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# The Impact of Tourism on Changing Cultural Form (Case Study: Balinese Traditional *Lumbung* Architecture)

*Putu Agung Prianta*[*] *and Anastasia Sulistyawati*

Program Studi Event Management, Politeknik Internasional Bali
Email: agungbali567@gmail.com

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**Abstract**—The rapid development of tourism has challenged the existence of traditional Balinese *lumbung*. Many *lumbungs* have been converted into commercial premises for the needs of the tourist market. This research aims to understand the influence of tourism on architectural changes in traditional Balinese *lumbungs* and to find out the implications of the transformation of traditional Balinese *lumbung* architecture due to the influence of tourism. The study uses a holistic and descriptive analytical approach, with a qualitative methodology involving literature analysis, observation and interviews. The research results show that tourism has changed the architecture of Balinese *lumbungs* from placement and form to materials and function. *Lumbungs* are now often adapted for tourist comfort, using modern materials, and functioning as tourism facilities such as villas and cafes. Sizes and ornaments are adjusted to international standards, as well as the use of modern lighting and ventilation. The transformation of traditional Balinese *lumbung* architecture has influenced cultural values and environmental sustainability. The conversion of *lumbungs* causes loss of historical value and reduces local cultural identity. Commercialization ignores cultural heritage and sustainability, increasing the burden on local resources and waste. Local socio-economic changes occurred as many shifted from agriculture to the service sector, increasing social inequality. However, tourism has strengthened awareness and funding for conservation, and the adaptation of modern facilities has increased the function and relevance of *lumbung/jineng*.

**Keywords:** tourism; *lumbung*; traditional; Bali

## 1. Introduction

Bali, with its deep cultural richness, has long been known as a world tourist destination that attracts millions of visitors every year. Its stunning natural beauty, combined with its unique, rich culture, makes this island a symbol of harmony and diversity. Traditional Balinese architecture, which includes a variety of structures from temples to traditional houses, not only reflects the unique local aesthetic, but also shows a deep attachment to the social values and spiritual beliefs of the community. These structures, built following the principles of *Tri Hita Karana*, which teaches a balanced relationship between humans, nature, and God (Efendi, 2023) provide insight into how Balinese people integrate their spiritual beliefs into every aspect of life. Among these traditional buildings, *lumbung* architecture also plays an important role in the daily life of Balinese people, not only functioning as a place to store harvests but also as an important element in rituals, social life of Balinese people (Smith, 2019) and symbol of sustainability and wisdom in managing natural resources.

Traditional *lumbung* in Bali, often called 'jineng' in Balinese, are structures that reflect the rich cultural and aesthetic values of Balinese society. *Jineng* is part of a traditional building in Bali which is used as a rice storage area (*lumbung*). This building is located precisely in a complex of traditional Balinese houses. There are three variations of *lumbung* in Bali besides *jineng*, namely *kelumpu*, *gelebeg*, and *kelingking* (Mardika, 2016) which are larger in size than *jineng*.

In general, the location of the Balinese *lumbung* is at the back of a residential house. In several places in Bali, *lumbung* is located close to the house entrance before the kitchen (*paon*). In this position, the function

of the *lumbung* is used as a space to receive guests. Remembering that the bale in *lumbung* can also be used as a multifunctional space.

Granaries are more than just utilitarian buildings for storing grain. It is a symbol of prosperity and vitality of Balinese agricultural life. *Lumbung* also play an important role in the spiritual and social life of local communities. Apart from its function as a storage place, *lumbung* is also a symbol of social status and wealth in Balinese society. The size and ornamentation often indicated the status of the owner. Apart from that, *lumbung* is also considered to be the residence of Dewi Sri, the goddess of rice and fertility, who is a very important deity in Balinese Hinduism. Therefore, *lumbung* are not only associated with material wealth but also with spiritual wealth.

The sacredness of traditional *lumbung* is clearly visible in various traditional ceremonies and communal activities. For example, before rice is stored, a ceremony is often held to clean *lumbung* and honor Dewi Sri, who is expected to provide an abundant harvest. *Lumbung* also functions as a focal point in various festivals and ceremonies related to the agricultural cycle, such as the *Ngaben* (cremation ceremony) and *Galungan* ceremonies which celebrate the victory of *dharma* (goodness) over *adharma* (evil).

Architecturally, traditional *lumbung* in Bali have prominent characteristics. Their unique shapes with towering high roofs are often made from natural materials such as reeds and bamboo, reflecting harmony with the natural surroundings and the *Tri Hita Karana* philosophy. This structure usually stands on four or more tall poles to protect the contents of the *lumbung* from ground moisture and invading animals.

However, changing times and economic pressures, especially due to the influence of tourism, have provided new challenges for the existence of traditional Balinese *lumbung*. Many *lumbung* have been converted into residential or commercial use to meet the needs of the tourist market, and this is changing long-standing social and cultural structures. In essence, the tourism industry caused a functional shift in architectural structures, where many *lumbung* were converted into accommodation or tourist attractions.

This transformation reflects the complexity that occurs when modern economic values collide with tradition. On the one hand, tourism has provided new opportunities for income and employment, but on the other hand, it has also driven changes in architectural practices that could erode Bali's unique cultural identity. Traditional architecture, once at one with the natural environment and adhering to cosmological principles, now risks being reduced to a commercially marketable aesthetic. The rapid growth of the tourism sector has the potential to create a conflict between cultural heritage preservation and local economic development (Sørensen et al., 2020).

So far, research related to the impact of tourism on traditional architecture in Bali has concentrated more on economic aspects (Ahimsaputra, 1999) and changes in building function. There is a lack of studies that explore how these changes affect the cultural identity and symbolic value attached to traditional Balinese *lumbung*. In-depth studies regarding the impact of tourism on changes in cultural forms, especially on traditional lumbung architecture, are still limited. Research is needed that integrates sociocultural perspectives to gain a more comprehensive understanding of this phenomenon. Based on this, this research aims to understand the influence of tourism on architectural changes in traditional Balinese *lumbung* and find out the implications of the transformation of traditional Balinese *lumbung* architecture due to the influence of tourism.

## 2. Method

This study adopts a holistic approach, which views an object as an integral and complete entity. In terms of type, this research is analytical descriptive. The research method is a qualitative method. This method emphasizes aspects of a deeper understanding of a problem (Sulistyawati, 2019). Data collection techniques include observation, interviews, literature studies, and internet studies. Observations are carried out systematically on certain social phenomena, with observers playing an important role as information collectors (Adler & Adler, 2009). The research location on the island of Bali, Indonesia, was chosen because of its important role in the national tourism industry and the significant influence that tourism activities have on local social and cultural structures, including changes to traditional architecture such as lumbungs.

Observation involves the systematic recording of conditions that occur in natural settings. Interviews were conducted in an unstructured manner with several people who have *lumbungs* in their homes and architects. Literature studies, which are searches for written data, involve the use of various sources (books, journals, and previous studies). Internet studies via websites and social media. Data collection is entirely related to architecture *lumbung* (Bali), especially in the context of architectural changes and the impact of tourism on socio-cultural transformation. The observation data analysis technique is thematic analysis or narrative analysis, where researchers look for patterns or themes that emerge from observation notes.

Thematic analysis is a technique used to process interview data so that researchers can identify and explore research themes. Library and internet data analysis techniques are carried out through data reduction, data presentation, and drawing conclusions or verification (Susilo, 2010). The results of qualitative data analysis are very useful. Data from observations, interviews, and literature or the internet can provide in-depth insight into the ways in which traditional lumbungs are adapting to or being pushed back by social and economic changes resulting from tourism.

The results of this analysis can be used as criteria or indicators to measure these changes.

## 3. Results and Discussion

In the yard of a traditional Balinese house there are several building units, and one of these buildings is *lumbung*. The existence of *lumbung* is closely related to the livelihood system of most traditional Balinese people, namely as farmers. The form of *lumbung* buildings in Bali has its own characteristics compared to other building units. The forms of *lumbung* are differentiated based on the size of their embodiment and according to their designation. The following are several types of traditional Balinese *lumbung*.

(1) *Kelumpu* is a rice storage building with a rectangular basic shape with four or six saka (pillars). The *kelumpu* roof is a gable roof. Usually rice is stored on the side of the building. However, there are also *kelumpu* which have a door at the top of the building, and to put the rice into the harvest storage room using a ladder. *Kelumpu* walls are made of *gedeg* material, woven bamboo or wooden planks. Building roofs are generally made of thatch or other materials determined by the local climate. *Kelumpu* is often owned by people belonging to the *Brahmin* caste. However, due to the passage of time and developments and changes in livelihoods, *jineng* in the form of *kelumpu* are becoming increasingly rare (Wiriantari & Wijaatmaja, 2019).

(2) *Jineng*, this building has four pillars with a long rectangular plan, uses a gable roof and has an enclosed space from the top of the halls to the roof, functioning as a place to store rice with the entrance at the top. The walls and hallways of the storage room are made from the same material as *kelumpu* such as boards or *gedeg* (woven bamboo). The roofing material usually uses alang-alang or bamboo shingles.

(3) *Gelebeg*, this building has a long rectangular shape with six or eight pillars. All the space from under the roof to the space above the halls functions as a place to store grain so this building does not have open halls that function as seating. The walls of the halls cover up to the roof, usually using boards or bamboo. The door that functions to enter and remove rice is located on one side of the wall, in the same direction as the length of the building on the top front side. In some *gelebeg* buildings, girders are often equipped as floors separating the lower space from the halls to the roof. Usually the rice selected for seedlings is placed in the upper room. The *gelebeg* roof is a high, curved and convex gable roof that functions for air conditioning. Roofing materials generally use thatch. So what matters is the size and simpler shape of the *jineng*.

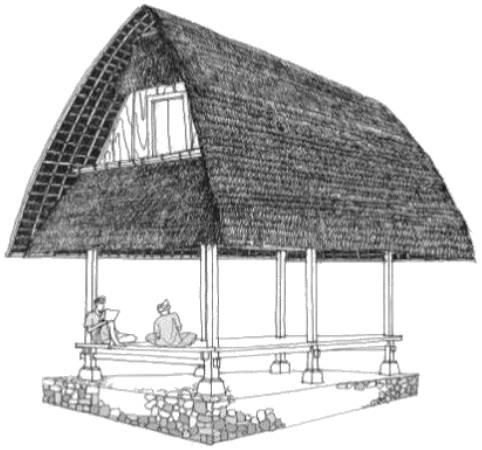

**Figure 1**. Tradisional *Glebeg*
Source: Sulistyawati, 2013

(4) *Kelingking*, this building has a shape and construction structure that is almost like a *jineng*, the only difference lies in its length or area as a doubling of the area of the *jineng* building with an elongated spatial pattern. The shape of the *kelingking* building shows that the social status of the owner is very rich or that the rice fields are very large.

Among the various types of traditional Balinese *lumbung* above that have the same function, *jineng* will be chosen because it is more dominantly used in Balinese society.

### *The Influence of Tourism on Architectural Changes in Traditional Balinese Lumbung*

Elements of the architectural discipline are used to form a comprehensive framework that can be used for analysis of architectural changes in traditional Balinese *lumbung*. In order to get a clear picture of the impact of tourism on architectural changes in traditional Balinese *lumbung*, the condition of traditional *lumbung* and the current (after the influence of tourism) using architectural elements will be compared.

#### *Layout*

(1) Traditional *Lumbung*

The hierarchy of spatial values in Bali is called the *Tri Mandala*. The meaning of *Tri Mandala* comes from the words *Tri* which means three and *Mandala* which means area, so *Tri Mandala* is the division of space into three areas. *Tri Mandala* in the yard of a traditional house in Bali consist of *nista mandala* for the outermost part of the yard, *madya mandala* to define the middle part of the yard space and *main mandala* to describe the innermost part of the yard space which is considered the holiest or most private space in a Balinese house.

The *Tri Mandala* found in the *Sikut Satak* yard in Bali has different uses for sacred buildings of worship or *parahyangan*, residential or residential buildings or

*pawongan* and other buildings to complement or support the life of the Balinese people or *palemahan* (Sulistyawati, 2018).

*Lumbung* is usually located in the nista mandala zone (southwest for southern Bali) of the yard of a traditional Balinese residence, precisely to the east or north of the kitchen (*paon*). This layout concept follows the philosophical values and functional values of the building. Judging from the functional relationship of the *lumbung* with the surrounding buildings, the location of the *lumbung* as a food supply warehouse is very strategic because it is close to the kitchen.


*Information:*
1. *Sanggah Pamarajan*
2. *Bale Dangin*
3. *Bale Delod*
4. *Bale Daja/Meten*
5. *Bale Dauh*
6. *Lumbung/ Jineng*
7. *Paon/* Kitchen
8. *Aling-aling*
9. *Angkul-angkul/* Entrance

**Figure 2**. Layout of a traditional Balinese house
Source: Sulistyawati, 2017

(2) *Lumbung* Changes

The current position of the *lumbung* is no longer based on the *Tri Mandala* , but can be freely adapted to the environment and view that you want to show to tourists so that you get an attractive view and can be used as a photo spot with a good view.

## *Form*

(1) Tradisional *Lumbung*

Traditional Balinese *lumbung* buildings have a long rectangular floor plan. This building is a stilt building, with four pillars, and a curved gable roof. The *jineng* building is a multi-storey building, and is vertically divided into three rooms according to their function.

(2) *Lumbung* Changes

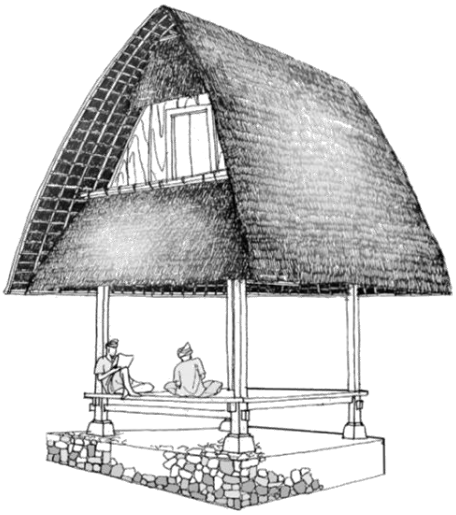

**Figure 3**. Tradisional *Lumbung*/*Jineng*
Source: Sulistyawati, 2013

Almost all forms of traditional *jineng* in Bali have undergone a design transformation due to the times and advances in technology. The plan shape of the *lumbung* is now free to suit the architect's creative abilities and is adapted to its needs as tourism accommodation, such as a villa or cafe.

## *Material*

**Figure 4**. *Lumbung* with concrete and thatched roof
Source:
https://live.staticflickr.com/65535/49358561488_89b01e8889_h.jpg

(1) Tradisional *Lumbung*

Balinese *lumbung* are generally built from natural materials available in the surrounding natural environment. Wood is used for the main structure and support pillars because of its durability and ease of carving. The roof is made of reeds or thatch, which not only provides protection from rain but also helps keep the temperature inside the *lumbung* cool. Bamboo is often used for flooring and other structural elements because of its strength and flexibility.

(2) *Lumbung* Changes

Analysis of the types of materials used in lumbung construction is currently changing greatly, influenced by technological developments. The use of materials that are

sometimes still maintained is thatched roofs, but the use of woven bamboo has been replaced by modern materials, namely concrete and steel. These changes aim to increase the structure's resistance to intensive use associated with tourism activities. Sometimes to get an authentic impression, materials use modern materials that have wood or bamboo motifs such as ceramics and furniture.

### *Construction Structure*

(1) Tradisional *Lumbung*

*Jineng* buildings are made in such a way that structurally they can accommodate as much agricultural produce as possible. Because it has a function as a place to store rice for a period beyond the harvest period (above six months), this building is designed with (a) a storage room in the form of a roof cavity with a ceiling below, which must be large; (b) The halls are open to get enough sunlight and fresh air so that the rice stored above them does not get damp; (c) The place is high (a platform), this is to keep the storage area away from soil moisture and minimize the risk of pest attacks (rats, insects); and (d) The pole construction uses a ledge so that mice cannot easily enter. The structure and construction of the *jineng* building also uses the *Tri Angga* concept, a building structure concept which is divided into three parts vertically consisting of the head (*utama*) - storage space under the roof, the body (*madya*) - the halls, and the foot (*nista*) - flooring / flooring.

(2) *Lumbung* Changes

Many *lumbungs* have undergone renovations where traditional joints were replaced with the use of nails, screws, and other metal fasteners that provide additional strength. New techniques such as prefabrication of external building elements have also been introduced. This allows for faster development and can reduce disruption to the surrounding environment, an important consideration in tourist areas. Improvements to fastening and foundation techniques were also made to ensure that the building could with stand heavier loads and extreme weather conditions, including the use of more advanced anti-seismic technology.

### *Function*

(1) Tradisional Lumbung

The function of the *lumbung* is a place to store agricultural products (rice). The *lumbung* also functions as a community meeting place or as a center for family activities. The bottom of the *lumbung* is used for storage of cooking utensils and ceremonial equipment.

(2) Lumbung Changes

The unique embodiment of *jineng* often becomes an inspiration for architects to create new building forms. New building forms are even commercialized, for example as villas, living rooms, advertising display cases, border monuments, guard posts, and so on.

**Figure 5**. Café with *Lumbung* inspiration
Source: https://i.pinimg.com/736x/f2/bd/94/f2bd94605e05e4928383f17ba400d141.jpg

However, the *lumbung* inspiration is most widely used in designing villas to provide a more interesting experience for tourists.

**Figure 6**. *Lumbung* as a villa
Source: https://assets.mind-rakyat.com/crop/0x0:0x0/x/photo/2021/11/23/1972330490.jpg

### *Size and Scale*

(1) Tradisional *Lumbung*

As is the case with other traditional Balinese building units, to determine the distance between the *lumbung* (*jineng*) the basic calculations found in the *Asta Bumi lontar* are used. Meanwhile, for the size, use *tapak* (measurement of the length of the building owner's soles) and *tampel* (measurement of the width of the building owner's soles). Generally it is built by *undagi* using calculations in accordance with the traditional values and meanings above (Jaya, 2020).

(2) *Lumbung* Changes

The sizes used are based on international standard sizes in meters. The size is also adjusted to the standard hotel rooms according to their level/ restaurant/ exhibition space, so that the scale is enlarged to accommodate the new function. Designed by domestic or foreign architects and carried out by craftsmen under the direction of architects without being bound by magical symbolic

values and meanings, purely to appear unique and attractive in the eyes of tourists.

### *Ornaments and Aesthetics*

(1) Tradisional *Lumbung*

**Figure 7**. The interior of the villa is in the form of a *lumbung*
Source: https://images.tokopedia.net/img/

Ornaments on Balinese *lumbung* often include intricate wood carvings, which can include floral and fauna motifs, as well as spiritual and mythological symbols on the pines and pillars. This aesthetic not only adds visual beauty but also has deep meaning and is often associated with local religious beliefs and spiritual practices. While many lumbung retain the natural color of their materials, some are painted or given a special finish to highlight the carvings. The colors are also usually natural colors so they can blend with the surrounding environment.

(2) *Lumbung* Changes

Traditional ornaments may still be maintained, simplified, or replaced with more modern designs without thinking about the meaning and only looking at aesthetics.

### *Lighting and Ventilation*

(1) Tradisional *Lumbung*

Tradisional *lumbung* designs consider natural lighting and ventilation factors. The open structure and use of thatched roofs allow natural light to enter effectively while facilitating air circulation, which is important for maintaining the condition of the rice.

(2) *Lumbung* Changes

Featuring a play of artificial lighting to expose the beautiful corners of the room, while still relying on natural lighting by widening the door and window openings which are specially designed to follow the impression of the shape of the *lumbung*. All gaps between parts of the construction structure must be tightly closed to avoid artificial temperature leaks due to ventilation using AC, but sometimes natural ventilation is still applied by widening and increasing door and window openings in other parts or creating open areas.

### *Interiors*

(1) Tradisional *Lumbung*

The interior of a lumbung is relatively simple and functional, with a main room for grain storage and perhaps some shelves or compartments for additional storage. This layout is optimized for efficiency and accessibility.

(2) *Lumbung* Changes

The change in function that has occurred means that interiors are now often equipped with modern furniture, attractive decorations, and facilities for visitor comfort, such as air conditioning, good lighting, and WiFi.

**Figure 8**. The interior of the villa is in the form of a *lumbung*
Source: Sulistyawati, 2021

### *Integration with the Environment*

(1) Tradisional *Lumbung*

The *lumbung* was designed to integrate well with the surrounding natural environment, using locally sourced materials and minimizing impact on the landscape. This also reflects the strong attachment between the Balinese people and their land and environment.

(2) *Lumbung* Changes

While some still retain their traditional locations, many have been relocated or rebuilt in more commercial or touristic locations.

### *Cultural and Symbolic Values*

(1) Tradisional *Lumbung*

The *lumbung* in Bali in the upper room has sacred value because it is related to the offering ceremony to *Bhatari Sri*, which is called the sarin taun ceremony, because it is used as the stana of *Dewi Sri* (S*anghyang Sri Manik Galih*), the sacred power of God *Vishnu* (Sulistyawati, 2017). In addition, the shape of the roof resembles a mountain, often interpreted as a symbol of the sacred mountain in Bali, which reaffirms the spiritual connection with nature and the cosmos.

(2) *Lumbung* Changes

Symbolic value is often reduced in favor of new functional adaptations that favor commercial gain and modern aesthetics that appeal to tourists. Dominant becomes a temporary palace for tourists as a place to pamper themselves and does not contain any meaning.

### *Compliance with the Principles of Sustainable Architecture*

(1) Tradisional *Lumbung*

Tradisional *lumbungs* fit perfectly with the principles of sustainable architecture, which emphasizes the use of local materials.

(2) *Lumbung* Changes

Even though there are efforts to maintain sustainable aspects, in fact some renovations and rebuilds use materials that are less environmentally friendly and sustainable.

## ***Implications of the Transformation of Traditional Balinese Lumbung Architecture Due to the Influence of Tourism***

The transformation of traditional Balinese *lumbung* or *jineng* architecture under the influence of tourism is a complex and multi-dimensional phenomenon, influencing various aspects from cultural values to environmental sustainability. Below we will discuss the implications of this transformation.

### *Loss of Cultural and Historical Value*

Traditional Balinese *lumbungs*, originally used as rice storage areas, have important cultural and historical value in Balinese society. These transformations often alter or eliminate the original function of the *lumbung*, which can impact traditional knowledge and cultural practices associated with the agrarian way of life in Bali. This loss can weaken local cultural identity and reduce the *lumbung/jineng* to an aesthetic object without a deep cultural context (Yoeti, 2016).

### *Commercialization and Exploitation*

Increased tourism brings economic opportunities, but often also leads to over-commercialization (Kreag, 2001; Cohen, 1984) of cultural elements, including *jineng*. This transformation can lead to the exploitation of traditional architecture by turning it into restaurants, hotels or tourist attractions that are not always sensitive to the cultural heritage they represent. This not only changed the physical function of the *jineng*, but also the way people viewed the structure.

### *Environmental Impact*

The use of new materials and construction techniques in the renovation or construction of modern *lumbungs* often does not pay attention to sustainability principles. The use of concrete, plastic and metal can have a greater environmental impact compared to traditional materials such as bamboo and wood. Additionally, improving infrastructure to support tourism activities could increase the burden on local resources, such as water and energy, and increase waste production.

### *Changes in the Social Landscape*

The architectural transformation of the *lumbung* also brought about changes in the social structure of the local community. With the development of tourism, many local residents are shifting from agriculture to the service sector, which may offer more stable or higher incomes. This could impact income distribution and increase social inequality, especially if tourism profits are not distributed equally.

### *Increased Awareness and Conservation*

On the positive side, this transformation can also increase awareness of the value of *jineng* if carried out in a way that respects and involves local communities and traditional practices. In some cases, tourism can be a tool for the preservation of traditional architecture by providing the economic resources needed for maintenance and restoration.

### *Adaptation to Modern Needs*

The *lumbung's* transformation is also a reflection of adaptation to modern needs and challenges. The integration of modern amenities such as better insulation, electrical installations and sanitation can improve building function and user comfort, making these traditional structures relevant and useful in a contemporary context.

The implications of the transformation of traditional Balinese *lumbung* architecture demonstrate the complexity of interactions between cultural preservation, environmental sustainability, and economic development. A thoughtful and participatory approach is needed in managing these changes, ensuring that the economic benefits of tourism do not come at the expense of cultural value and long-term sustainability.

## 4. Conclusion

The impact of tourism on architectural changes in *lumbungs* can be seen in several aspects: (1) placement *lumbung* no again based on on the *Tri Mandala* but free in accordance with desire architecture created to provide comfort to tourists; (2) shape *lumbung* also modified to suit with facility tourist; (3) of facet material is replacement ingredients local with modern materials and use ingredients nature is maintained no think about utility just to be seen authentic; (4) structure and construction use modern techniques and not again use connection traditional; (5) The function of the *lumbung*, which was originally a place for storing rice and family socialization,

has changed its function to supporting tourism, becoming a villa, cafe, restaurant and other tourism accommodation; (6) The dimensions no longer use *Asta Bumi* calculations, but instead use international measurements (meters) and the size of the room is made according to international dimensions to provide comfort for tourists; (7) Ornaments no longer think about meaning and only look at aesthetic; (8) It features a play of artificial lighting to expose the beautiful corners of the room, and natural lighting is obtained from wide door and window openings that are specially designed to follow the impression of the shape of the *lumbung*. Uses air conditioning, and for natural ventilation by widening and increasing door and window openings in other parts or creating open areas; (9) The change in function that has occurred means that interiors are now often equipped with modern furniture, attractive decorations, and facilities for visitor comfort; (10) Many *lumbung* locations have been relocated or rebuilt in more commercial or touristic locations; (11) Symbolic value is superseded by commercial benefits and modern aesthetics that appeal to tourists; (12) Although there are efforts to maintain sustainable aspects, in fact some renovations and redevelopments use materials that are less environmentally friendly and sustainable.

The architectural transformation of traditional Balinese *lumbungs* or *jineng*, is a complex phenomenon, influencing cultural values and environmental sustainability. *Jineng*, which originally functioned as a place to store rice, now often loses its historical and cultural value, changing its function to a restaurant or inn, and reducing local cultural identity. This commercialization is often insensitive to cultural heritage. Updates in construction materials and techniques often ignore sustainability, taxing local resources and increasing waste. The socio-economy of local communities is also changing, with many shifting from agriculture to the service sector, often leading to social inequality. However, tourism has also increased awareness and funding for conservation, and the adaptation of modern facilities has increased the function and relevance of *lumbung/jineng* in a modern context.

The challenge facing Bali today is how to balance utilizing tourism as a motor for economic growth with preserving and respecting the cultural heritage that is the basis of the island's appeal as a tourist destination. Traditional *lumbungs* in Bali have a heritage that goes beyond their physical function. They are a symbol of Balinese identity, a representation of social values, and bearers of deep spiritual meaning. The importance of traditional *lumbungs* lies not only in their use in everyday life but also as guardians and unifiers of Balinese culture, which must be preserved amidst cultural change and adaptation.

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**References**

Adler, Patricia A & Adler, Peter. (2009). Teknik-Teknik Observasi, *in Handbook of Qualitative Research*. Pengarang Norman K. Denzim dan Yvonna S. Lincoln. Yogyakarta: Pustaka Pelajar.

Ahimsaputra, H.S. (1999). Perencanaan Wisata Budaya. Jogjakarta: Bimbingan Teknis Perencanaan Program Kepariwisataan Kepala Dinas Pariwisata II.

Cohen, Eric. (1984). The sociology of tourism: Approaches, issues and findings. *Annual Review of Anthropology*, 10, 373-392.

Efendi, F. K. (2023). Implementasi Tri Hita Karana Sebagai Asas Dalam Kehidupan. *Jurnal Review Pendidikan dan Pengajaran*, 6 (4), 3372-3376.

Jaya, S. I. G. A. (2020). Arsitektur Bali Berkonsepkan Asta Kosala Kosali dan Asta Bumi sebagai Daya Tarik Wisata. Maha Widya Duta: Jurnal Penerangan Agama, Pariwisata Budaya, dan Ilmu Komunikasi, 3 (1), 35-45.

Kreag, Glenn. (2001). *The Impact of Tourism*. Minnesota: University of Minnesota.

Mardika, I Kadek (2016). *Kajian Fungsi dan Efisiensi Konstruksi Bangunan Jineng Dalam Dinamika Kehidupan Modern*. (Skripsi, Universitas Katolik Widya Mandira).

Smith, J. (2019). The Impact of Technological Advancements on Education. *Journal of Educational Technology*, 15 (3), 123-135.

Sulistyawati, Anastasia. (2017). *Transformasi Unit-unit Bangunan Simbolik Stana Manifestasi Ida Sang Hyang Widhi Wasa pada Pekarangan Sikut Satak di*

*Desa Wisata Ubud Bali*. (Disertasi, Institut Hindu Dharma Negeri Denpasar).

_____. (2018). Teo-Kosmoligi Arsitektur Bali dan Transformasinya. Surabaya: Paramita.

_____. (2019). Tradisi Megibung, Gastrodiplomacy Raja Karangasem. Journey: Journal of Tourismpreneurship, Culinary, Hospitality, Convention and Event Management, 1 (2), 1-22.

Susilo, Edi. (2010). Dinamika Struktur Sosial Dalam Ekosistem Pesisir. Malang: Universitas Brawijaya Press.

Sørensen, F., Fuglsang, L., Sundbo, J., & Jensen, J. F. (2020). Tourism practices and experience value creation: The case of a themed attraction restaurant. *Tourist Studies*, 20 (3), 271-297. https://doi.org/10.1177/1468797619899347.

Wiriantari, F. & Wijaatmaja, A. B. M. (2019). Perubahan Bentuk, Fungsi dan Struktur Jineng Dalam Arsitektur Tradisional Bali. Seminar Nasional INOBALI 2019 Inovasi Baru dalam *Penelitian Sains, Teknologi dan Humaniora*. Bali. Page. 38-49.

Yoeti, Oka A. et al. (2016). Pariwisata Budaya: Masalah dan Solusinya. Jakarta: Balai Pustaka.