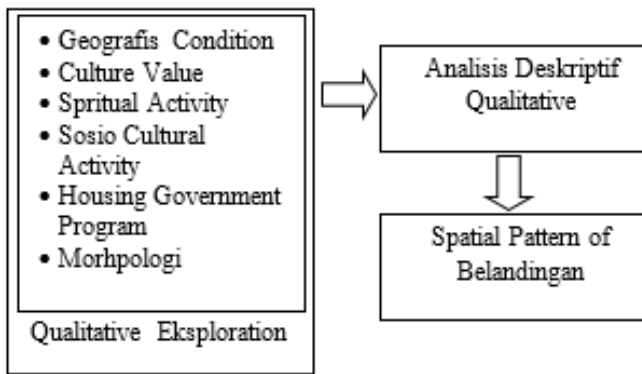


Fig. 3. Logical framework.

### IV. RESULTS AND DISCUSSION

#### A. History of Blandingan Village

Belanding Village is a very unique and secluded village. At first the village of Blandingan was established, this village was led by *Dukuh* named Penunjung Tutar who was placed beside Manik Muncar Temple. In the past, the village of Blandingan consisted of two villages led by the same person, *Dukuh* Penunjung Tutar. It was during the leadership of the Penunjung Tutar that the two villages were named Bala and Tandingan which consisted of 1700 residents from 17 descendants, the social condition of this village was called the *Sepa Satus*.

Geographically the location of the first village is in a residential area that is currently developing and the other is behind the hill or in Puseh Meneng Temple. In the past there were 2 sources of spring water, one in the Manik Muncar and the other in the Sau and then the distribution of the spring was the catastrophe and caused the tension of the two community. Then at that time, the village leader wanted justice for his people so the rule was made that the residents in the settlement area were now required to take water in the area behind the hill, and otherwise, the residents behind the hill were required to

take water in the residential area now. The polemic finally led to the killing of the village head by the people who felt unhappy about the rules made because each village felt they owned each water source. Finally, the number of inhabitants is reduced to 7 people due to the conflict and gradually the development of the population increases due to the migrants from the surrounding villages such as Sukawana village. And now there are 17 people including seven survivors. It is this development of population growth that ultimately led to 2 villages namely Bala and Tandingan villages being one village namely Blandingan village.

Beside the story from the establishment of Belandingan Village there is also a history of the establishment of a temple in the village of Blandingan which is a history of the temple that has a close relationship with the history of the origin of the village of Blandingan. The temples in Blandingan Village are Manik Muncar Temple, Balé Agung Temple, Peneteggan Temple, Batu Gede Temple, Dukuh Temple, Pura Dalem Temple, and Sang Hyang Song Temple. Manik Muncar Temple also has a connection with Tianyar Karangasem Village, while Sang Hyang Song Temple has links with Songan Village.

#### B. Character of Belandingan Village

Administratively, Belandingan Village part of the Kintamani Subdistrict, Bangli Regency, Bali Province. Distance of Belandingan Village from the capital city of Bali, Denpasar is 67 Km. The distance from the Capital of the Regency is 30 Km and the distance from the capital of the district is 5 Km. The boundaries of the Belandingan Village Administration are as follows:

- North: Tembok Village ( Buleleng Regency)
- South: Songan A Village
- East : Songan B Village
- West: Pinggan village and Siakin village

The population of 1116 people with the number of households is 320. The area of Belandingan Village is  $\pm 2,022$  Ha. Belandingan Village is located at an altitude of  $\pm 1250$  m above the surface of the sea with cool weather. Because it is located at an altitude, then looking from the village towards its surroundings to Mount and Lake Batur is very beautiful. The livelihoods of the residents are vegetable farmers, so it is very common to see the views of the vegetable garden on the back of the village hills.

The use of existing land in the village is dominated by forests and vegetable plantations. Only 1% is used as a settlement and is in an area that is relatively more sloping than the surrounding area. The use of existing land in the village is dominated by forests and vegetable plantations. Only 1% is used as a settlement and is in an area that is relatively more sloping than the surrounding area. The amount of land that functions as a forest is due to the steep geographical conditions of the area so that it is difficult to be used as settlement land.

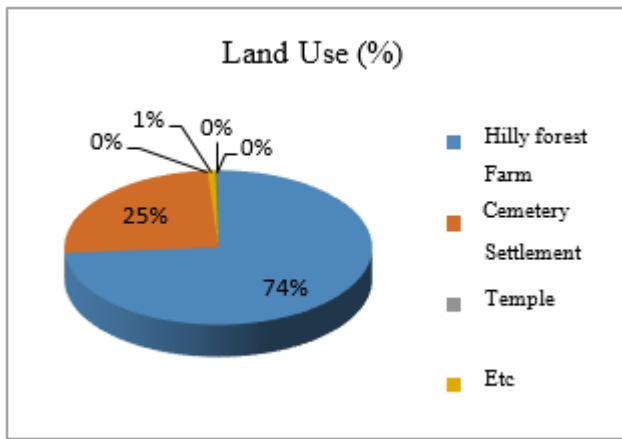


Fig. 4. Land use in Belandingan village.

### C. Traditional Spatial Pattern of Belandingan Village

According to Dwijendra in Ganesha the concept of Balinese space is harmony and religiosity, where religious values are the main thing [7]. By using the *Bhuana Agung* concept (Macrocosm) with *Bhuana Alit* (Microcosm) as an approach in spatial planning which then gives an understanding of the existence of a soul in spatial planning in Bali known as the concept of "Tri Hita Karana". Aside from the fact that there are some more basic concepts that are outlined in the Balinese community space arrangements, 5 of them are:

- The Rwa Bhineda concept provides opposing orientations such as *Luan-Teben* (upstream-downstream), 'Kaja-Kelod' (North-South) and also real Sacred-profane '(Good-Bad)
- The concept of *Tri Angga* provides a vertical orientation of the *Utama-Madya-Nista*
- The concept of *Nawa sanga* gives strength and symbols to structures that illustrate the pattern of structure and attachment between structural components
- The *Tri Mandala* concept provides the horizontal orientation of *Utama-Madya-Nista*
- The concept of dynamics, which is a structure in Balinese culture that deals with space is defined as having a pattern and regularity, also having the nature of being accommodating, flexible and dynamic.

The embodiment of the *Tri Hita Karana* Conception in Belandingan Village includes: *Palemahan* (Village area) which is the entire village area with the facilities and infrastructure in it. *Pawongan* (human) that is the whole of the Desa Adat community. *Parahyangan* (Place of Worship), which is a community worship facility in Belandingan Village. The location of Pura-pura in the village of Belandingan, seems to refer to the hills on the north and east sides of the village. In the hills on the north side of the village there are *Pura Bale Agung*, *Pura Dukuh*, *Pura Manik Muncar* and *Pura Batu Gede*. In the hills on the east side of the village there is the *Puseh Meneng temple*. The distribution of temples, there will be two temple groups, namely the temples located in the high area (hills) as

upstream (Hulu), *Pura Puseh*, *Pura Bale Agung*, *Pura Dukuh*, *Pura Manik Muncar* and *Pura Batu Gede*. While the temples in *teben* are *Pura Dalem*, *Pura Penegtegan* and *Pura Pemagpagan*, but if you look at the function and location of the three temples, it is can be accepted. Dalem Temple which is close to *Setra* (cemetery) occupies a relatively flat location. Likewise, the temples of Penengtegan and pemagpagan relating to their function with agricultural activities occupy a relatively flat location. Another unique thing about the location of *Pura* in Belandingan Village where one of the temples belonging to Belandingan Village is administratively located in Songan Village, but the land area of 100 Ha belongs to Belandingan Village which has been inherited by the village ancestors. Likewise, the Batu Gede Temple is owned by the Belandingan traditional village, but it is located in the border area of Belandingan Village with Pinggan Village.



Fig. 5. Pawongan of Belandingan village.



Fig. 6. Traditional house of Belandingan village.

From the location of the temples, settlements and *setra* (cemetery) can be identified in the *Tri Mandala* Village of Belandingan. The hills on the north and east sides of the village become the main or *utama* zone with the presence of the Temple lined up at the foot of the hill. *Mandala Madya* is characterized by the existence of residential areas, and *mandala nista* are characterized by a *setra* or cemetery.

Belandingan village consists of one official village which is traditionally divided into 12 *banjaran*. The term *banjaran* becomes very unique because it is not a general term. In Bali generally using *tempekan* term. Comparative village communities consist of several family clans (*soroh*) namely *Pangkas*, *Celagi Manis*, *Pasek Gelgel*, *Pasek Kayu Selem*,

Panji, Pasek Tangga, Kemoning and Pande. Belandingan knows no caste.

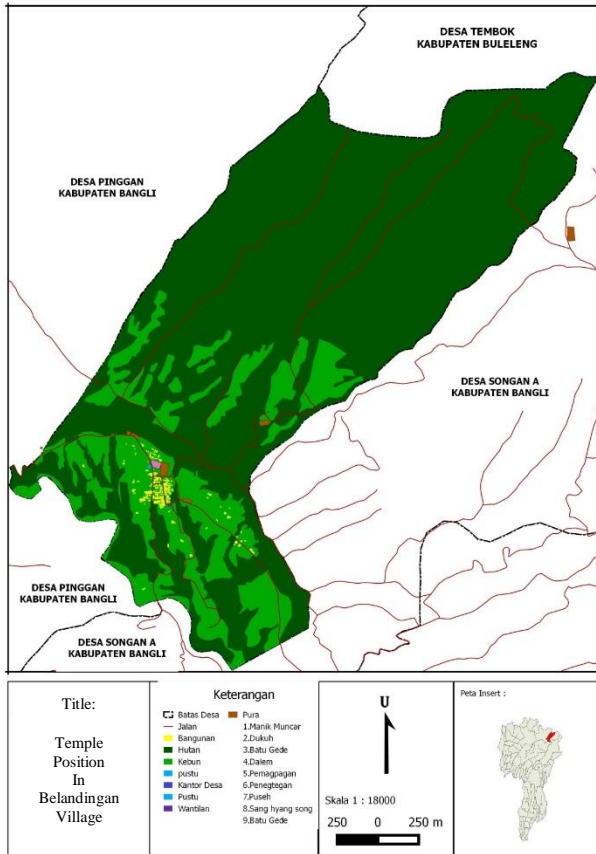


Fig. 7. Temple position in Belandingan village.

Settlements in Belandingan villages with linear patterns follow two main roads and are divided into small blocks based on lineage. There is still evidence of the division of settlement blocks in the form of stone-shaped boundaries embedded in the ground. The main gate goes into the yard not directly from the main road, but through a small alley which is the link.

Traditional buildings in Belandingan Village consist of new building mass that is still maintained and currently there is a mass of additional buildings. In one settlement block there are family shrine and additional pelinggih such as pelinggih *hyang kembar* if you have twins or *hyang manik mas* if there are women who have abortion. The location of the ramp from family / chest is next to the road. It seems that the position next to this road was chosen because of its geographical conditions where the back of the settlement conditions declined. So the position of the march occupies the highest position of the chest settlement block. One traditional building in Belandingan has a complete function for worship, kitchen and sleep. The arrangement of the inner space is usually only at the position of the Kitchen and Bale

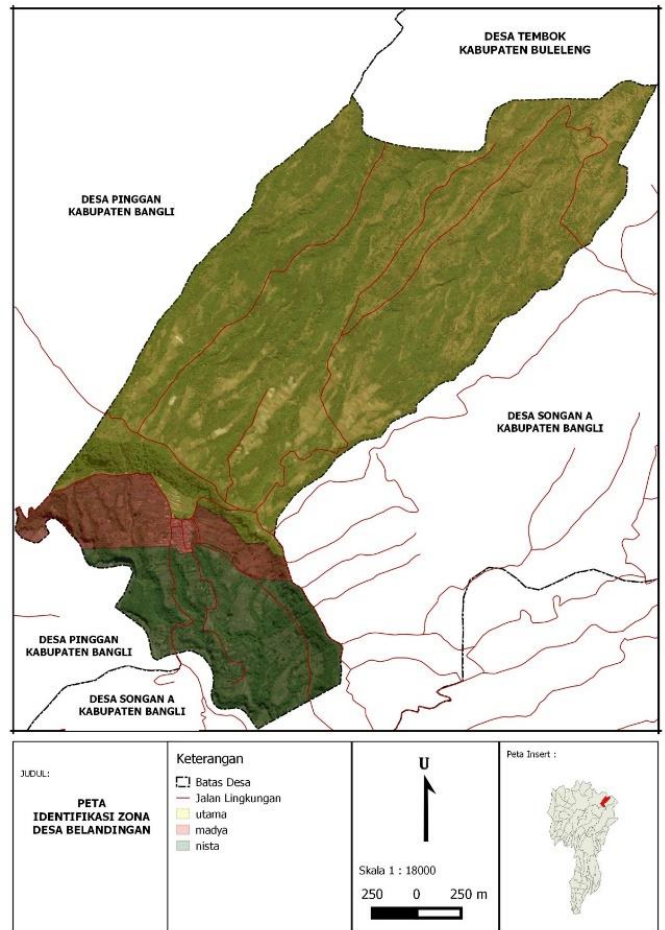


Fig. 8. Distribution of *Tri Mandala* in Belandingan village.

The settlement pattern is divided into 3 groups, namely the first group of the original settlement pattern, the second group is the settlement group in the anyar Banjaran, and the third group is the settlement group in the upland area (farm) called the *Kubu*. The second group of Anyar Banjaran is the settlement of the indigenous people which is divided because of the increase in the population in the Belandingan Village. This settlement uses land owned by Bale Agung Temple (*laba pura*). In the Anyar Banjaran, people do not set up a family temple. They reasoned that the distance that was still close to the old house and the land was very limited so that the policy issued was not to build a family temple, just to build a small shrine. Settlements in the farm are the development of simple houses on the land of vegetable plantations belonging to residents which were once a non-permanent building but now have become permanent buildings.



TABLE III. DISTRIBUTION OF BANJARAN IN BELANDINGAN VILLAGE

No	Name of Banjaran	Clan	Total (K)
1	Kaja Kangin	Tangkas Kori Agung	10
		Celagi Manis (Karangasem)	50
		Pasek Gel-Gel	40
		Pasek Kayu Selem	10
		Panji	5
2	Tegeh	Celagi Manis (Karangasem)	50
		Pasek Tangga (Siakin)	30
		Kemoning (Klungkung)	20
		Pande Taman Bali	25
3	Jero	Pasek Gel-Gel	40
		Pasek Kayu Selem	7
		Tangkas Kori Agung	20
		Panji	5
		Tangga	35
4	Kayu Selem	Pasek Kayu Selem Songan	7
5	Tangkas	Tangkas Kori Agung	20
6	Panji	Panji	5
7	Tengah	Tangga	30
		Celagi Kaja	
8	Celagi Manis	Celagi	20
9	Asah	Kemoning	25
10	Pande	Pande	27
11	Anyar	Campuran	30
12	Pemetelan	Tangga	7

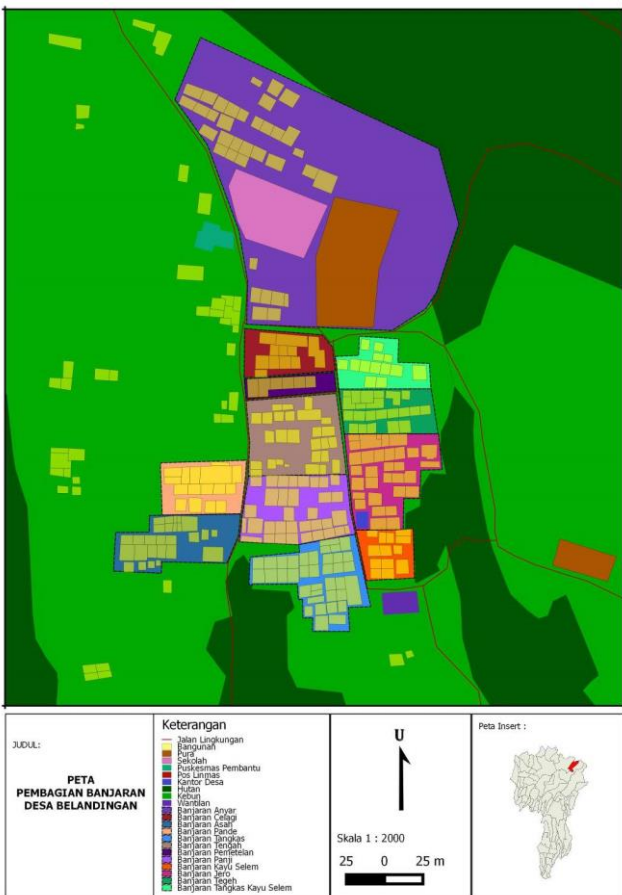


Fig. 9. Distribution of Banjaran in Belandingan village.

D. Changes to the Traditional Space Pattern of Belanding Village

Public facilities available in the community such as Puskesmas, elementary schools, Community Security Po, Wantilan (community building) and the Village Head office all use the land owned by the village and are located in the residential area.

The existence of the help housing program from the Bali Provincial Government from 2013-2017 as many as 27 units and the stimulant assistance of self-help housing in 2017 as many as 80 units from the Ministry of public work have contributed to changing the existing traditional pattern order. These changes tend to be destructive because they do not heed the existing traditional space patterns. The Belandingan traditional system, where the arrangement applies the concept of *rwa bhineda*, concept *Hulu* (upstream) and *teben* (downstream) actually becomes something new that is infiltrated in the concept of traditional houses.

The forms of the aid houses are very different both in terms of their shape, building materials and existing values. There is hope from the Belandingan community itself that if housing assistance is returned, it is hoped that assistance will be returned to traditional houses that are difficult to rebuild due to financial problems.

The existence of one 2-storey building unit owned by one of the residents also needs to be change so as not to further eliminate the traditional characteristics of the Belandingan village. Exemplary of what has happened in Pengotan Village, where there is a clear division between the old settlements and settlements in the farm, which can be applied in the village of Belandingan

The land that is still possible to be developed is in land owned by Sang hyang song temple. But administratively, the area is included in the Songan A. village area.

The main change that occurred in the Belandingan Village was the moved of the settlement center from around Puseh Meneng Temple to the existing Settlement Center. The reason for the moved is unknown as well as the time of its moved. Resettlement from Puseh Meneng Temple to the current settlement center does not necessarily make people move the location of the temple. The people did not dare to move the existing temples, even though the community's distance to the temple became quite far away. The second significant change affecting the pattern of Belanding Village space is the expansion of the settlement area, namely in the Anyar Banjaran, which utilizes the land owned by Bale Agung Temple. Along with the expansion of settlements with the increasing number of inhabitants, the building of strongholds in the fields belonging to the villagers changed from non-permanent buildings to permanent buildings. Regional facilities also increase such as the provision of primary school facilities, supporting healthy public, postal and social security services.

Formerly, the temple did not know the distribution of *mandalas* like the current conditions. *Pelinggih* pura placement is usually higher than the surrounding area as seen in *Puseh* Temple, *Bale Agung* Temple, *Dukuh* Temple, *Puseh* temple or *Sang Hyang Song* Temple. Only *Dalem Pura*, the *Pemapagan*



Temple and the Penengtegan *Pura* are in a fairly gentle position. Pretend that you didn't have a *penyenger* (fence). Around the 1980s, with increasing population and for temples to have clear boundaries, the community decided to make temple arrangements by making temple fence. The making of this fence makes the temple have innards and *madya / jaba* sides.

Changes that occur in the temple area lead to a positive direction where the *mandala* hierarchy of the temple is increasingly visible. However, these changes are not the same in every temple because it adapts to its topographic conditions. The topographic conditions make the temple in Belandingan unique.

TABLE IV. ANALYSIS OF CHANGING PATTERNS IN THE TRI MANDALA ZONE BELANDINGAN VILLAGE

No	Tri Mandala Zone	Special Characteristics	Existing	Analysis
1	Utama Mandala Zona	This <i>parahyangan</i> zone is functioned for <i>parahyangan</i> where the characteristic of this zone is temples and hills (forest)	In its development in this Zone there are already settlements because of the development of new settlements in Banjaran Anyar, which Bale Agung temple land. The land of Pura Bale Agung as a residential area and village facility blends the main zone of this mandala. But it is still tolerable because there are no residential buildings whose position is above the temple.	Not Suitable
2	Madya Mandala Zona	This zone is a manifestation of the <i>pawongan</i> function in Tri Hita Karana as a zone for human relations	ada zona ini sepenuhnya difungsikan sebagai kawasan permukiman . Namun program bedah rumah yang dicanangkan telah merusak tatanan pola permukiman tradisional Desa Belandingan	Suitable
3	Nista Mandala Zona	In this zone as an embodiment of the <i>Palemahan</i> function. A distinctive feature is the existence of <i>Setra</i> (Cemetery)	As in the main zone of the Mandala, in this zone there are also houses that were formerly non-permanent buildings turned into permanent buildings due to insufficient land in the center of the village.	Not Suitable

## V. CONCLUSION

Based on the findings and previous discussions, the conclusions that can be drawn from this study can be described as follows:

- Belandingan village spatial pattern is influenced by the geographical conditions of the area in the mountainous region. This is very evident from the placement of the position of the sacred area both temples and fairly temple.
- Characteristics of traditional pattern of Belandingan Village's macro spatial follows the concept of Tri Hita Karana and Tri Mandala. The pattern of the village settlement space is linear in accordance with the two main axes of the village that connect its settlement blocks through small alleys as access. The concept used in the settlement pattern is the upstream downstream concept. Moved of settlements did not necessarily make the village community also move the temples of the tri kahyangan, namely Puseh Temple towards the present settlement. The people of Desa Belandingan have high obedience in maintaining the existence of the Position from the Pretend. The changes that appear in the pattern of the temple are the creation of 2-3 new mandalas.
- Changes to the pattern of village space are broadly divided into 3 periods, namely the numberless period, namely moved of the settlement center from Puseh Meneng Temple to the current center of the settlement. Period II (1975-2000) is the addition of public and social facilities of the community and the expansion of the settlement area with the formation of new banjaran and Period III is a change caused due to the provision of facilities in the settlement area as well as changes to the traditional settlement patterns<sup>4</sup>. In these changes namely in period III there was a destruction of

traditional patterns caused by assistance from the government, namely the Help Housing program from the Bali Provincial Government and the assistance program for Self-Help Stimulants from the Ministry of Public Works .

## ACKNOWLEDGMENT

This research was supported by Ministry of National Education through Dosen Pemula Grants.<sup>4</sup> We thank our colleagues from LP2M Unhi who provided insight and expertise that greatly assisted the research, although they may not agree with all of the interpretations of this paper. We thank to all people in Belandingan Village who have helped during the research. Also to our students who have helped in the data collection process.

## REFERENCES

- [1] I.W. Runa, *Arsitektur Publik Bali Kuno dan Sistem Spasial Desa Pegunungan*. Bali: Udayana University Press, 2018.
- [2] N.K. Setiada, "Desa Adat Legian Ditinjau Dari Pola Desa Tradisional Bali," *Jurnal Permukiman Natah*, vol. 1, no. 2 Juni, p. 59, 2003.
- [3] I.K. Alit, "Morfologi Pola Mukiman Adati Bali," *Jurnal Permukiman Natah*, vol. 2, no. 2 Agustus, p. 56, 2004.
- [4] N.K. Agusintadewi, "Pola Spasial Permukiman Tradisional Bali Aga di Desa Sekardadi, Kintamani," *Jurnal Ruas*, vol. 14, no. 2, p. 48, 2016.
- [5] I.G.M. Sukariyanto, *Partisipasi Masyarakat Lokal dalam Pengembangan Desa Belandingan Sebagai Desa Wisata di Kabupaten Bangli*. Bali: Sekolah Tinggi Pariwisata Nusa Dua Bali Kementerian Pariwisata, 2015, p. 24.
- [6] W. Ganesha and D.K.W. Antariksa, "Planning for Urban Regional and Environment," vol. 1, no. 1 December, p. 129, 2012.
- [7] A. Dwijendra, *Jurnal Permukiman "NATAH"*, vol. 1, no. 1-Februari, p. 20, 2003.



## ● 8% Overall Similarity

Top sources found in the following databases:

- 8% Publications database
- Crossref database
- Crossref Posted Content database
- 0% Submitted Works database

### TOP SOURCES

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1	Ni G.A Diah Ambarwati Kardinal, I Komang Gede Santhyasa. "PERUBA...	3%
	Crossref	
2	Ni Made Yudiantini. "Traditional Concept Toward The Sustainable Built ...	2%
	Crossref	
3	HERY LEO SIANTURI. "Proceeding ICEST Labuan Bajo 2018", Open Sci...	<1%
	Publication	
4	M N Indriani, M A Widyatmika, I A P S Mahapatni, A A A C Wardani. " Th...	<1%
	Crossref	
5	Abdurahman. "Reflection Leadership Learning in Classic Stories as the...	<1%
	Publication	
6	A.A. Gde Oka Putra, I Ketut Widnyana, Nyoman Utari Vipriyanti. "IMPAC...	<1%
	Crossref	
7	A A G Raka, I W Runa. "Changes in Rural Settlement to Improve Ancient...	<1%
	Crossref	
8	N P S R Dewi, P B Adnyana, D M Citrawathi. "The Validity of Tri Hita Kar...	<1%
	Crossref	
9	I Putu Sarjana, I Putu Gelgel, I Wayan Budi Utama. "The Dynamics of Tri...	<1%
	Crossref	

10

Rahmiati Aulia, Diani Apsari, Sri Maharani Budi Haswati, Hana Faza Sur... **<1%**  
Publication