

# The Culture of Packaging Traditional Balinese Snacks with Banana Leaves

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Abstract. The packaging of traditional Balinese snacks with banana leaves has been practiced and passed down for a long time. However, currently, the use of banana leaves as a packaging material is being replaced by plastic packaging. The purpose of this research is to study the local wisdom behind banana leaves packaging for traditional snacks with simple packaging techniques and technology that comes from the traditions of the Balinese people in order to preserve it. Sources of data are as follows: traditional snacks packaged in banana leaves, snack sellers, consumers selected by purposive technique, and snowball method supported by similar research results. Data were collected through observation, interviews, and literature study. The data were analyzed descriptively and qualitatively with Bourdeau theory. The results of the research that has been carried out indirectly have implications for passing on values, preserving and developing traditional snacks with banana leaves packaging to become part of the modern industry as the empowerment of local communities. This research can be used as a reference for visual communication designers that the tradition of banana leaves packaging has a positive impact on the environment.

Keywords: The Wisdom of Packaging; Balinese Snacks; Banana Leaves

# 1 Introduction

The tradition of food packaging has been around for a long time using natural packaging materials obtained from nature in the form of leaves, bark, and animal skins which functioned simply for the purposes of carrying food [1]. The use of banana leaves as food wrappers has been known since people began to recognize farming systems. Referring to the reliefs of the Borobudur *Karmawibhangga* temple, panel 118 depicts the life of the people during the farming, hunting and fishing eras, which are thought to have existed since 800 AD, during the reign of the Syailendra dynasty [2]. The relief in Figure 1 with a clear red outline depicts the appearance of a banana tree carved in its entirety and in detail starting from the stems, leaves and banana fruit arranged in bunches that come out from the base of the tree. The existence of banana trees is still used as a means of ceremony in the religious ritual traditions of communities throughout Indonesia, especially Bali to this day.

Banana leaves in the cultural tradition of the Balinese people, young leaves to dry leaves, are used in Hindu religious rituals and as wrappers for traditional snacks [3].

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Z. B. Pambuko et al. (eds.), Proceedings of the 4th Borobudur International Symposium on Humanities and Social Science 2022 (BIS-HSS 2022), Advances in Social Science, Education and Humanities Research 778, https://doi.org/10.2991/978-2-38476-118-0\_174

Banana leaves as packaging for traditional snacks is the most widely used due to their abundant availability in tropical countries which, they are also easy to obtain and can be formed into various variations of packaging resulting in various types of folding techniques [4]. Each folding technique has a shape pattern adapted to the type of packaged traditional snacks. This shows that banana leaf packaging with various patterns and various folding techniques produces a packaging design that is able to give identity to traditional snacks [5]. Each area in Bali has its own characteristics of traditional snacks packaged using banana leaves as part of the local cultural wisdom that grows and develops in the community. Banana leaves as a packaging material are environmentally friendly and easily biodegradable [6].



Fig. 1. Banana trees depicted on the reliefs of Borobudur (*Karmawibangga* panel 118), as the forerunner of the traditional packaging culture.

However, currently, plastic packaging has replaced the function of natural material packaging to package traditional snacks, causing the face of natural material packaging to be replaced with plastic packaging [7]. The use of plastic packaging began to be dominantly used as packaging for traditional snacks, this phenomenon can be found in traditional markets as shown in Figure 2. The widespread use of plastic packaging today began with the discovery of the forerunner of plastic by Alexander Parkers in 1856, then in 1980 the use of Plastics was increasingly spreading in Indonesia, followed by the development of the packaging industry supported by advanced technology [8]. Efforts to reduce the use of plastic packaging in Bali have been regulated through PERGUB (Governor Regulation), Number 97 of 2018, concerning restrictions on the generation of single-use plastic waste [9], but this regulation has not been fully implemented in the community because there are still practices of packaging traditional snacks using plastic. Based on in-depth interviews with traditional Balinese snack makers in the city of Denpasar, the switch from using natural packaging materials to plastic packaging is due to the limited availability of natural packaging materials, higher prices and the need for processing before use. Meanwhile, the use of plastic packaging is considered more practical, easy to obtain, cheaper prices, and looks clean (interview with AA Ketut Cantika (42 years) November 2022). The traditional packaging tradition is being abandoned by the people because not only is it considered less practical, but also the fact that materials needed to make the packaging is increasingly difficult to find. Plastic packaging is chosen by the community because it is felt to be cheaper, easy to obtain, and practical to use [4]. The lack of transfer of knowledge and skills in making and packaging traditional snacks for the younger generation is one of the factors causing the younger generation to have no knowledge of how to process traditional snacks and packaging techniques [10]. This condition can threaten the existence of the various faces of natural material packaging as packaging for traditional snacks which are full of local cultural wisdom values. The skill and creativity in processing banana leaves as packaging for traditional snacks in the cultural traditions of the Balinese people is unique, passed down from generation to generation. This traditional packaging culture is very important to record, identify, inventory and document as a form of local cultural wisdom that encapsulates a variety of knowledge. The traditional packaging tradition is a legacy that has important and sustainable values; therefore, it needs to be maintained and appreciated as a cultural tradition so that it remains sustainable and known by future generations [11]. Research on the tradition of packaging traditional snacks with banana leaves in Bali has never been conducted.

Therefore, through this research, knowledge originating from the local cultural wisdom of the Balinese people, which is gathered orally, will be recorded, disclosed and documented so that it can be preserved. The aim of this research is to study how the wisdom of traditional banana leaf packaging with simple packaging techniques and technology comes from the traditions of the Balinese people as local cultural wisdom so that they can be preserved. The urgency of this research is a form of preserving the knowledge of the Balinese people as part of local cultural wisdom so that it can still be enjoyed by future generations. Re-introducing the various traditional snack packs that once existed and as a source of inspiration for the community is critical so that they continue to use packaging made from natural ingredients as traditional snack packaging. Cultural wisdom with the strength of local values is needed to create a sustainable culture and to increase the uniqueness and distinctiveness of the community's sources of social creativity [12]. This research can be used as a reference for designers in creating traditional packaging design concepts and as a form of support to the government especially with regard to PERGUB, Number 97 of 2018 [9].



**Fig. 2.** The condition of traditional snack packaging which is being replaced by the presence of plastic packaging, this phenomenon can be seen in traditional markets in the city of Denpasar (Kreneng market)

# 2 Method

This research was carried out in June-December 2022. The research was carried out in traditional markets in the East Denpasar sub-district. The research location was determined by purposive sampling based on the diversity of traditional snacks wrapped in banana leaves. The research method begins with collecting primary data, the data source is in the form of traditional snacks packed with banana leaves obtained in traditional markets in Denpasar city. Other data sources, in the form of hawker sellers and consumers, were determined using purposive sampling and snowball techniques. This research is also supported by the results of similar studies sourced from scientific journals. Data in the form of information on traditional packaging traditions sourced from interviews and field observations were analyzed descriptively and qualitatively with the aim of describing and providing explanations regarding the data that has been collected through data classification. Data were collected through observation, interviews, and literature study. The data were analyzed descriptively and qualitatively with Bourdeau theory.

# **3** Result and Discussion

Banana leaves have become an integral part of the cultural traditions of the Balinese people. Balinese traditional snacks that are packaged using banana leaves have various packaging techniques adapted to the type, texture, and ingredients of the packaged traditional snacks. The study results found that the type of banana leaf best used as packaging for traditional Balinese snacks is Batu banana leaf (Musa Balbisiana) called don biu batu. Batu banana leaves (Musa Balbisiana) as primary packaging which directly comes into contact with traditional snacks, contain antioxidants and antimicrobials which have a good effect on packaged traditional snacks. Based on the results of research by Rhamadhia et al., it is stated that banana leaves contain gallic acid antioxidant compounds, which are a group of catechins included in the polyphenol group as phenolic compounds with potential as antioxidants and antimicrobials [4]. For traditional Balinese snack makers in the city of Denpasar, Batu banana leaves/don biu batu (Musa Balbisiana) which have good quality are Batu banana leaves from the village of Payangan, Gianyar Regency (interview with Ni Putu Wirayani (40 tahun) Desember 2022). The advantages of Payangan Batu banana leaves include wide leaf surfaces, clean, fresh green color, thick leaves, and intact leaf sheets without tearing. In practice, Batu banana leaves (Musa Balbisiana) can be used directly without being processed first because the characteristics of the leaves are not stiff, so they are easy to shape, and the surface of the leaves is thick. It gives a distinctive aroma to packaged snacks. Another advantage of Batu banana leaves is that they do not affect the color of the snacks, as other banana leaves, if used, will leave black stains on the snacks [6]. Another benefit of using banana leaves as packaging is that they are environmentally friendly because they break down easily, so they don't pollute the environment. However, in reality, the use of staples made of iron as the lock is still found, which is very dangerous if swallowed.

The characteristics of shapes and techniques in packing traditional Balinese snacks by wrapping, rolling, folding, and bending have different treatments depending on the type of packaged snacks. Based on the results of data collection conducted at traditional markets in the city of Denpasar, it was found that there are several types of traditional snacks packaged using banana leaves presented in table 1. Traditional snacks packaged in banana leaves have unique characteristics, distinctive appearances, aromas, and various packaging techniques [13]. Banana leaves as packaging for traditional snacks, apart from protecting the contents, also serve as identity packaged traditional snacks without the need to add labels to the packaging. For example, *jaja sumping* is packaged using banana leaves with different flavors, such as biu/banana, waluh/pumpkin, peanuts, keladi/taro, and jackfruit. One can see the difference just by looking at the appearance of the packaging and packaging techniques, as shown in Figure 3. All these are created for ease of identification and as a means of information and communication of packaged traditional snacks. This causes traditional snacks packaged using banana leaves to continue to grow with various types of snack creations and various packaging techniques.

For traditional Balinese snack makers, knowledge in choosing packaging materials and packaging techniques has been practiced with consideration and through repeated trials to produce a variety of local wisdom in choosing the best leaf packaging materials and wrapping techniques for traditional snacks. According to Suyanto in Natadjadja and Yuwono [14], local wisdom is defined as local cultural wealth contained in the way of life and outlook on life, which accommodates life wisdom. Traditional snack packaging, as one of the local cultural wisdoms of the Balinese people, contains life wisdom to always protect the environment as the *Trihitakarana* concept, which is the philosophical foundation of Hinduism in Bali always to maintain balance with the creator, fellow humans, and nature and its environment.



Fig. 3. Variations in packaging techniques produce variations in the form of different *sumping* snack packs that function as content identities. 1. Peanut snacks, 2. *Waluh*/pumpkin snacks, 3. *Biu*/banana snacks and 4. Jackfruit snacks.

Traditional packaging practices using banana leaves exist and develop in Balinese society and have become cultural traditions passed down from generation to generation. Balinese people who use banana leaves for packaging traditional snacks are the actors

who carry out social practices in Balinese socio-cultural life. The role of actors in packaging practices can present various packaging forms with various types of traditional snacks. This is influenced by the customs prevailing in the community. According to Bourdeau, the composition of social practice can be formulated by the equation (Capital)(Habitus)+Field=Practice. Capital, according to Bourdeau, includes economic, cultural, social, and symbolic capital [15]. Related to the social practice of packaging traditional snacks carried out by the Balinese, cultural capital has a major influence on people's behavior patterns in the tradition of packaging and consumption. This cultural capital includes traditional knowledge passed down from generation to generation, influencing people's behavior patterns. Various types of traditional snacks with banana leaf packaging that are developing in today's society are historical products that were born as a result of the social interaction of people in a certain time and space. A result of learning through socialization in society that is done verbally, subtly, and unconsciously presented as something natural, constantly changing, and developing for Bourdeau this is called habitus. The presence of various types of traditional snacks that are packaged using banana leaves is the result of competition between actors, in this case, traders, and consumers with their capital, thus creating markets as fields/realms to trade and buy snacks that are created to be in demand by consumers.

Table 1. Types of traditional snacks packaged using banana leaves (musa paradisiaca)

No	Types of Traditional Snacks	Photo
1.	Sumping snacks Sumping snacks are packaged using a fold- ing and bending technique in a rectangular shape and cooked with the dough by steam- ing. Flavor variants consist of banana, pumpkin, taro, peanuts, and jackfruit, known as jaja sumping biu, waluh, keladi, kacang, and nangke.	
2.	<b>Pasung snacks</b> Pasung snacks are packed in a cone shape with the rolling technique and tied with semat as a lock. The leaves are cooked with the dough by steaming. Pasung snacks are always present in Hindu traditional rituals.	
3.	<i>Timus</i> snacks <i>Timus</i> snacks are wrapped in a rolled tech- nique resembling <i>pepes</i> packaging. At both ends, it is bent and given <i>semat</i> as a lock. The dough is cooked with leaf packaging by steaming.	

## No Types of Traditional Snacks

### 4. Klaudan snacks

*Klaudan* snacks are wrapped in a triangular pyramid shape, with the characteristic folds being bent outwards. Banana leaves as packaging are cooked with the dough by steaming.

### 5. Klepet/Bugis snacks

*Klepet/Bugis* snacks are similar to *Klaudan*, just that the packing technique is slightly different. *Klepet/bugis snacks* are packaged in the shape of a pyramid triangle with the wrapping and folding technique, but the end of the fold is inserted inside. Banana leaves are cooked with the dough by steaming.

#### 6. Bendu snacks

*Bendu* snacks are packaged in a rolled-up technique, the ends are bent, and a bamboo stick is attached as a lock, similar to the technique for wrapping *timus* snacks. However, the difference is in the treatment of banana leaves used, namely fresh banana leaves without being processed with the dough.

### 7. Lukis snacks

*Lukis* snacks are made from sticky rice and are packaged using a triangular folding technique. At the end, a bamboo stick is attached as a lock. Banana leaves are cooked with the dough by boiling.

### 8. Uli snacks

*Uli* snacks are always used for *Galungan* and *Kuningan* holidays and served with sticky *tape* rice. *Uli* snacks are packaged using a folding technique following the shape of the *uli* and wrapped using fresh leaves.

## 9. Tape Ketan

The packaging technique is similar to a *tum*. The ends meet in the middle and are pinned with a staple and packaging label as a seal. Fresh banana leaves are used directly without being cooked with the dough.





No	Types of Traditional Snacks	Photo	
10.	<i>Lemper</i> snacks The packaging technique is done by rolling the ends and bending upwards with staples as the lock and packaging labels as infor- mation. Cooked with the dough by roast- ing/burning.		
11.	<i>Apem</i> snacks The packaging technique is done by folding in the form of a square box like a <i>takir</i> serves as a base for the dough. Cooked with the dough by steaming it until it blooms.		
12.	Hunkue snacks The snacks are packaged directly using fresh leaves with an elongated folding tech- nique resembling <i>sumping</i> . At the end, it is folded and bent inward with a staple as a lock.		

Balinese traditional snacks function as a means of ceremony in the rituals and traditions of the Balinese people. For example, snacks are used in the tradition of wedding rituals as a symbol of the union of the two elements of men and women. Snacks are also used in the Ngaben (cremation) ceremony and other traditional ceremonies full of symbols and meanings. In addition, traditional snacks are also used as banquet dishes for various other events.

The technique of packing traditional snacks with banana leaf packaging contains the local cultural wisdom values of the Balinese people, passed down from generation to generation. These values are as follows:

- 1. Aesthetic values: these values that can be seen from the techniques and forms of packaging presented.
- 2. Health values: using banana leaves as packaging for traditional snacks can protect packaged snacks from dust and weather and give a distinctive aroma.
- 3. Economic values: using banana leaves as packaging for traditional snacks provides economic value for the survival of farmers.
- 4. Preservation values: it is important to preserve various traditional snack packaging techniques resulting from cultural acculturation so that they can be enjoyed by the next generation and used as a national identity.

# 4 Conclusion

The results of the research that has been carried out indirectly have implications for passing on values, preserving and developing traditional snacks with banana leaves packaging to become part of the modern industry as the empowerment of local communities. This research can be used as a reference for visual communication designers that the tradition of packaging with banana leaves has a positive impact on the environment. The tradition of packaging traditional snacks using banana leaves is an art that combines simple folding techniques to produce unique packaging forms as part of the cultural traditions of the Balinese people, which are important to be preserved because they contain values that can be inherited in a sustainable manner. The tradition of packaging traditional snacks can survive if it is respected and remains present in the midst of society. The use of natural packaging materials to package traditional snacks must be maintained and developed with various new designs. Preservation efforts need to be made for the types of plants used as packaging materials so that they can continue to be used as natural packaging materials. Traditional knowledge needs to be disseminated to traditional snack makers so that they continue to use environmentally friendly materials.

Acknowledgement. Thank you to all the interviewees who were successfully interviewed in this study to gather important information. Funding This research was funded by the Directorate of Research, Technology, and Community Service, Directorate General of Higher Education, Research and Technology with the Basic Research of Higher Education (PDKN) scheme in 2022.

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