

Housing Typology of Bali Aga Architecture in Sukawana Village: Developments and Challenge

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Abstract. The Bali Aga is an Indigenous people of Bali scattered in remotes areas such as mountains, hills, along the Batur Lake, and highlands. The Bali Aga people still practices the original tradition and differ from other Balinese people who mostly live in mainland area which differentiated by the reign of Majapahit Kingdom. Bali Aga refused Majapahit's influences, in contrast other Balinese followed the Majapahit rules that known as Bali Apanaga. Bali Aga still conserves original tradition but cannot avoid the increasing of development in technology and communication. Sukawana Village is one of Bali Aga village still conserve the Indigenous culture and tradition that located in highland of Kintamani Regency. The research aims to seek how the people adhere the tradition, norm, and values; and to explore the housing typology in Sukawana Village that faces on influence of development and threaten by globalization. The research primarily involves a qualitative method with includes an extensive literature review regarding the Bali Aga village and its distribution in Bangli Regency. The field research collected data through on-site evaluation and observation in Sukawana Villages in 2017, interviews to village leader and randomly questions to the householders. The research finding is the changing occurred in Sukawana Village such as using of new material and changes of indoor housing pattern.

1 Introduction

There are two types of Balinese people based on the history of Majapahit Kingdom's influences. First type is called Bali Aga, who's the Indigenous Balinese people that called as "the Mountain Balinese" [1] which apply the original tradition without having influence from Majapahit era. Second type is Bali Apanaga [2] who's implement tradition with having influence from Majapahit Kingdom and mostly located in mainland area of Bali. Although both embrace same Hindu Religion, Bali Aga have their own uniqueness of spatial of architecture including village pattern and layout of the housing. They still conserve the tradition however they cannot avoid the increasing of development in technology and communication that affect the way of thinking. This influences impact on the changes of housing lay-out and appearances.

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1.1 Research Aim and Scope

The research aims to explore the housing typology of Bali Aga village, specifically in Sukawana Village that faces on influence of development and threaten by globalization. There many changes have been occurred in Sukawana Village such as the use of new material on the building and changes of lay-out housing pattern. The investigation of housing typology aims to understand traditional housing architecture in the village as an effort for conservation of the heritage. The scope of research focuses on case study of the typology of housing pattern in Sukawana Village, Kintamani Sub-district, Bangli Regency. The research gathers information of traditional housing pattern and its changes from past to present through comparison from previous studies.

1.2 Research Methodology

The research primarily involves a qualitative method with includes an extensive literature review regarding the Bali Aga history, distribution of Bali Aga villages, and its development of traditional architecture including tangible and intangible aspects that influenced by the origin tradition of Bali Aga. The field research collected data through on-site evaluation and observation in Sukawana Villages that focus on village pattern and housing typology and its changes. The interviews to the village leader aimed to obtain fundamental information regarding village history, tradition, and socio-culture condition of the village, tangible and intangible aspects that contribute to the architecture. The research also questioned to the people in the village randomly regarding their housing function traditionally and its changes of building appearances. The questions also aimed to ascertain the consciousness of villagers in conserving and maintaining their traditional norms and values into the housing. The method of on-site evaluation and observation aim to seek how the people adhere tradition, norms, and values, and it also investigate to discover housing pattern and its changes. The observation has been done in 2017. The research found that the changes clearly appear on some house's layout and appearances.

2 Results and Discussions

The research provides information regarding the existence of Bali Aga villages in Bali Province which scattered across Bali Island. There have been studied the distribution of Bali Aga villages mostly in the highlands area. Yudantini (2015) studied that there are sixty two of Bali Aga villages still exist in Bali [3]. These are based on Bali Province inventory in 1988 to 1989 and the fieldwork of Carole Muller in 1980s. Many scholars have been studied about Bali Aga villages such as Krause in 1912 described the beautiful of Bali Island and depicted the people socio-culture life in Bangli Regency; Covarrubias (1974) described Balinese life, caste, organization, traditional villages, ceremonies as well as art and crave; Mead and Bateson (1936-1939) observed Bayung Gede Village which research focus on anthropology. There are many other scholars who contribute in the research of Bali Aga villages in Bali.

Bangli Regency is located in the middle of Bali Island. The only Bangli Regency does not have a beach among nine regencies in Bali Province. Topographically it ranges from 100 – 2,152 metres above sea level, and has an average rainfall around 400 mm per year. The Bangli Regency is bordered by the Buleleng Regency in the north, Karangasem Regency in the east, Klungkung Regency in the south, and Gianyar and Badung regencies in the west. Bangli Regency encompasses approximately 52,081 hectares, or 9.25% of the total area of

Bali Province (563,666 ha). Bangli Regency is divided into four sub-districts and 72 villages. Based on Population Census 2010, the population in Bangli Regency is 215,353 people with 50,840 households and a density of 413 per km² [4]. The people work mainly in agriculture (58.85%), industry (14.77%), trades (10.26%), services (7.13%), and in mining, utility, transportation, finance and construction (8.99%). There are around 25 Bali Aga villages scattered in Bangli Regency that located along Batur Lake, in the foot of Batur Mountain, and some villages located in plain area [5, 6] (see Figure 1).

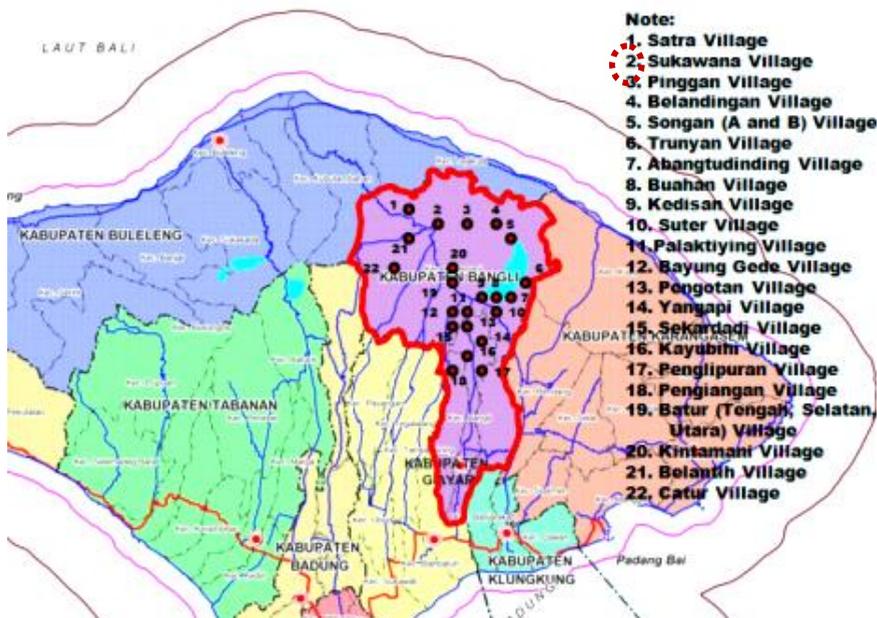


Fig. 1. Mapping of Bali Aga Villages Distribution in Bangli Regency
 Source: Yudiantini, 2015

Sukawana Village located in the hills and has rather steep topography. The village has an area of 3.361 hectare, inhabited by more than 900 householders and mostly as farmers and livestock. Traditionally, Sukawana Village governance is called *ulu apad* system as a main characteristic of government system of Bali Aga. The village pattern adopts a linear pattern; it is tied by village temples (Bale Agung Temple, Puseh Temple and Dalem Temple), settlement and its infrastructure and cemetery.

2.1 Housing Typology of Sukawana Village

It has been observed that the housing pattern in Sukawana Village adopts a linear pattern with one unit housing yard is aligned in rows comprises of six to eight households (Figure 2). Traditionally, one unit house yard consists of traditional building called *sakaroras* and a family temple or *merajan* as household shrine. The *sakaroras* (twelve pillars) comprises of holy room, bed room, traditional kitchen, and family temple. The traditional housing of *sakaroras* has a rectangular form with 12 or 8 or 6 pillars (*saka*) supporting a steep gable roof constructed from five layers of bamboo shingles (*sirap*) with a wall constructed from woven bamboo (*bedeg*) with one door oriented to the centre of yard (*natah*) (Reuter, 2002).

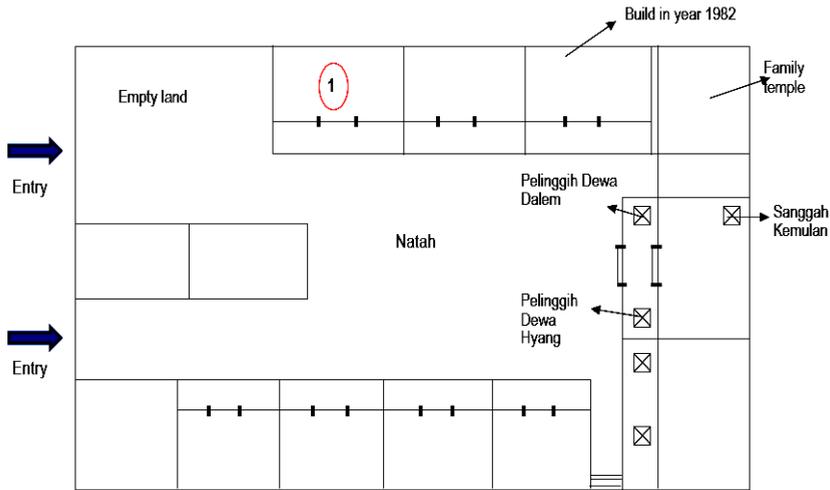
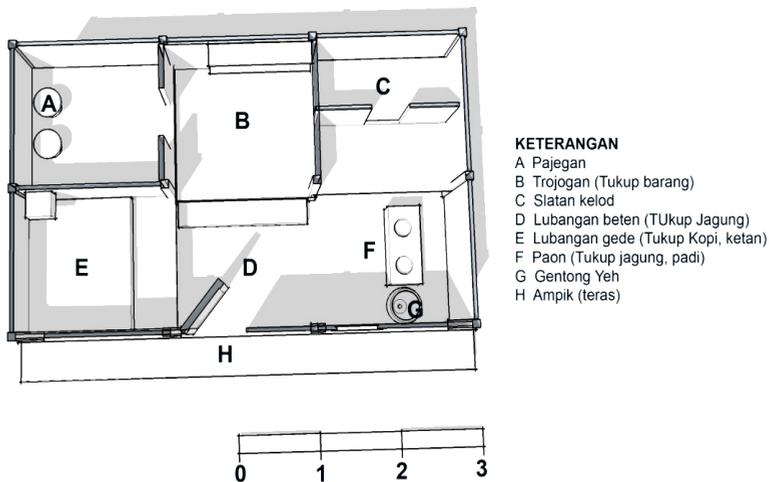


Fig. 2. One unit housing in Sukawana Village

Source: Yudiantini, 2015

The house floor is covered by soil except the entry room, called *geladag/ampik/ampen* that is coated by a wooden slab. Rooms in the *sakaroras* are divided by several functions. There are *trojogan*, *lubangan gede*, *lubangan beten*, traditional kitchen/*paon*, *slatan kaja*, and *slatan kelod*. The *trojogan*, derived from the word *ojog* meaning toward, functions as a children's bed room and as a guest room. The *lubangan gede* is a male bed room, and the family also dines in this room. The *lubangan beten* is part of the traditional kitchen or *paon* and also functions as a food store. The traditional kitchen or *paon* is a place for the daily cooking food for the family and includes a hearth fire and a water jar for cooking and drinking. *Slatan kaja* (*Pajegan*) is a room for giving birth and for the storage of heirlooms. In this room is also an offering platform (*pelangkiran*) to celebrate the ancestors (*Bhatara Guru*, *Bhatara Surya*, and *Sang Hyang Komara*). Finally the *slatan kelod* is a room for keeping jewelry or other worthy goods (Figure 3 and 4).



- KETERANGAN**
- A Pajegan
 - B Trojogan (Tukup barang)
 - C Slatan kelod
 - D Lubangan beten (Tukup Jagung)
 - E Lubangan gede (Tukup Kopi, ketan)
 - F Paon (Tukup jagung, padi)
 - G Gentong Yeh
 - H Ampik (terras)

Fig. 3. Lay out Plan of traditional housing in Sukawana Village

Source: Reuter, 2002



Fig. 4. Traditional housing appearances
Source: Observation, 2017

2.2 Developments and Challenges

The increase of development and technology give impact on increasing villager's economic. It cannot be avoided that the people in the village want to have better appearances on their housing. The observation found some change happening in Sukawana Village. Some villager have been changed the housing layout into simple layout and the use of new material such as concrete, ceramic instead of local material (Figure 5). Other extended their room function to the *ampik* or terrace. This becomes challenge that the people in Sukawana Village want to change traditional or local material to modern or new material to have new and modern appearances. Although the people adopt new style (modern style) in the lay out of the house, the people still conserve and implement a holy room in their houses as a place to worship to the ancestors (Figure 6). In general, the unit housing pattern remain still extant with linear pattern.



Fig. 5. The use of new material in the house, and simple lay-out with no *ampik*/terrace
Source: Observation, 2017

The change cannot be avoided in Sukawana's housing appearances. However, the people still obligate not to change the housing pattern that apply the linear pattern and remain the same dimension of space. This strategy of the people in maintain their traditional value sustain the environment to provide the open space for public activities. This could be adopted this strategy in modern housing pattern through implement the traditional value to conserve and maintain the local genius, and also as local identity of Bali.



Fig. 6. Changes in lay-out and holy room remain
Source: Observation, 2017

3. Conclusion

Traditional housing is unique as a place to live in. Pattern, form, dimension, and material as well as customs become characteristic of Bali Aga culture. Sukawana as one of village of Bali Aga remain conserve their traditions although they face globalisation. As the increase of the people economic and improvement the way of living, the Bali Aga people also cannot avoid the changing. This is becoming the challenges of traditional architecture especially in Indigenous village. It is urgently need awareness of the people to maintain their tradition, norm and value that as a local characteristic and identity that worthy for Balinese traditional architecture.

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