

## **Protecting the Natural Environment and Socio-Cultural Through Tourism Village Design Innovations in Bangli, Bali, Indonesia**

**By**

**Ngakan Ketut Acwin Dwijendra**

Faculty of Engineering, Udayana University, Bali, Indonesia

E-mail: [acwin@unud.ac.id](mailto:acwin@unud.ac.id)

**I Dewa Gede Agung Diasana Putra**

Faculty of Engineering, Udayana University, Bali, Indonesia

E-mail: [diasanaputra@unud.ac.id](mailto:diasanaputra@unud.ac.id)

**I Wayan Parwata**

Faculty of Engineering, Warmadewa University, Denpasar, Bali, Indonesia

E-mail: [iwayanparwata01@gmail.com](mailto:iwayanparwata01@gmail.com)

**I Wayan Wiwin**

Departement of Cultural Tourism, Faculty of Dharma Duta, Univetsitas Hindu Negeri I Gusti Bagus Sugriwa Denpasar, Bali, Indonesia

E-mail: [wiwin@uhnsugriwa.ac.id](mailto:wiwin@uhnsugriwa.ac.id)

**I Ida Bagus Putu Adnyana**

Faculty of Engineering, Udayana University, Bali, Indonesia

E-mail: [bagusadnyana@unud.ac.id](mailto:bagusadnyana@unud.ac.id)

ORCID ID: [0000-0003-0070-4254](https://orcid.org/0000-0003-0070-4254).

### **Abstract**

Development of tourist villages is able to move the economy of rural communities. However, often rural tourism development is not accompanied by the development of structuring and design innovations, innovations in the protection of artefacts and natural resources and technological innovations in tourism systems. The absence of this innovation has led to the development of tourism villages so far not well targeted and unable to develop properly and often has a negative effect on culture and the natural environment, which are both the advantages of a tourist village. Bangli Regency, in the past is a large kingdom in Bali, has a wealth of interesting natural, artificial and cultural resources to be used as tourist attractions such as agricultural land, cultural attractions and past artefacts. However, these villages face challenges in innovating and creating the main components of a tourist destination, such as attractions, accessibility, amenities, supporting facilities and institutions, which can compete with tourism activities in other places. The lack of innovative ways in developing tourism villages that are in accordance with current needs causes the development of tourism villages to have a negative impact. Therefore this research is urgent to study the innovation model of the arrangement and design of a tourism village that is environmentally and culturally friendly, also meets the needs of tourists. The method developed in this study is a tiered method that starts from extracting the potential of the area and developing the innovation of structuring rural tourism; followed by innovation in protecting artefacts and the environment; and technological innovation in the tourism system. Each of these stages develops a system of observation and data collection, testing technological innovation models and field testing of the developed models. At the end of the first year it is planned to conduct component validation in the community so that the reliability of the technology has been integrated. The second year will

demonstrate a prototype of the system in a relevant environment in the form of a design model. In the third year there will be a demonstration of a prototype system in the actual environment in the form of a model applied as a guideline to stakeholders.

**Keywords:** tourism innovation, design creations, tourist villages.

## **Introduction**

The development of tourism villages in various regions is able to drive the rural economy, where various conditions and atmosphere and rural life can attract tourists to come and on the other hand can increase the income of the local population. Growing vegetables, picking fruit in the garden, raising animals, painting, crafts, and so on are activities that can be sold to urban communities and foreign tourists. Water sources are converted into bathing pools; the trails are arranged nicely to increase the village treasury many times over. The historical artifacts, kingdoms and ancestors also invited many people to come so that they could grow the economy of the community in the village.

However, often the development of a village as a tourist village is not based on developing innovation so it lacks competitiveness. The weak development of planning and structuring innovations has made cultural and natural potentials contaminated with foreign cultures which have a negative impact on the authenticity and naturalness of tourist attractions. Likewise, the weak development of innovation in the protection of artifacts, the environment and tourists themselves has changed the beauty of the area into a built environment that is rigid and not in harmony with the surrounding environment. Plus, the lack of innovation in the tourism system makes the region less competitive. The absence of the development of innovative tourism villages has led to the development of tourism villages so far that they are not well targeted and unable to develop properly. The lack of development of this innovation also often has a negative effect on culture and environment, both of which are the advantages of a tourism village. Therefore, the development of an innovative tourism village model is very urgent to do so as not to make the artifacts and environment in the village already polluted and damaged. To be a successful tourism village, the concept of sustainable tourism development consists of (1) Economically Feasible; (2) Environmentally friendly (Environmentally Feasible); (3) Socially Acceptable; (4) applying appropriate technology (Technologically Appropriate), really needs to be developed.

Various researches related to the development of tourism villages have been carried out such as studies by Dwijendra [12] [13] and Putra [37] Tourism activities besides bringing economic benefits have also had negative impacts on culture and the environment [12] [13] [37]. In this case, it is necessary to arrange tourism attractions based on their potential, weaknesses and challenges [12]. The use of cultural artifacts as an attraction is very much needed by developing innovative planning and structuring based on the spirit and phylosopy of local traditions (Putra 2015, 2016). Besides that, exploring local potentials and uniqueness is very much needed in developing innovative protection of artifacts and the environment [37]. This research is still local in nature which only applies at the study location so that development in one village cannot be applied directly. Therefore, to avoid the development of innovative and contextual tourism villages, it is necessary to develop a tourism village model in Bangli.

In this case the development of an innovative tourism village system and model so that it can develop planning and structuring village areas that are friendly to culture and the environment so that cultural and natural potentials are not contaminated by outside cultures

which negatively impact the authenticity and naturalness of tourist attractions. It is also necessary to develop innovation in the protection of artifacts, the environment and civitas that have activities in it so that the beauty of the area becomes an environment built in harmony with the surrounding environment. This study aims to innovate both in planning, designing infrastructure and managing tourism villages that still maintain the philosophy of local traditions and culture without ignoring the current needs of tourists and the community. In this case the innovations applied support the continuous protection and maintenance of the existence of traditions, culture and the natural environment that attracts the tourist village itself. The creation of planning and management of an innovative model of tourism village needs to be developed so that it becomes a guideline for the community and government in utilizing their villages in tourism economic activities. Specifically, the objectives of this study are:

1. Creation of planning innovations and structuring of regional traditional configurations that are in line with current needs while at the same time without leaving the local identity of the region;
2. Development of innovations and creations for the protection of artifacts, the environment and the civitas who are active in them. Civitas safety guarantee is very important in developing competitive tourism villages.

## Literature Review

### *A. Tourism Village Development Model*

Village tourism is a tourism activity in a village that emphasizes and relies on the attractiveness of rural life. A village can be developed as a tourist village as long as the village still has traditions and culture that are still relatively preserved [46] [47]. Zakaria and Suprihardjo further revealed that the development of a tourist village is composed of various factors, especially related to the uniqueness of the region, the existence of community groups that still maintain their culture, as well as active participation from the community.

### *B. Culture as Tourism Potential and Cultural Transformation*

Tradition is classically defined in the 1950s and 1960s as static, with little innovation based on the traditions of the elite in a society. However, at present, tradition is not always a static phenomenon but a gradual transformation process [15]. The interaction of community members with outside cultures and the development of social and cultural movements influence the character of family life, social structure and religious beliefs and practices [20].

The idea of a tradition is very accommodating that can be transformed in a process of transmission between generations. This transmission process refers to ideas from human responses to old traditions with little or no change [38]. Shils states that a tradition transmission focuses on intergenerational interaction which is a "chain" and "bridge" of a communication to transfer traditions within a particular structure of society [38]. In line with this, the transformation can be considered as a change where a thing or condition changes or changes from one state to another [48]. Change is a pattern of transmission or status that is stable to one pattern of behavior and another stable status. There are several types of things that affect the changes, which are as follows.

1. Technology caused by all aspects of life involves technology.
2. Lifestyle with the influence of time and a change in the classification of work, age, and the influence of the status level.
3. Politics is closely related to the policy of the holder of power.

4. Economics sees from the conditions and developments in the field of community business.

A housing is the result of a tradition of constructive practices. This tradition is not something that is fixed, but it can be defined as the inheritance of habits, beliefs and ideas that involve the interaction of people in a community with an outside culture. This interaction is not only inheritance, but also acceptance and recommending which is based on various recipient motivations. The recipient may accept a tradition without analyzing it first, or unconsciously and without thinking first and immediately do it [38]. These things are done and accepted as something that is considered right and good only because previous generations have done before.

On the other hand, some traditions are accepted after learning whether the new traditions are in accordance with certain criteria in a community through an adaptation process. In this process, old traditions may be adjusted so that they can fit new conditions or old traditions are used for new purposes [25]. The process of analysis to accept a new tradition shows that the tradition has changed over time. This change is a connection between "an invented present" and "imagined past" where change becomes an ongoing process of transformation [47] or change is a process of renewal and modification [24].

A tradition is not simply always repeating previous traditions, but it is a process of selectively adopting new things. A new tradition will undergo a process of filtering, adjusting and modifying which is adapted to existing needs [1] [11] [19] [29] [31] [33] [44]. The interaction of the population with outside culture influences the process of accepting new traditions in a society [20].

Using the transmission theory of tradition above, the transformation of a housing production and architecture and the traditions within it are exported to understand the ways in which people construct their houses and housing as a physical form of culture, as a response to new conditions and show their identity. This exploration is relevant to research analysis to examine and study how a traditional housing is transformed and how the implementation of the changing traditions of its inhabitants.

## **Research Method**

This type of research is descriptive exploratory, that is research that is to explore and tell or describe a phenomenon in a non-experimental manner. The research begins by conducting preliminary studies and literature studies related to the theory and concepts and relevant research results. The study is the basis for revealing problems and inventorying and exploring the character of traditional villages that have the potential to be developed as tourist villages.

In this second year, more detailed mapping of village infrastructure and traditional houses is important information in selecting a sample of traditional villages for further investigation related to spatial exploration and management as well as design related to the development of the tourism village innovation model by conducting interviews and architectural documentation (such as maps, layouts, views and photos). In this second year the structuring and design model has been developed in the form of a prototype of infrastructure facilities and design.

In the third year, the prototype was then adjusted and tested in a sample village so that it could be used as a platform for evaluating prototypes in the relevant environment. The key component of this research is the development of the use of architectural documentation such as house layouts, pieces, views and photographs. This architectural documentation is not only an additional component, but is used as a way to investigate the original form of the settlement and housing patterns in the data. Layout can not only illustrate the configuration of space, but also spatial stories as well as narratives and memory of residents' activities. Layouts can be used to consolidate memories and to reconstruct spatial stories.

## **Result and Discussion**

### ***General Overview of Tourism Village in Bangli***

As a former large empire and as a Regency, Bangli has traditional villages that have the potential to be developed as tourist villages. The villages have traditional houses, facilities to carry out traditions both agricultural and religious activities that can be developed as attractive resources to be developed as efforts to improve the community's economy. However, along with the development of tourism, the exoticism of traditional villages is not only a matter of pride, but also an object of commodification. This is an interesting phenomenon where on one hand, the community tries to maintain the traditionality of their village area to attract tourists to visit, but, on the other hand, they carry out activities that can damage the environmental components and damage the cultural potential they have. Placing tourism facilities in any place in ways that damage the environment and living creatures such as trees and animals, transforming buildings by eliminating important components such as the wall buffer, *angkul-angkul* and *teleport*. Therefore, the use of traditional rural areas as tourist facilities is a challenge and a pressure for efforts to maintain traditional configurations and systems as an identity.

Bangli has valuable natural and cultural potential and cannot be found anywhere else in Bali. The existence of the Bangli kingdom which has an important role in the history of Bali is inseparable giving a very varied heritage and attracting tourists in this region including the villages in the Bangli region also save the tourism potential that is no less interesting than other regions. The tourists want to see, feel, and enjoy directly the existence of the beauty of the condition of the village, including traditional houses which become a sustainable system for the environment. In addition to nature tours, tourists also enjoy residential areas that are thick with Balinese culture.

Increasing tourist arrivals to villages, making rural communities try to get involved in tourism activities by building tourism facilities both on agricultural land and in their traditional residential areas. However, the development carried out so far tends to be out of the context of development which promotes cultural and environmental sustainability as well as user safety. Changes in the configuration of traditional villages and the increasingly massive development of tourism in the countryside have made traditional arrangements increasingly polluted. Likewise, the existence of a changing traditional Balinese house that tends to be out of context so that obscuring the existing traditional order [37] has faded the advantages of traditional villages. Not to mention the existence of a number of tourism facilities that pay less attention to the safety of users, do not pay attention to the needs of plants and animals that also need a place to live and also the needs of artifacts that can be a tourist attraction. This is a paradox phenomenon in the development of a cultural tourism area. On the one hand, tourists expect authenticity from the region. On the other hand, the village itself was transformed to suit the needs of tourists. Therefore, this research is very urgent to be carried out to investigate the paradox phenomenon of the transformation of



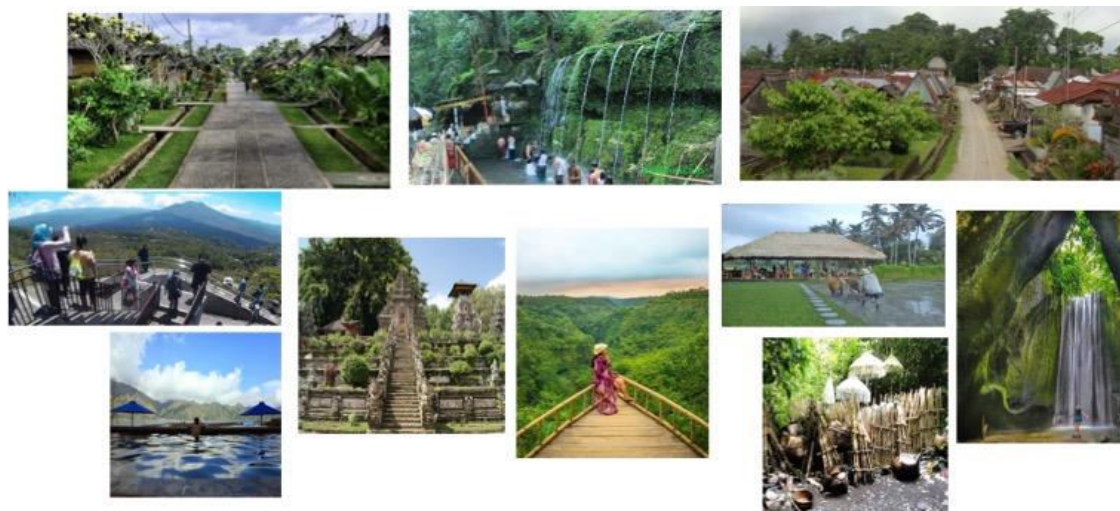
traditional village areas and the exploration of conflicts between regional conservation and tourism demands.

Seeing the paradoxical phenomena that occur in the development of cultural tourism in Bali so far, this research is very important to do especially for the development of planning innovations and design of the master plan as well as infrastructure of tourism villages so as to create a tourism village that pays attention to environmental and cultural sustainability and able to accommodate the current needs of tourists. The results of this study are expected to be used as a basis and reference in creating innovative rural tourism development. These results will be in line with the Udayana University research road map especially in the areas of tourism, economic and social culture.

The target of the output of this research is to develop a prototype and product innovation in the arrangement and design of a tourist village which is a guideline and procedure for arranging and designing a tourist village. This model was created in the form of finding innovative ways to plan and arrange rural tourism infrastructure facilities by taking into account the need to protect the rural environment, existing artifacts and cultural heritage and rural traditions without ignoring the current needs of tourism so that it can be used by the community in organize and design infrastructure in the village that was developed as a tourist village.

***Potential and Issues of Tourism Village Development***

Tourism Village Area in line with population growth and tourism development that is increasingly increasing. The ability of the government and the community to improve the quality of developing village houses as tourist villages is still lacking. Besides that, public knowledge about the minimum standard of livable homes that can and can be used as tourism accommodation is also felt to be lacking. The existence of a number of villas and resorts that were built in the tourist village area still has not touched the local community to participate in experiencing tourism as an effort to improve their standard of living in addition to the agricultural sector and household crafts that have developed at this time. The existence of tourism accommodation that is not built by the local community has encroached the rural periphery area and utilizes productive agricultural land so that it is worried that it will reduce the uniqueness of the area as a productive agricultural area.



**Fig 1.** *Some Potential Tourism Villages in Bangli Regency: Penglipuran Village, Bayung Gede Village, UndisanTembuku Village, Trunyan Village, Guliang Kangin Tourism Village, Kehen Village, Bayung Gede Village, etc.*

Meanwhile, architecturally, it is seen that various types of buildings are made which are very varied, some of which do not refer to the requirements of traditional Balinese architecture, which is the architecture that guides development in the province of Bali, including residential buildings. There are still buildings that refer to building styles that are outside of traditional Balinese architecture so that they are not in harmony with the surrounding environment. Some potential and problems faced by tourism villages in Bangli are very diverse. Some of the potential for the development of tourism villages in Bangli Regency are as follows:

- Having many alternative tours so as to extend the stay time such as: religious and cultural tourism, nature tourism, trekking, cycling, etc.
- It has natural potential that can be further developed such as: outbound tourism, trekking, ecotourism.
- The beautiful, clean and organized condition of the building and environment environment becomes a positive tourism image for the village.
- Well-connected with community-based and sustainable community groups.
- The number of tourist visits continues to increase.
- Special interest tourist market with clear market share/not mass tourism.
- The beautiful, clean and organized condition of the building and environment environment becomes a positive tourism image for the village.
- Potential expansion of market shares through cooperation with other Pokdarwis in the surrounding districts
- Bangli Regency already has a tourism site specifically for foreign tourists (6 languages).
- The tourist accommodation industry is one with residents' homes, which is selling a picture of people's daily lives.
- Having public facilities that can function as a hall for the performing arts industry such as: Paruman Agung Hall.
- Has a decree which has the power of law, etc.

The rapid development of physical development without being accompanied by detailed guidelines and strict monitoring and supervision causes development to be less directed. Some of the problems faced by tourist villages in Bangli Regency are as follows:

- Tourism development is limited to existing spaces and not yet optimal telecommunications network services such as not yet available wifi for tourists, and inadequate cell phone signals.
- Lack of public toilet infrastructure for tourists who have just arrived in the village.
- Lack of markers for tourist village area.
- Conditions Access to tourist accommodation is still not good.
- Need to improve the quality of drainage and road networks.
- Low utilization of social media and not active in promotion through social media.
- Village blogs do not actively promote regional tourism.
- Other supporting industries outside of accommodation and tourism services have not been developed.
- Agro Tourism and Tourism Industry requires better integration, etc.

### ***Analysis of Distribution of Activity Patterns and Direction of Settlement Development in Tourism Villages***

The spread of population activity patterns is reflected in the development of activity activities and the use of space in tourist villages. The pattern of activity of the residents of the area who interact within will fill the spaces of the region through the process of densification

in the traditional housing settlements that already exist, and extensification of new settlements that have been directed or not directed to residential areas.

The development of the region has a close relationship with the development of the Tourism area in Bangli. In addition to activities within the village, tourism villagers do some activities outside the area and vice versa. The closeness of the location between the activity centers, even though different administrative regions within the Bangli tourism area and the surrounding villages, lead to a commuter trend from/to the planning area and the surrounding area and vice versa at random. Theoretically the spatial function will occur from the centers of growth with the pattern:

- Urban fringe development: the development of the area to the periphery of the region
- Development ribbon development along the way
- Leap frog development random development, jumping and sporadic.

Trends in the development of residential and housing areas are based on two main things namely natural trends and directed trends. The natural tendency is a developmental trend due to a meeting point between supply and demand so that the community's need for housing continues to develop (due to population growth and economic development). The availability of land for the speed of development of the change of function of each region varies depending on the following factors:

- Accessibility of the region, which is easy or difficult for a location to reach because of the availability of the road network.
- The value of land that is still affordable and is directly proportional to the accessibility of the region, namely the higher the level of accessibility, the higher the price of land.
- Proximity of the region to centers of economic activity and urban services, such as tourist areas, commercial business areas, office areas and tertiary locations.
- The high and low obligations of the procedure/obligation based on awig-awig or perarem in the Pekraman Village applicable, especially for migrants.

#### ***Analysis of the Linkage between Trade and Service Areas and Tourism Village Areas***

The trade and service area is an area that is expected to be able to bring benefits to its owners and provide added value to an area. Therefore, this area must have very good accessibility to housing locations, especially those that will be used as tourist accommodation and guarantee marketing ease. Analysis of trade activities and services in the planning area, the conditions consist of:

- Village market, which is a retail shopping trading place managed by PD Pasar and Desa Adat with a combination of booths and shops.
- Shop and shop groups with trade and service services.
- Service activities are very widespread and join trade and housing areas, in the form of office services, travel agent salons, and other service businesses.

The tendency of trade and service activities follows the tendency of development of housing and settlement areas, namely:

- Realized in areas that are indeed trade and service zones or trade zones of regional or environmental scale
- The spread of trade and service areas is predominantly in residential areas, especially on the main roads of the region.



- The spread of trade and service areas mixed with housing areas spread throughout the region to meet the needs of the residential environment.

### ***Analysis of the Need to maintain Green Open spaces in the Tourism Village***

Green open space is space within a wider area or region, both in the form of an area/area and in the form of an elongated area/path, where its use is more open and basically without a building. In the green open space, the utilization is more natural in filling green plants or plants as well as in cultivation of plants such as agricultural land, landscaping, plantations and so on.

This green open area also encompasses green open areas in traditional housing such as natah, tel Jose, and teba. These spaces must be able to function ecologically, culturally and support traditional community activities.

In accordance with Law No. 26/2007 on Spatial Planning, aka states that regional spatial planning must provide and use green open space consisting of public green open space and private green open space. In the case of a residential area, the green open space of the Republic is an open space area which is part of the overall green open space of the area in the form of an environmental park and open sports facilities. Meanwhile private green open space is a green area contained in each building lot.

Based on Bangli Regency RTRW directives, the development of green open space in each plot is determined in the form of Green Basic Coefficient (KDH), the amount of which is 15% of the plot area and traditional provisions which have been applied for generations and the requirements and requirements of a traditional Balinese house based on Kosali Kosala.

In this case a residential area must have an open space in the form of a green belt of 15 m<sup>2</sup> per person and various park facilities and playgrounds in accordance with the planned development of lots on each housing development. In this case, according to the average number of family members in a household is 4 people, so the determination of the number of supporting population is the number of lots multiplied by the number of family members in an average family of 4 people.

### ***Analysis of Tourism Village Housing Development***

Residential area is part of the environment outside the protected area that functions as a residential or residential environment and a place of activity that supports life and livelihood. Housing is a group of houses that functions as a residential or residential environment that is equipped with environmental infrastructure and facilities. Balinese traditional settlement is an existing traditional house which is a legacy from generation to generation where people carry out cultural activities and traditions as well as housing. Delineation of residential and residential areas in the RTRW is united in settlement zoning, and settlement support activities such as trade and service activities, office facilities, educational facilities, health facilities, worship facilities which are categorized expressly delineated in separate zoning, but other activities scattered in the form of location points are part of the zoning of residential areas.

Classification of housing as above, needs to be adjusted according to local conditions and RTRW directives, namely: Housing Puri and Balinese Traditional Houses namely traditional housing which is a former castle, some of which are still intact functioning as housing for families of descendants of the castle is a cultural heritage that must be protected. Its existence requires special arrangements so that it needs to develop a special housing zone that has cultural heritage values and within the area of cultural and scientific heritage this has

also been accommodated. Besides that, the existing traditional housing needs to be maintained. Semi Traditional Housing is housing in a residential area that develops from rural housing which originated from traditional Balinese housing with a large plot area with several building units and some parts, especially at the front, have been turned into business activities and some parts have become rental rooms

Residential area is an area that functions as a residential or residential environment and a place of activity that supports life and livelihood. In addition to functioning as a residential or residential environment to develop family life and livelihoods, the settlement is also a place to conduct community activities in a restricted or economic environment [50][51].

Therefore, the Settlement Area as a place of residence and shelter must meet healthy, safe, harmonious and orderly environmental norms. In addition, residential areas must be free from disturbances: noise, dirt, air, odors, and so on. This area must also be able to support the ongoing process of socialization of the cultural values prevailing in the community concerned, and must also be safe and easy to reach service centers and workplaces. In the settlement area other facilities are needed, namely educational facilities, health, worship, shopping, recreation, and others that cannot be separated from the lives of the population.

#### ***Analysis of the Development of Balinese Tradisioanl Houses in the Tourism Village***

A traditional Balinese house based on the teachings of Balinese Hinduism is a house designed to accommodate a variety of basic activities and socio-cultural activities. The first is the basic function of the house related to the occupants' need for security, shelter, as a starting point for traveling and an end point after returning from activities, a place where residents get their autonomous rights as individuals and perform other daily routines [45]. Meanwhile the second function is related to the activities of the residents to maintain a harmonious relationship with God, other living creatures and the environment. These activities are contained in various ritual and supporting activities. Rituals performed in traditional houses are closely related to the implementation of the five yadnya, five holy sacrifices carried out based on the teachings of Balinese Hinduism which are dedicated to God and the gods (god yadnya), offerings and honors to the sulinggih or priests (receipt of yadnya), rituals rituals dedicated to the ancestors (Pitra Yadnya), rituals related to the human life cycle (Manusa Yadnya) and rituals dedicated to other creatures in nature (Butha Yadnya) [14] [23] [27] [ 32]. Meanwhile supporting activities are carried out through traditional dance, music and song performances. All the rituals and supporting activities are carried out in various parts of the house including displaying or sanggah (family temple) (1), kitchen (6), teba (11), natah (7) and pavilion (2, 3, 4, 5, 6) others.

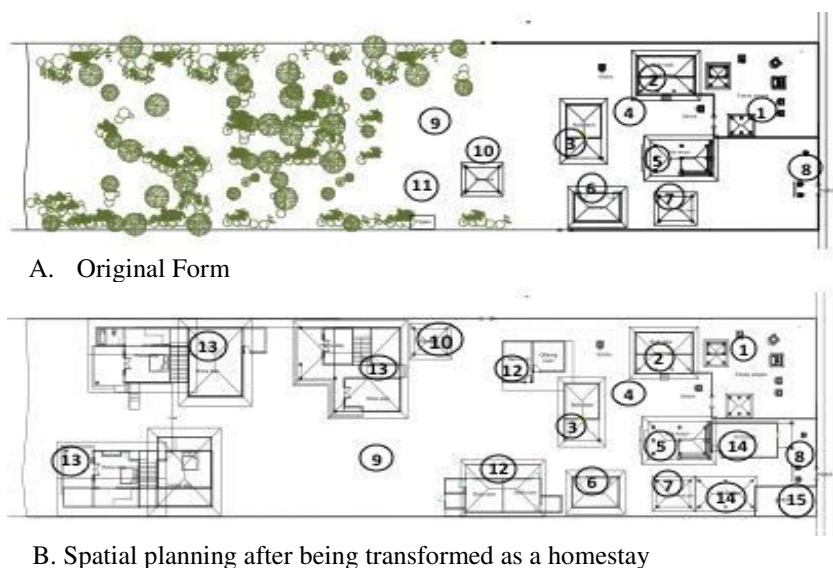
The traditional Balinese house is a compound house imbued with the philosophy of tri hita karana [22] [23] [26] [18] [19]. This philosophy is presented by dividing the house into three parts, namely the head, body and legs. The first is presented from the existence of a place of worship called worship. The second place is a place for carrying out daily activities and social culture which is represented by the existence of several pavilions called bale and natah as courtyard. The last is presented from the backyard (teba). The administration is located in the most sanctified location in the direction of kaja-kangin (northeast of the southern Balinese population) where the occupants carry out various rituals related to offerings to God and ancestors. Natah is the center of home orientation both physically and spiritually. Physically, Natah is the center of orientation for all bale and as a meeting point for the circulation in the house. While spiritually, it is the axis between human nature and nature above and below where various rituals are carried out. Besides natah, the existing pavilions also function as a place to carry out ritual activities such as bale dangin (4) or bale adat (pavilion for the implementation of religious activities), paon (kitchen), bale meten located in the direction of kaja (2), jineng or klumpu (5) for storing rice, and bale dauh (3). In some traditional houses there are also bale delods which are generally used for social and religious activities. Teba as

an inseparable part of a traditional house is a place to raise livestock such as pigs, chickens, ducks, cows and other livestock and plant various types of plants such as coconut, banana, bamboo, various types of flowers, and other plants. All livestock and plants mentioned above are associated with the supply of various materials for the needs of making ceremonial facilities and meeting the daily needs of the inhabitants.

Traditional houses are arranged according to the hierarchy of cultural activities and the daily lives of the residents. Upon entering a traditional house, a person will go through the gates/*angkul-angkul* (8) equipped with *aling-aling* (9) before going through the kitchen and other parts of the house. This circulation is arranged from propan space to the most sacred space (holy place) [16] [49]. Judging from the arrangement of space in a traditional Balinese house, it is seen that the conception of circulation entering the house is based on the belief in the protection and sanctification of the house itself both from its occupants and from outside. The existence of *angkul-angkul* (traditional gate) which is equipped with a facade and wedge apron is a means of initial protection and purification of a house. Various negative influences from outside will be purified and filtered in this section so that the house and its inhabitants will be protected from bad influences [8]. Stepping deeper, one will pass through the kitchen where based on trust is a place for spiritual purification.

This can be seen from the ritual activities of the occupants when they come from the ceremony of the death ceremony. Residents will carry out a simple ritual in front of the kitchen where someone will take some water, then throw it on the roof and then filter it with a steaming device from bamboo matting and wash your face, hair, hands and rinse to purify yourself so as to avoid the negative influences that are carried while following the death ceremony. After carrying out this ritual, residents will enter *Natah* and various existing pavilions. Meanwhile physically, the existence of a kitchen which is always passed first before entering other parts of the house can be directed as a surveillance room for residents, where residents will be able to easily know everyone who enters the house. From the kitchen too, parents will easily oversee the activities of their children who generally play at *Natah*.

In the case of the traditional house being transformed with the addition of the function as a homestay, it is expected that the function of the house as a cultural activity and the implementation of the traditions of the population besides being a place of residence is still ongoing with some adjustments. Some approaches that need to be taken to keep showing the character as a traditional house both physically and philosophically are:



**Fig 2.** Example of a house model used as a tourist village homestay

- Angkul-angkul and straightforward are still maintained, not only physically as a characteristic of a traditional house, but also spiritually as the first neutralization or cleansing for residents entering the house.
- Concentration and teleportation walls are still maintained as a physical characteristic of the existence of traditional houses. The existence of these two components is also a barrier or guardian occupants in it spiritually.
- The position of the kitchen is sought to remain in the position of the kelod kauh in accordance with the traditional Balinese values. By improving the physical condition and adapted to the needs of residents, this kitchen can be used as a place for providing breakfast to tourists in addition to introducing a community life plan where the kitchen has not only the function of providing food for its inhabitants, but also a place for spiritual cleansing.
- Natah where residents can carry out daily activities and activities of the ceremony, the layout and configuration is still maintained. The addition of a large park, leaving only the path of the pedestrian from each bale, is expected not to be carried out because it will reduce the character of the natah itself as a flexible function which will be able to change at any time as needed.
- Bale Daja and Bale Daging as far as possible are not used as a residence for tourists. Both bale is expected to still play an important role for cultural activities and the residence of its inhabitants to avoid building compounds that seem abandoned by the occupants. Bale Daja was developed for the owner's residence and ceremonial activities.
- Development of tourism accommodation is directed by using the bale dauh or bale delod by building additional structures such as bathrooms and lavatory.
- The construction of tourist accommodation is directed towards teba by building various facilities needed while paying attention to the density of the building so that the teba can still function ecologically and culturally where in this place residents occupy a variety of plants for daily needs and ceremonies other than as a place to prepare especially ceremonies related to activities great.

## **Conclusion**

The principles that need to be followed in the planning of rural tourism areas are as follows: Principles of sustainable development and structuring (sustainable urban development); The principle of ecologically sustainable tourism development; The principle of private and community participation (community involvement) and community empowerment.

Basically these principles contain the following directives: Optimal integration with regional development plans, strategies and local structuring plans; Provide a framework for sustainable development (sustainable development); Improve linkage and accessibility between tourism products, zone activities including cultural and domestic activities and non zone activities; Maintain and develop the unique character of the region's identity; Maintaining the landscape and ecological system of the environment; Protection and efficient utilization of ground water sources; Increased employment opportunities to improve the people's economy (income generating) and ownership (ownership); Protection of cultural heritage and historical assets; Improvement of infrastructure and facilities; Reduction of negative impacts on the environment; Provide a basis or instrument for regional and environmental control; Get support and commitment from all community actors; Able to respond to environmental changes; and Provide a basis for developing collaboration.



## Acknowledgments

Thank you for those who have supported this research such as: LPPM Udayana University for the research grants and also thank to the Village Head and all communities and respondents in Bangli, Bali Indonesia.

## References

- I Kadek Pranajaya , Ngakan Ketut Acwin Dwijendra , "The Domination of Cultural and Symbolic Capital in the Preservation of Temple Heritage Architecture through a Restoration Approach in Bali, Indonesia," *Civil Engineering and Architecture*, Vol. 9, No. 6, pp. 1744 - 1753, 2021. DOI: 10.13189/cea.2021.090608.
- I Nyoman Widya Paramadhyaksa, Ngakan Ketut Acwin Dwijendra, "The Complexity of Orientation in Traditional Village Architecture in Bali, Indonesia", *Humanities Diliman, A Philippine Journal of Humanities*, HD Vol. 18 No. 1, January-June 2021.
- Barker, Chris. 2005. *Cultural Studies: Teori dan Praktik* (Terj. Tim Kunci Cultural Studies Centre). Yogyakarta: PT. Bentang Pustaka.
- Brubaker, R & Cooper, F (2000) 'Beyond identity', *Theory and Society*, vol. 29, no. 1, pp. 1-47.
- Siluh Putu Natha Primadewi , Ngakan Putu Sueca , Ngakan Ketut Acwin Dwijendra , Ni Ketut Ayu Siwalatri , "Emerging Architect's Design Method in Designing Tourist Accommodation Case Study: Tourist Accommodation in Ubud, Bali," *Civil Engineering and Architecture*, Vol. 9, No. 2, pp. 271 - 280, 2021. DOI: 10.13189/cea.2021.090201.
- Chaney, David. 1996. *Lifestyles. Sebuah Pengantar Komprehensif* (Terj. Nuraeni). Yogyakarta: Jalasutra.
- Clifford, J (1994) *The predicament of culture: twentieth-century ethnography, literature, and art*, Harvard University Press, Cambridge.
- Covarrubias, M (1974) *Island of Bali*. Kuala Lumpur: Oxford University Press.
- Danesi, Marcel. 2012. *Pesan, Tanda, dan Makna. Buku Teks Dasar Mengenai Semiotika dan Teori Komunikasi*. Yogyakarta: Jalasutra.
- Derek & Japha, V (1991) 'Identity through detail: an architecture and cultural aspiration in Montagu, South Africa, 1850-1915', *TDSR*, vol. II, pp. 17-33.
- Ngakan Made Anom Wiryasa, Ngakan Ketut Acwin Dwijendra, "Socio-Physical Transformation towards Sustainable Urban Morphology through Land Readjustment in Indonesia," *Civil Engineering and Architecture*, Vol. 9, No. 3, pp. 874 - 882, 2021. DOI: 10.13189/cea.2021.090329.
- Ida Bagus Gde Wirawibawa, I Dewa Gede Agung Diasana Putra, Ngakan Ketut Acwin Dwijendra, "Memada-mada: The Power Relation and Architectural Creativity of Gianyar Palace," *Civil Engineering and Architecture*, Vol. 9, No. 3, pp. 949 - 957, 2021. DOI: 10.13189/cea.2021.090336.
- Nuryanto, Ngakan Ketut Acwin Dwijendra, Syamsul Alam Paturusi, I Made Adhika, "Technic and Mystics of Tukang Wangunan in Sundanese Traditional Houses in Indonesia (Case Study: Baduy Tribe Community-Banten)," *Civil Engineering and Architecture*, Vol. 9, No. 2, pp. 533 - 544, 2021. DOI: 10.13189/cea.2021.090226.
- Eiseman Jr, FB (1989) *Sekala and niskala: essays on religious, ritual and art*, vol. I, Periplus Editions, Singapore.



- Eisenstadt, SN 1973, 'Post-traditional societies and the continuity and reconstruction of tradition', *Daedalus*, vol. 102, no. 1, Post-Traditional Societies (Winter, 1973), pp. 1-27, the MIT Press on behalf of American Academy of Arts & Sciences.
- Ferschin, P & Gramelhofer, A (2004) 'Architecture as information space', *Proceedings of the Eighth International Conference on Information Visualisation (IV'04)*.
- Foucault, Michel. 2002. *Power/Knowledge*, Wacana Kuasa/Pengetahuan (Terj. Yudi Santosa). Yogyakarta: Bentang Budaya.
- Ngakan Ketut Acwin Dwijendra (2020). Meru as a Hindu Sacred Building Architecture with a High Roof and Resistant to Earthquakes in Bali, Indonesia. *Civil Engineering and Architecture*, Vol. 8 (3), pp. 350 - 358. DOI: 10.13189/cea.2020.080319. Retrieved from [http://www.hrpub.org/journals/article\\_info.php?aid=9473](http://www.hrpub.org/journals/article_info.php?aid=9473).
- N. K. Acwin Dwijendra. I Putu Gede Suyoga (2020). Analyze of Symbolic Violence Practices in Balinese Vernacular Architecture, Bali Indonesia. *International Journal of Innovation, Creativity and Change*, Vol. 13, Issue 5, 18 June 2020. Retrieved from [https://www.ijicc.net/images/vol\\_13/Iss\\_5/13543\\_Dwijendra\\_2020\\_E\\_R.pdf](https://www.ijicc.net/images/vol_13/Iss_5/13543_Dwijendra_2020_E_R.pdf).
- Gusfield, JR 1967, 'Tradition and modernity: misplaced polarities in the study of social change', *American Journal of Sociology*, vol. 72, no. 4, pp. 351-362.
- Hall, S (1990) 'Cultural identity and diaspora', in J Rutherford (Ed), *Identity, community, culture difference*, Lawrence and Wishart, London, pp. 222-237.
- Hobart, A, Ramseyer, U & Leemann, A (2001) *the people of Bali*. Massachusetts: Blackwell Publishers Ltd.
- Hobart, M (1978) 'The path of soul: the legitimacy of nature in Balinese conceptions of space', in G Milner (ed.), *Natural symbols in South-East Asia*, School of Oriental and African Studies, London, pp. 5—28.
- Hoben, A & Hefner, R (1991) 'The integrative revolution revisited', *World Development*, vol. 19, no. 1, pp. 17-30.
- Hobsbawm, E. (1983) 'Introduction: inventing traditions', in E Hobsbawm & F Ranger, (eds), *The invention of tradition*, Cambridge University Press, Cambridge, pp. 1–14.
- Kagami, H (1988) *Balinese traditional architecture in process*, Inuyama: the Little World Museum of Man.
- Lozanovska, M (2011) 'Holy days after migration', 2nd International Conference on Intangible Culture, Green Lines Instituto, Barcelos, pp. 459-469.
- Manikeni, Storey, John. 2003. *Teori Budaya dan Budaya Pop*. Yogyakarta: Qalam.
- Suyono, Seno Joko. 2002. *Tubuh yang Rasis*. Yogyakarta: Pustaka Pelajar.
- Sztompka, Piotr. 2004. *Sosiologi Perubahan Sosial*. Terjem. Alimandan. Jakarta: Prenada.
- M. V. Yogantari, N. K. A. Dwijendra, Visual Exploration Using Acrylic Paint on Used Fashion Items for Sustainable Use. In: *International Journal of Psychosocial Rehabilitation*, Vol. 24, No. 03, DOI: 10.37200/IJPR/V24I3/PR201902, 2020. Retrieved from <https://www.psychosocial.com/article/PR201902/17516>.
- N. P. S. Nurjani, N. K. A. Dwijendra, How Traditional Balinese Houses Can Adjust and Cater for International Tourist in the Canggu Area, Bali Indonesia? In: *International Journal of Psychosocial Rehabilitation*, Vol. 24, No. 03, DOI: 10.37200/IJPR/V24I3/PR201901, 2020. Retrieved from <https://www.psychosocial.com/article/PR201901/17512>.
- Nordholt, HS (1986) *Bali: colonial conceptions and political change 1700-1940 from shifting hierarchies to 'fixed' order*, Rotterdam: Erasmus.
- O'dea, Thomas F. 1985. *Sosiologi Agama*. Jakarta: CV. Rajawali.
- Picard, M (1996) *Bali: cultural tourism and touristic culture*. Singapore: Archipelago Press.

- Piliang, Yasraf Amir dan Jejen Jaelani. 2018. Teori Budaya Kontemporer: Penjelajahan Tanda dan Makna. Yogyakarta: Aurora.
- Piliang, Yasraf Amir. 2004. Post-Realitas: Realitas Kebudayaan dan Era Post-Poerwadarminta, WJS (1989) Kamus Besar Bahasa Indonesia. Jakarta: Balai Pustaka.
- Proshansky, HM et al. (1983) 'Place identity: physical world socialization of the self', *Journal of Environmental Psychology*, vol. 3, pp. 57-83.
- Putra, IDGADP (2015) 'the impact of tourism on the transformation of the tradisional Balinese house, unpublished PHD thesis, Melbourne: Deakin University Australia.
- Shils, E (1971) 'Tradition', *Comparative Studies in Society and History*, vol. 13, no. 2, Special Issue on Tradition and Modernity, pp. 122-159.
- Ngakan Ketut Acwin Dwijendra. (2020). From Tradition to Modernization in Morphological Process of Indigenous Settlement Patterns in Bali, Indonesia. *International Journal of Advanced Science and Technology*, 29(8s), 172 - 184. Retrieved from <http://sersc.org/journals/index.php/IJAST/article/view/10437>.
- Spradley, J. 2007. Metode Etnografi. Yogyakarta: PT Tiara Wacana.
- Swellengrebel, JL (1984) Introduction, in JL Swellengrebel (Ed), Bali: studies in life, thought, and ritual, Foris Publication Holland, Netherlands, pp. 1-76.
- Thompson, John B. 2003. Kritik Ideologi Global (Terjem. Haqul Yagin). Yogyakarta: IPCiSoD.
- N. K. A. Dwijendra, Identity Struggle Perspective in Car-Shaped Shrine in Paluang Temple, Nusa Penida Bali, Indonesia, *International Journal of Psychosocial Rehabilitation*, Vol. 24, No. 4, DOI: 10.37200/IJPR/V24I4/PR201653, 2020. Retrieved from <https://www.psychosocial.com/article/PR201653/13871>.
- Vickers, A 1989, Bali: a paradise created, Penguin Books Australia Ltd, Ringwood Victoria.
- Wikstrom, T (1995) 'The home and housing modernization', in DN Benjamin, The home: words, interpretations, meaning and environment. Avebury: Aldershot.
- William, R 1983, Culture and society: 1780–1950, Columbia University Press, New York.
- Wood RE (1993) 'Tourism, culture and the sociology of development', in K Hitchcock & Parnwell (Eds), *Tourism in South-East Asia*, Routledge, London, pp. 48-70.
- Zoetmulder, P.J. Kamus Jawa Kuna-Indonesia. Jakarta: PT. Gramedia Pustaka Utama.
- WA Ode Sifatu, Herman Sjahrudin, Yana Fajriah, Ngakan Ketut Acwin Dwijendra, Adi Santoso. Innovative Work Behaviors in Pharmacies of Indonesia: Role of Employee Voice, Generational Diversity Management and Employee Engagement. *SRP*. 2020; 11(2): 725-734. DOI:10.31838/srp.2020.2.105. Retrieved from <http://sysrevpharm.org/?mno=118846>.
- Chen, TC., Rajiman, R., Elveny, M., Dwijendra, NKA., et al. Engineering of Novel Fe-Based Bulk Metallic Glasses Using a Machine Learning-Based Approach. *Arab J Sci Eng* 46, 12417–12425 (2021). <https://doi.org/10.1007/s13369-021-05966-0>,
- Dwijendra NKA, Akhmadeev R, Tumanov D, Kosov M, Shoar S, Banaitis A. Modeling Social Impacts of High-Rise Residential Buildings during the Post-Occupancy Phase Using DEMATEL Method: A Case Study. *Buildings*. 2021; 11(11):504. <https://doi.org/10.3390/buildings11110504>.