ABSTRACT

The Island of Bali is not only rich in natural conditions and landscapes but also has unique socio-cultural and architectural characteristics. This makes the island of Bali a tourism and research destination, especially the indigenous villages that are called Bali Aga. There are approximately twenty-five villages spread and lies on in the four areas of the Bangli Regency. These Bali Aga villages are unique for implementing the original Balinese traditions. Mostly the Bali Aga villages take place in the fringe of mountains, hilly areas, and along the shores of Lake Batur. The observations on the architecture of the houses found that there are few traditional buildings called sakaroras still extant. This cannot be separated from technological and communication developments that affect people’s lives. The study aims to explore the existence of the indigenous villages in the Bangli Regency, mainly to document the architecture of traditional houses that still exist. Observations were carried out to obtain primary data regarding the architectural conditions of the sakaroras. Interviews were conducted with the village leader to get information about the history, the village’s needs, and the sakaroras house condition. This study found that most sakaroras houses have been turned into a modern house style. This research implies that it is essential to document the existence of the sakaroras place, which tends to change as evidence of cultural heritage and the identity of traditional Balinese architecture. Public awareness to maintain cultural heritage needs to be encouraged through programs to foster the importance of preserving traditional houses.

**Keywords:** Bali Aga Villages, Sakaroras Houses, Balinese Architecture, Cultural Heritage

INTRODUCTION

Bali Province is one of the tourist destinations in Indonesia, has a natural landscape, unique customs and culture, and its traditional Balinese architecture. One of the uniqueness is the existence of the original culture and tradition of the
indigenous villages or the Bali Aga. The other town, called Bali Apanaga, has influences from the Majapahit’s culture. The Bali Aga villages are located in the highland, while the Bali Apanaga extent is in mainland areas. Reuter (2002) called the Bali Aga the Balinese mountain, which relates to the word ‘aga’ that means mountain [1]. It is believed that the phrase ‘aga’ derives from the Javanese Language' argan, which means mountain, so Bali Aga is called the mountain Balinese’ [2]. Other scholars, Covarrubias (1974), also stated that the meaning of Bali Aga means 'highlands of Bali', the 'original' for Bali Mula, and the ‘ancient Bali’ for Bali Kuna [3]. For this research, the focus study is the Bali Aga village that the original or customary town still adopts and implements their authentic tradition from generation to generation.

Bali Aga villages are spread over seven regencies in Bali Province, including in Karangasem Regency (12 villages), Buleleng Regency (14 villages), Bangli Regency (25 villages), Gianyar Regency (3 villages), Klungkung Regency (2 villages), Badung Regency (2 villages), and Tabanan Regency (3 villages) [4]. Bangli Regency has most Bali Aga villages. There are 25 villages located in four sub-districts, the sub-district of Kintamani, Bangli, Susut, and Tembuku (Figure 1).

The Bali Aga villages are unique in socio-cultural, traditions, natural landscape, and architecture. The differentiation between the Bali Aga village from other towns in Bali is that the Bali Aga village still carries out the original traditions that have been passed down from generation to generation until now, where this tradition is not influenced by the Majapahit culture [1]. However, over time and rapid technological developments affect people’s lives, including the changes in the architecture, where the traditional sakaroras houses in several villages in Bangli Regency have been replaced with modern houses style today.
maintain customs and architecture. This document considers the influence of technological advances and the significant influence of globalization on the preservation of traditional Balinese architecture. Maintaining the conventional Balinese architecture in the local area of Bali Aga villages is the goal of Nusantara architecture as an architectural diversity in Indonesia.

**THEORY / RESEARCH METHODS**

The study approach in this research is descriptive exploratory. This study extracts information, then describes descriptively and depicts the situation regarding the existence of Bali Aga villages in Bangli Regency. This study examines the architecture of the *sakaroras* houses and their changes. This qualitative research involves data collection through observations in Bali Aga villages in Bangli Regency as a primary source. Interviews with village leaders such as the village head (*bend*). and the community leaders (*Relihan adat*) were conducted to find out aspects of village history, traditions, and customs that are still being carried out in the village, as well as to obtain information about the pattern of village spatial arrangements that are still being maintained, especially the *sakaroras* houses. The secondary data was conducted through a deepening literature review to understand the characteristic of Bali Aga villages that determines the town's existing potential in terms of history, geography, customs, and conventional and government system. Literature studies are sourced from institutions, the Internet, and previous research.

The research uses various techniques to extract and analyze data according to the problem formulation [5]. This research uses the case study method to obtain a comprehensive study that focuses on the studied object [6]. This method also allows researchers to explore the physical factors of the thing being studied and non-physical factors, including community behaviour [7]. The object of the case study is the existing Bali Aga villages where the Bangli Regency has 25 Bali Aga villages, with the village selection being made randomly to represent the architecture of the *sakaroras* house. The qualitative descriptive data analysis was used to elaborate qualitative data from observations and interviews regarding the spatial pattern of the *sakaroras* places. Data analysis was also used to embellish the changes in the spatial design of the houses being studied. Mappings and sketches were also used to help understand the spatial patterns of residential dwellings in Bali Aga villages in the Bangli Regency. This study recommends the findings obtained from observations to preserve the architectural wealth owned in Bali Aga villages in Bangli Regency so that they do not become extinct, considering that traditional architecture is a cultural heritage with its philosophy and uniqueness. This is a form of architectural conservation before everything is replaced with a modern meaningless one.
RESULTS AND DISCUSSION

1. Classification of outline figures

1. The Bangli Regency overview
Among regencies in Bali Province, the only Bangli Regency does not have ashore. Bangli Regency location is in the centre of Bali Province, with longitude and latitude between 115° 13' 48" to 115° 27' 24" East Longitude and 8° 8' 30" to 8° 31' 87" South Latitude. The total area of the Bangli Regency is 52,081 Ha or 9.25% of the Bali Province area (563,666 Ha). Bangli Regency has four sub-districts and 72 villages/kelurahan, with an area of each sub-district, namely Kintamani District (366.92 km²), Bangli District (56.3 km²), Susut District (49.3 km²) and Tembuku District (48.3 km²) [8]. The boundaries of the Bangli Regency are as follows: Buleleng Regency in the Northside, Karangasem Regency in the East part, Klungkung Regency in the South, Gianyar Regency, and Badung Regency are both on the Westside. Geographically, the Southern part of the Bangli Regency is lowland, and the Northern region is mountainous. The highest peak is Puncak Penulisan with Batur Mountain and its crater, namely Lake Batur (1,067.50 Ha).

Bangli Regency has a reasonably high rainfall because it is a highland, affecting climatic conditions and air currents. The population of the Bangli Regency in 2018 was calculated at 226.2 thousand people with a population density of 747 people/km². The largest population is in Kintamani District, amounting to 94.85 thousand people or 41.93% of the entire population of the Bangli Regency [8].

2. The Bali Aga characteristics and its socio-cultural

The Bali Aga villages have their uniqueness in socio-cultural, customary governance and architecture. Dwijendra (2009) in his book of Arsitektur dan Kebudayaan Bali Kuno describes the characteristics of the Bali Aga [9]. He states that most of the house of Bali Aga consists of twelve (12) pillars called campus roars or sakaroras. The houses pose linear patterns in the settlement and create a natch plaza in the middle. The watch has a function for circulation area and place to carry out the religious ceremonies. Most of the customary governance of the Bali Aga village adopts the ulu pad or Hulu Ampad system, which means 'push to the up'. The cremation or given ceremony is conducted by burying the corpse or called by tanem. Some villages have mass cremations that celebrate every four or five years and are held by the clan community or dadia. The Bali Aga people do not use caste in their name. However, they adopt the nyineb Wangsa means hiding their caste. The people occupation primarily as farmers and fishers. Another uniqueness is the implementation of a mass wedding in several villages. This mass wedding is the second ceremony of their marriage, held in the village temple (Pura Desa). The ngusaba desa is the annual village festival that celebrates prosperity and fertility that the Creator has bestowed upon the village.

Of the seven regencies with Bali Aga villages, it is recorded that Bangli Regency has the most Bali Aga villages spread across its four sub-districts, 25 Bali Aga villages spread in each district. Kintamani District consists of 19 Bali Aga
villages, namely: Bayung Gede, Kedisan, Songan A, Songan B, Trunyan, Buahan, Sekardadi, Abangbatudinding, Suter, Satra, Sukawana, Catur, Belantih, Belandingan, Pinggan, Batur Utara, Batur Selatan, Batur, and Kintamani. Bangli District has 4 villages, there are Pengotan, Kayubiihi, Landih, and Penglipuran. Susut District has one Bali Aga village, namely Pengiangan Village. Tembuku District also has one Bali Aga village, namely Yangapi Village.

From a socio-cultural perspective, Bali Aga villages adhere to Hinduism. The town has three types of temples, namely Kahyangan Tiga, consisting of Balai Agung Temple, Puseh Temple, and Dalem Temple. Another temple is the irrigation temple or Subak Temple, and they consist of some clan temples called Dadia Temple or Kawitan Temple. The villages adopt a linear pattern with the Balai Agung Temple as the village axis, the core and orientation of the town. The ulu apad government system (keduluan system) is a system that respects elders (elders’ system) [2]. Most ulu pad system consists of forty people on the right side and twenty people on the left side when carrying out religious ceremonies. In variety, the villages of Suter and Abangbatudinding, 18 members are called saing nembelas (Kiwa-Tengan or left-right equal in number).

The Biye tanem (burial) is carried out in most Bali Aga villages, such as Belantih Village, Suter Village, Satra Village, and Abangbatudinding Village. In general, the graves in the town (Setra) have three types of tombs, where the baby graves are located upstream; The nobles' graves are located on the northeast side as the primary area, and the commoners' graves are located downstream of the graves. The Trunyan village cemetery is unique with a 'primitive sky burial' [2]. To avoid animal disturbance, the corpses are put down to the ground and protected by triangular bamboo (ancak Saji). This unique burial system is the only one in Bali. What is unique about the Trunyan Village cemetery is the presence of the Taru Menyan tree, which functions as a neutralizer of the surrounding air to avoid the smell of corpses. Generally, graves in Bali are mainly characterized by trees with ecological functions, such as banyan trees, kept trees, kipah trees, and clumping trees.

The nine wangsa (hiding caste) is adopted in all Bali Aga villages, but research finds that in Belantih Village, one clan still uses caste in their name. The caste is the Arya Kuta Waringin in Kayu Padi Hamlet. The village ngusaba ceremony is an expression of gratitude to the ancestors for the prosperity and fertility that is still applied in the villages of Suter and Abangbatudinding. The ngusaba Tegen ceremony presents agricultural products through offerings called tenant at Bale Agung Temple. Mass wedding ceremonies were adopted in Bali Aga villages such as Pengotan Village, Land Village, Suter Village, and Abangbatudinding Village. Mass wedding ceremonies are usually a second marriage to continue the first marriage. The first marriage ceremony is small and straightforward (biokaoonan) held in each groom’s house. The second marriage is called bhakti jauman, held at Pura Bale Agung (Pura Desa).

2.1. The Architecture of the Sakaroras house as cultural heritage and its challenge

The Bali Aga villages adopt a linear pattern (Figure 2). This linear pattern can be found in the villages of Satra, Landih, Sukawana, Belantih, Pinggan, Suter, Trunyan,
Abangbatudinding, Bayung Gede, Kintamani, Kedisan, Sekardadi, and Buahan. One unit housing consists of 5 to 10 traditional houses of sakaroras. The sakaroras have a role as a place to live where people carry out their activities in one building except for work carried out in the fields or gardens located outside the village. The sakaroras has four room functions: a kitchen, bedroom, place of worship (called pelangkiran), and terrace (Empik or trample). The kitchen room as a place to cook daily meals, the bedroom as a place of rest, a holy place as a place of ancestor worship, and Empik or trample to receive guests, socialize, prepare offerings (Banten), and function as a tank for clean water that comes from rainwater.

![Figure 2. Buahan Villages in Bangli Regency](image)

Traditional houses are called the sakaroras, as they can be found in Buahan Village (Figure 3). The sakaroras in Buahan Village consist of the lobang dangin as a place of prayer or a family shrine. The other room is the lobang dauh, that function as the parent's room. The lobang delod serves as a child's bedroom. The patokan is placed between the lobang dangin and the lobang dauh. The ketungan, a ledge, is placed in front of patokan with the function of ketungan as a ladder. The kitchen (punapi) has a fireplace or punapi. Above the punapi, there is a place to store the firewood and the pork. The odds are placed in the centre as the orientation of all the rooms. This opportunity is grounded in direct contact with the floor made of earth. In the sakaroras, the construction system of the bale uses a sunduk construction that creates space under the bale. At the front, there is ambient as a terrace or open space. There is also a tiny link on this terrace that serves as a storage area for agricultural tools.

![Figure 3. The Sakaroras in Buahan Village](image)
The sakaroras house can also be found in Suter Village (Figure 4-7). The sakaroras, commonly known as plank houses, are similar to Satra Village (Figure 8-11) and Land Village. The sakaroras consist of a bed and a kitchen (punapi). Some plank houses do not have kitchens on the sakaroras. This is because the kitchen has been moved to another place. Based on the interviews, there are only five households that still carry out the sakaroras conservation in Suter Village. Most of the other sakaroras have been replaced with modern forms. In the next few years, the uniqueness of this traditional house will become a threat of extinction if it is not preserved. For this reason, public awareness is critical to be grown to maintain and preserve the wealth of the sakaroras that has been inherited. It is essential to keep the traditional house and the traditional house of the sakaroras as the identity of traditional Balinese architecture, especially the BaliAga villages in the Bangli Regency.

Figure 4. The Sakaroras plan in Suter Village

Figure 5. The appearance of Sakaroras in Suter Village

Figure 6. The Sakaroras in Suter Village

Figure 7. The kitchen in Suter Village
The changes of the sakaroras are unavoidable. Several villages no longer have sakaroras buildings from the observations, such as in Suter Village, Belantih Village, Land Village, Kintamani Village, and Abangbatudinding Village. However, the linear village pattern is still visible and maintained about the traditional measurement of sikut Karang called sikut satak, which is still being adopted. The changes that occur in several buildings in Belantih Village are experiencing changes in dimensions to become more prominent. This is because of the need for space. Other changes also occur where the use of new materials dominates the traditional house and no longer maintains the conventional pattern of space. In Belantih Village, the sakaroras place has also changed its spatial arrangement pattern into a modern form, but the linear way in the yard unit is still maintained (Figure 5).
CONCLUSIONS

Traditional Balinese architecture has its uniqueness, especially in the Bali Aga villages spread across the Province of Bali. The Bali Aga villages, which still maintain their original customs and architecture, cannot be separated from the threat of technological and communication developments. This can be seen from several changes in form from traditional houses to modern-style houses. This has happened in several villages in the Bangli Regency, which will be a threat to other villages if there is no effort and awareness to preserve and maintain the wealth they have. For this reason, this documentation is essential. It has implications for knowledge to the broader community to introduce that there are still those who maintain the sakaroras houses in Bali Aga villages as wealth and identity of traditional Balinese architecture. Thus, this research must carry out further research that is more specific in fostering public understanding and awareness of the importance of traditional values passed down from generation to generation. Overall, this is important for conservation purposes and as a source of wealth in traditional Balinese architecture.

ACKNOWLEDGMENTS

This research is a grant from the DIPA PNBP of Udayana University for the Fiscal Year 2020. For this reason, a big thank you goes to LPPM Udayana University, which has organized this research so that it has the opportunity to participate in contributing to documenting the wealth in the fields of architecture and socio-culture as effort conservation of cultural heritage in Bali Province.

REFERENCES

BPS Kabupaten Bangli 2019 Kabupaten Bangli Dalam Angka 2019, Pemerintah KabupatenBangli, Propinsi Bali
Covarrubias M 1974 Island of Bali, Kuala Lumpur: Oxford University Press/Indira
Dinas Pekerjaan Umum Propinsi Bali 1989 Inventarisasi Desa-Desa Tradisional Bali, Pemerintah Propinsi Daerah Tingkat I Bali, Dinas Pekerjaan Umum Propinsi Bali
Doctorate Thesis. Deakin University-Australia
Reuter T A 2002 Custodians of the Sacred Mountains; Culture and Society in the Highlands of Bali, University of Hawai” I Press, Honolulu
Stake R E 1978 The Case Study Method in Social Inquiry, American Educational Research Association, seven no 2 pp 5-8
Yin R K 2009 Case Study Research: Design and Methods, Fourth Edition end, SAGE, LosAngeles

Yudantini N M 2015 Bali Aga Cultural Landscape Challenges: Conserving the Balinese Traditional Landscape for Future Balinese Indigenous Villages (Bali Aga) and Communities,