Local Traditions and Environmental Preservation - Genius Loci in Penglipuran Village in Protecting Public Spaces

INU Mahardika,1, Gusti Ayu Made Suartika,1, and Kadek Edi Saputra1
1 Master Program in Architecture, Development & Planning of Udayana University – Bali, Indonesia
Email: udianamahardika10@gmail.com

Abstract. Community groups who live in traditional settlements mostly have a wealth called genius loci, which actually has very insight into the preservation of the natural and cultural environment. Bali also has several unique traditions that are not only in terms of settlement layouts, but are unique in terms of preserving the natural landscape. Meanwhile, there are some areas in Indonesia that are not able to maintain environmental sustainability, which is indicated by the continued increase in deforestation rates which are a sign of the deteriorating quality of the surrounding environment. Based on this, this article discusses the traditions applied in landscape conservation in Penglipuran Bangli village. This research was conducted using a qualitative descriptive method with a case study approach. To preserve the natural environment, there are several traditions that are still maintained and implemented consistently, including traditions: Preserving village forests, keeping the environment clean, telajakan karang kerti, may not use vehicles on the main village corridor. The application of local traditions related to environmental preservation is carried out consistently and with full awareness by both the community and the prajuru as leaders in the Penglipuran Traditional Village. The success of nature conservation cannot be separated from the clear, firm, consistent application of awig-awig accompanied by sanctions, as well as public awareness of the importance of landscape conservation.

Keywords: traditions, environmental preservation, public space, community participation

1. Introduction

Development in various sectors of life in order to improve people's welfare, on the other hand produces by-products in the form of waste and other waste materials. Development is a series of processes of optimization, independence and interaction between development components, namely natural resources, human resources, community values and technology [1]. Lessons can be drawn from local traditions in the form of values on how to utilize natural resources while taking into account the capabilities of nature itself. Local traditions also teach how waste products from resource utilization do not exceed the carrying capacity and carrying capacity of the environment itself.

Community groups who live in traditional settlements mostly have a wealth called genius loci, which actually has very insight into the preservation of the natural and cultural environment. But along with the times, local knowledge is getting eroded. This also applies when we talk about preserving the natural environment. For example, the Amazon Forest has been preserved for a long time, but then investors come, causing deforestation. Likewise with the Dayak forests in Kalimantan, the oil palm plantation industry is suspected to be the main cause of deforestation. During the period from 2011 to
2016, the amount of deforestation in Kalimantan was 2.08 hectares or 23 percent of the damage to national forests in that period [2]. The high rate of conversion of forest land every year has resulted in Indonesia being included in the list of countries that contribute to the eighth highest carbon emission in the world in 2018. Indonesia produces 965.3 million metric tons of carbon dioxide or equivalent to 2% of world emissions [3].

There are many things from local traditions that can be adopted and used as references for how urban planning should be structured to respond to the challenges of modernization which tend to exploit nature with high intensity. Some traditions which are local wisdom that develop in certain communities teach how to coexist with nature and the environment without destroying it [4,5]. For example, what is owned by the Panca Goya Tradition in Maluku, namely the tradition of cleaning hills, mountains and sacred places. Local people believe that these places have good fortune or are sacred so that they cannot be damaged. The Mantari Bondar tradition in North Sumatra, the surrounding community believes that the Batangtoru forest is a source of spring water, so its existence needs to be maintained and protected from generation to generation for the sustainability of generations. The traditional Sasi Nggama tradition in Papua is a unique tradition in preserving the environment and ecology, prohibiting the use of natural resources within a certain period of time where this tradition implies giving time to nature to be able to restore its natural resources [6].

Bali also has several traditional settlements that are unique, not only in terms of the layout of the settlements, but also unique in the form of local traditions in preserving the landscape environment. Among them are forest conservation efforts carried out by local communities in Tenganan Village, Karangasem Regency, Bali Province. With a strong tradition, the Tenganan community strives to maintain, maintain and prevent environmental damage through customary rules called awig -awig. Awig-awig in Tenganan Village, among others, are regulations related to the prohibition of logging several types of trees in the village forest as well as regulations related to the taking of wood materials that can be used by residents. The tradition of landscape protection carried out by the people of Tenganan is an effort to defend their ancestral heritage, especially from pressure from outside investors. In addition to Tenganan Village in Bali, there is Penglipuran Village which still maintains its culture and traditions from generation to generation which are considered to be native Balinese [7,8]. The uniqueness of Penglipuran Village lies in the social system, culture as well as the physical structure and spatial pattern of the village which is distinctive with a strong north-south linear pattern. Where the edge of the village is surrounded by village forests in the form of bamboo forests, wood forests and tegalan as a green open space so that it reflects the beauty of a truly Balinese village.

The Penglipuran Traditional Village community is one of the villages in Bali that persistently maintains their identity and continues their tradition in preserving their natural environment. While in some areas in Indonesia are not able to maintain environmental sustainability. For example, the continued increase in deforestation rates as a marker of the deteriorating quality of the surrounding environment. In 2000 forest cover in Kalimantan was approximately 33.2 million hectares, then decreased to 28.3 hectares in 2009 and finally 24.8 million hectares in 2017 [9]. Based on this, this article focuses on talking about how traditions are applied in landscape conservation in the village of Penglipuran Bangli. The number of spaces in Penglipuran village, both public and private spaces, are regulated in such a way by the traditions they have inherited.

Various previous studies related to environmental conservation have been carried out in Penglipuran Village. This study focuses more on how to apply local traditions in controlling and maintaining the sustainability of the natural environment in Penglipuran Village, Bangli. The increasingly complex relationship between development and environmental preservation requires alternative solutions as a form of environmental conservation pattern. In this context, Penglipuran Village was chosen as a case study.
2. Literature Review

2.1 Local Traditions, and Spatial Planning Controls

Local traditions are inherent habits that are believed and carried out for generations by the local community [10]. The Balinese Aga community has unique local traditions related to its culture, settlement structure and government system [11]. Customary law, better known as awig-awig is a basic guideline as a rule of customary village in its government [12]. The hierarchy of Balinese customary law consists of Awig-awig which functions as a kind of law while Perarem functions as implementing regulations [13]. In Bali itself, the customary norms, customs or traditions that apply in a certain community group that are inherited from generation to generation are called dresta [14]. For Penglipuran Village, in the preservation of its natural environment there is harmonization between customary law and local traditions in preserving the nature that was inherited by their ancestors dynamically along with the times.

The concept of residential space in Bali is strongly influenced by the beliefs and values of local life. The life values that apply to each Traditional Village affect the diversity of the concept of space. For Bali Aga villages, in general, the physical structure and spatial pattern of the village are typical with a north-south linear pattern known as the upstream-teben concept. Research on the concept of upstream-teben has been carried out by many experts [15-17] stating that hulu-teben is the concept of space as a symbol of respect for ancestors which is oriented up-down, the mountain represents the top and the sea represents the bottom. In this case, in Penglipuran Village, the spaces are clearly and firmly divided including hulu as a sacred space, a sacred space where the Kayangan Desa Temple is located, teben where setra (village graves) are located, between upstream-teben there are residents' settlements. Uniquely, the village area is surrounded by village forests in the form of bamboo forests and fields.

To maintain the existence of traditional spatial planning, controlling measures and instruments are needed [30, 31, 32, 33, 34, 35]. Control provisions in spatial planning are essentially aimed at avoiding the occurrence of spatial use conflicts. Through good and planned control, it is hoped that the utilization of resource allocation can be managed optimally. In the end, through control, it is hoped that there will be harmony between the plan and its utilization, so that environmental damage due to development can be prevented or at least can be minimized [18]. As an instrument of spatial regulation, spatial control policies should contain clear rewards and punishments and the consistency of their enforcement [19]. Rewards are in the form of incentives as one of the instruments in controlling the use of space as an effort so that the implementation of development is in line with the predetermined plan.

2.2 Potentials and Challenges in the Inclusion of Local Traditions to Control Spatial Development and to mitigate Environmental Damages

Traditional communities basically have local traditions that function to preserve the surrounding environment. However, along with the issue of wrong modernization, many local wisdom values have been eroded. The misunderstanding of some people who think that traditional means backward has an impact on the abandonment of some traditions that have been carried out for generations. Research on the factors that influence changes in traditional Balinese settlements has been carried out by many experts [20-22]. Based on these studies, it can be concluded that changes are caused by internal factors and external factors. Internal factors include the community's need for new functions due to population growth, economic needs and changes in the socio-cultural view of society towards modernity. While external factors include opportunities from the tourism sector which is believed to be able to support the community's economy. At the same time which is slowly changing the mindset of the people from traditional which is persistent in maintaining its tradition to modern.

2.3 How Traditions are Accommodated and mediated in governing spatial development and natural environment.

In fact, local traditions in spatial planning and preservation of the natural environment have been recognized by native Indonesians. Local traditions in spatial planning have divided the spaces according
to their designation based on the prevailing local values. Local traditions in controlling urban spatial development and preserving the natural environment can be accommodated by integrating them into regional/city regulations. In addition, these traditions can be accommodated through real traditional community participation in spatial planning and nature conservation. Accommodating local traditions means acknowledging the existence of customary law communities as required by the constitution [23].

In Bali, it is expected that the spatial planning process ideally adopts all the important elements contained in local wisdom which is a form of the union of tradition, culture and religion as a fortress to protect Balinese culture and nature [24]. So that regional planning related to spatial planning and preservation of the natural environment needs to accommodate local values, so that the plans drawn up and determined are easy to implement.

2.4 Community Participation in Sustaining Natural Environment

A person's knowledge of the environment is the result of a thought process based on experience interacting with the environment, so that a person tends to participate in environmental conservation as part of the environment where he lives and where he does all his activities [25]. In connection with this article, the level of community participation in preserving the environment is inseparable from the availability of local values related to the environment and how these values are applied.

Sherry Arnstein (1969) in Suciati (2006), community participation is how people can be involved in social change that allows them to get a share of the benefits of influential groups [26]. There are three important elements in community participation in development to achieve optimal results, namely: the willingness of the community to be independent, the existence of mutually agreed goals and carried out with a planning, implementation and evaluation management system [27]. In this article, we will see how the participation of the Penglipuran community in carrying out the tradition of preserving their natural environment from these three aspects will be seen.

3. Method

This research was conducted using a qualitative descriptive method with a case study approach. The descriptive qualitative research method in this study was made with the aim of knowing how to apply local traditions in controlling and maintaining the sustainability of the natural environment in Penglipuran Village, in particular how local traditions are able to act as driving forces in maintaining environmental preservation. The case study approach is used to understand certain phenomena in a certain place and at a certain time. The data collection method used was by conducting a survey in Penglipuran Village and observing, namely interacting by looking at objects/subjects in the field, viewing, reading documents and interviews. While the data analysis method used to reveal the findings is qualitative data analysis.

4. Data and Discussion

Penglipuran Village is one of the old villages in Bali or known as the Bali Aga. Bali Aga, also known as mountain Bali, are villages in Bali that are inhabited by indigenous Balinese people who are commonly called Bali Mula or Bali Kuna [28]. Penglipuran Village has a unique tradition, culture and physical structure of a clean and orderly village environment, so that it is able to display a sustainable rural face. The physical order of Penglipuran Village cannot be separated from the traditions and culture of the community that are rooted and have been passed down from generation to generation.

Penglipuran Village is located in Kubu Village, Bangli District, Bangli Regency, Bali Province, with an altitude of 500-600 meters above sea level and is located at GPS coordinates 8.0292893° Ls, 115.030360 East Longitude. Penglipuran Village is 5 Km from downtown Bangli and 45 Km from downtown Denpasar. Where in the east is directly bordered by the Kubu traditional village area, in the west by the Sang-Sang tukad while in the north it borders the Kayang traditional village (figure 1).
Figure 1. Map of Penglipuran Settlement [29]

Based on data from the Land Cover Map of the Penglipuran Priority Area in the Detailed Spatial Planning of the Bangli District, the area of Penglipuran Village is approximately 146.36 hectares. Utilization of village space, based on the land cover map of Penglipuran Village, is dominated by 48.45 hectares of village forest, 70.19 hectares of fields/moor, and 21.64 hectares of settlements. The environment has an important role in the life of the Penglipuran community. The tradition of preserving the natural environment can be seen from how the Penglipuran community persistently preserves the environment while maintaining spaces for various functions. In Penglipuran, village spatial planning consistently maintains its traditional spatial concept, namely hulu-teben. The natural environment that is preserved in Penglipuran village includes: village forest, dry fields, telajakan karang kerti in traditional settlements, setra (cemetery) and the war memorial (figure 2).

Figure 2. Penglipuran village spatial pattern map [29]
The village forest in the form of a bamboo forest is located upstream, precisely to the north of the village settlement. Telajakan is located on the main corridor of the village road which is located in the middle of the settlement and divides the settlement into two parts, namely on the west and east. Setra or graves are located in teben, located on the south end of the village.

4.1 Tradition in protecting natural environment in Penglipuran Village

To preserve the natural environment, there are several traditions that are still maintained and implemented consistently in Penglipuran Village, namely:

4.1.1 Village forest preservation tradition

Village forests in the form of bamboo forests belonging to traditional villages are managed by the community and the traditional villages themselves in the form of laba adat. Customary rules mandate that bamboo forests belonging to traditional villages managed by the community are not allowed to be converted. People who change the function of bamboo forests will be subject to customary sanctions according to the applicable awig-awig. The type and amount of the sanctions given depend on the results decided by the traditional village paruman (meeting). So far, no indigenous people have violated the regulation on the conversion of the village forest function.

Indigenous peoples are allowed to use bamboo plant products from village forests for their traditional house building needs and for commercial purposes by selective logging according to the forest lands they manage. There are 14 types of bamboo planted in the bamboo forest of Penglipuran Village, namely: Jajang Aya, Jajang Bali, Jajang Pantej, Jajang Taluh, Jajang Papah, Jajang Batu, Tambang Gading, Tambang, Petungan Buluh, Buluh, Tali Suet, Tali, Gading, Ampel (figure 3).

![Figure 3. Types and conditions of bamboo forests in Penglipuran Village (Authors’ documentation, 2021)](image)

Bamboo plants in Penglipuran Village have been maintained by the Penglipuran community for generations. This bamboo plant has a sacred value for the Penglipuran community because of its strategic location in the hulu (head) of the village. Apart from being a form of nature conservation, the preservation of bamboo forests for the Penglipuran community is a form of devotion and respect for the beliefs and teachings they hold dear. The felling of bamboo trees is also required to follow the customary rules that apply in Penglipuran Village. The felling of bamboo trees should not be carried out on the day of ingkelbuku and kajeng sweet. Local people believe that logging during ingkel Buku will cause the bamboo to break and break quickly, while logging when it is sweet is believed that bamboo plants will flower and bamboo plants will die quickly.

The regulation prohibiting the conversion of bamboo forest functions has become a standard rule that must be obeyed by all Penglipuran residents. This rule is based on, among other reasons, the function of the bamboo forest as a barrier to other villages, the bamboo forest as a catchment area and bamboo stalks as the main material for the Penglipuran traditional house. So that it can be seen clearly the relationship between conservation and the function of bamboo forest utilization in Penglipuran Village. The awig of preserving the bamboo forest was agreed to through the traditional village paruman. Awig
is carried out and supervised by the community with the traditional warriors consistently. Communities who violate the rules prohibiting the conversion of bamboo forest functions will be subject to sanctions according to the results of the agreement in the traditional village paroman. The highest sanction for awig-awig violators in Penglipuran village is keneroyang (dismissed) as a Penglipuran traditional citizen.

The Penglipuran community maintains the bamboo forest other than as a form of conservation of nature, because bamboo trees are the main raw material for traditional buildings in Penglipuran village. These buildings are preserved because their functions and benefits greatly support the implementation of several traditional rituals in Penglipuran Village. Awig-awig in Penglipuran Village mandated that the Penglipuran Village community is obliged to preserve their traditional buildings in the form of: angkul-angkul buildings, umah paon buildings and bale dangin buildings (figure 4). Through this regulation, local people continue to preserve the bamboo forest in Penglipuran Village.

Figure 4. Traditional buildings of Penglipuran Settlement - Using Bamboo as the Main Building Material (Authors’ documentation, 2021)

4.1.2 The tradition in keeping the environment clean

The tradition of keeping the environment clean in the Penglipuran village area is clearly and unequivocally contained in the awig-awig of the Penglipuran traditional village. In awig-awig, it is regulated that every traditional villager is not allowed to throw garbage indiscriminately that is not in accordance with the provisions of the traditional village. Violations of these rules in awig are subject to sanctions: “sang sapa sira mamurug pasukertan inucap kekanin pidanda manut perarem.” Meaning: whoever violates these rules will be subject to a fine according to the perarem. This tradition is maintained because it has an impact on the beauty and sustainability of the village environment. Local people believe that apart from disturbing aesthetics and smelling bad, unmanaged waste can become a breeding ground for disease vectors and rodents. through good waste management, shows that there is an effort to maintain the quality of the environment, both air, water and soil in Penglipuran village.

The tradition of maintaining the cleanliness of the village environment is carried out by carrying out mutual cooperation every 15 days. Gotong-royong is done by cleaning the environment in Penglipuran village. The implementation of gotong royong is carried out in all village temples, neighborhood roads, cemeteries and all other public facilities. In village awig-awig, it is regulated that traditional villagers are obliged to maintain cleanliness at palemahan setre (cemetry area). The implementation of gotong royong is led by the Traditional Village Prajuru as the coordinator of customary manners in the administration of customary village governance. The tradition of keeping the environment clean is not only carried out in the implementation of mutual cooperation which has been determined periodically by the traditional village, but the community is aware and willing to clean up their surrounding environment. It is a tradition that has become a tradition in Penglipuran village where every day the community cleans the residential environment, starting from the yard of the house to the foothills.
To maintain environmental health, the traditional village awig-awig also forbids all Karang Kerti residents to dispose or channel the remaining liquid domestic wastewater into the drainage channel leading to the village's main road corridor. The rest of the waste water must be channeled into the drainage channel at the back of the Karang Kerti or absorbed at the back of the house yard or what is called premises tebe (open space at the back of the house). The awig-awig also includes the following: “sapa sire ugi mekarya songbah mangde ngewentenang patemon bebaosan ring sang panyandingnya. Prade nenten adung patut kebaosin antuk prajuru adat utawi sang rumawos”. The awig-awig fragment means: whoever will build a sewerage channel to discuss it with neighbors, if no agreement is found, it will be discussed with traditional leaders. Local regulations in Penglipuran village mandate how the environment must be managed so that its sustainability can be maintained. The heaviest sanction for violators of this provision is the revocation of the right to use the Karang Kerti (house yard). Where Karang Kerti is managed by the traditional village.

4.1.3 Tradition in preserving of tejakan of the karang kerti

In addition to the habit of maintaining environmental cleanliness, villagers are also required to preserve the natural environment by maintaining the telajakan and natah space (open space in the yard between umah paon and bale dangin). The traditional village awig-awig explicitly mandates that there should be no transfer of the function of the yard yard for other functions. Uniquely, all the house yards in Penglipuran Village have beautiful treads with the same width and have been maintained until now (figure 5).

In the awig-awig of the traditional village of Penglipuran, it is stated that ” telajakan karang kerti sane majeng patut kapiara tur katandurin sarwa sari tan kengin katandurin tandurun siyosan sane ngawinang tan asri ring sajeroning margi.” The customary rules mean that the garden of the house must be planted with flowers, not allowed to be planted with plants that cause disturbing the beauty along the road. In this case, all villagers who own coral reefs are obliged to participate in maintaining the cleanliness and beauty of their respective treads. Violations of these customary provisions will be subject to sanctions according to the regulations. The lightest sanction is the obligation to perform a pecaruan ceremony (traditional cleansing ceremony) at the village temple and the heaviest sanction is the revocation of the right to use Karang Kerti by the traditional village. Until now, this tradition is still carried out obediently by the residents, this is indicated by the absence of community members who have received customary sanctions for violating this rule.

4.1.4 Vehicles free public corridor

Customary provisions mandate that the main village corridor can only be passed by pedestrians. Vehicles in the form of motorized vehicles or bicycles are prohibited from crossing this main route. This tradition is seen as a form of preservation of the natural environment in Penglipuran Village. With this arrangement, you can feel the air around the main corridor of the village is very clean and fresh. This
tradition is still maintained and preserved. The community's obedience in carrying out this tradition can be seen from the absence of violators of this rule. Penglipuran people who violate this tradition will be subject to sanctions in the form of fines according to the regulations. Perarem, in this case, is the result of an agreement that is discussed in the traditional village paruman (meeting).

4.2 Customary Codes and Regulations

Traditional village as a unit of customary law, bound by customs or customary law that grows and develops within the local community. Customary law, better known as awig-awig and perarem, is the basic guideline for traditional villages in their governance (Dharmayuda, 2001). In the context of Penglipuran Village, awig-awig and perarem have a major role in regulating the pattern of community trust relations (Parahyangan), social relations (Pawongan) and the sustainability of their natural environment (Palemahan). Penglipuran traditional village awig-awig which contains environmental conservation was agreed and ratified on August 19, 1989. Penglipuran village awig-awig regulates how environmental conservation is carried out and sanctions for violators of these rules.

The government system in Penglipuran Village consists of two government systems, namely the official government system and the traditional village. The government service system is under the leadership of the head of the environment who is tasked with coordinating affairs in the field of government administration. Meanwhile, the traditional village government is led by the Penglipuran Traditional Village Prajuru. The Penglipuran Traditional Village Government System consists of Prajuru Adat and Ulu Apad. Prajuru Adat is a democratically elected traditional village management structure, the management consists of the Kelian Desa adat, the Panglima, Pengarikan and the Interpreter Raksa/Petengen. Meanwhile, Ulu Apad is a traditional government system based on the order of seniority of cacakan krama Pengarep as part of the Bali Aga village. The structure of the Penglipuran traditional village institution can be seen in figure 6.

![Figure 6. Leadership Structure of the Penglipuran Community](https://via.placeholder.com/150)

In terms of environmental preservation, the application of awig-awig and perarem in Penglipuran Village is coordinated by the traditional Prajuru and the apparatus owned and supervised by Ulu Apad as an advisor to the institutional system of the Penglipuran Traditional Village. Indigenous peoples are obliged to comply with the agreed awig-awig. For people who violate customary provisions, especially those related to environmental conservation, they will receive customary sanctions according to the level and magnitude of the violation determined through the traditional village sangkepan (meeting). The customary rules related to environmental conservation are in line with the applicable state provisions.

4.3 How the existing rules are enforced, obeyed, violated, and sanctioned

In Penglipuran village, the tradition of preserving nature is in line with their customary law. In general, local regulations related to environmental conservation have been regulated in village awig-awig. But in its implementation, technically and in detail, it is regulated in the perarem. In Penglipuran Village, Perarem regulates in more detail how the implementation of awig-awig related to environmental conservation is enforced, adhered to and how to impose sanctions for violations of customary law. For
example, in Penglipuran Village's awig-awig, it is stated that customary village residents are obliged to maintain the palemahan (natural environment) of Penglipuran Village, manut dresta. This means that every villager is obliged to preserve the natural environment in accordance with the rules and traditions that apply in Penglipuran Village. Meanwhile, the Perarem regulates in detail the rights and obligations in the application of the awig-awig. For example, in the weakening conservation regulation, there is an obligation for indigenous people to protect the village forest in the form of a bamboo forest and it is prohibited to convert it to function. Indigenous people who have rights to use village forests are given management rights in accordance with applicable rules and traditions (manut dresta). The application of awig-awig and perarem in environmental conservation in Penglipuran Village is binding and forces indigenous people to obey them, because each of these rules is accompanied by sanctions for violators.

The rules in the form of customary law consisting of awig-awig and perarem are very effective in maintaining the sustainability of the traditional space and natural environment of Penglipuran village. Clear rules and strict implementation in their enforcement so as to make the people in Penglipuran Village very obedient to the mutually agreed rules. In formulating customary regulations, customary institutions involve indigenous peoples directly through the traditional adat meeting (customary meeting), so that all established customary rules can be accepted and implemented by the community with full awareness. In its implementation, the adat community is also a forum to evaluate the implementation of the preservation of the natural environment in Penglipuran Village.

In maintaining environmental preservation, Penglipuran Village applies clear and firm rules. Sanctions for violations of traditional village awig-awig are subject to criminal penalties, namely violations of customary rules are subject to sanctions based on perarem. The lowest customary sanction for indigenous peoples who violate customary law is the obligation to carry out a traditional cleansing ceremony (melaburin sepura) at Pura Desa. Meanwhile, the heaviest sanction is keneroyang, which is being dismissed as a customary citizen in the form of liberation of rights and obligations from the traditional village. The application of sanctions is carried out through the traditional village paroman mechanism. So far, no indigenous people have violated customary provisions related to the preservation of their natural environment. The obedience of indigenous peoples in carrying out the rules in environmental conservation is due to the synergy between tradition and applicable customary law. What is no less important in Penglipuran Village is that traditions and rules are enforced consistently and with full awareness by traditional institutions and indigenous peoples.

4.4 The Success of Tradition-Based Rules in controlling Spatial Development and its Natural Environment

The success of the regulation in the form of awig desa arranged in the context of environmental preservation can be seen from the consistency of the people in Penglipuran Village in maintaining spaces that have a function to support the preservation of the village environment. Until now, Penglipuran Village is still consistent in preserving its natural environment as an ancestral heritage in the midst of modernization. Until now, no residents have received sanctions due to violations of awig-awig related to the preservation of the natural environment in Penglipuran Village because of the attitude of residents who obey the rules and are full of awareness.

Penglipuran Village’s success in preserving its environment can be seen from the various appreciations received by the Traditional Village from various parties. In 1995, the Indonesian government awarded the Kalpataru award for efforts to protect bamboo forests in traditional village areas. In 2016 on Trip Advisor in the form of Traveler's Choice Destination Penglipuran ranked second after the Galapagos Islands in Ecuador. In 2017 it received the best award in the category of cultural preservation in the ISTA (Indonesia Sustainable Tourism Award) and in 2018 in the Magazine of Bombastic, Penglipuran Traditional Village was named the three cleanest villages in the world along with Giethoorn Village in the Netherlands and Maylynnong Village in India.
4.5 The Role of Community Members and Their Tradition-based Local Leadership

Penglipuran Village community as the main fortress in preserving the natural environment. The community is also the main actor of development in the village, especially in the field of environmental conservation, this can be seen from the high participation of the community in all stages of implementing activities related to environmental conservation in the village. The form of community participation in preserving the natural environment is carried out with the consistency of residents in maintaining environmental preservation traditions that exist in Penglipuran Village.

In the activities of preserving the natural environment, the Penglipuran village community plays an independent role with full awareness. The forms of participation given are in the form of energy, material, thought. The community is active in conservation activities, both on the agenda of the traditional village and in daily life. The community is fully involved in every conservation activity starting from the planning, implementation and evaluation stages. The role of the community in planning is carried out by providing ideas in the traditional village paruman (meeting). The community participates in determining the goals of conservation and how these goals are achieved as outlined in the customary village perarem. The implementation of environmental conservation is evaluated in the traditional village paruman activity which is carried out once every 15 days. The results of the evaluation in the traditional village paroman are used as the basis for making plans to improve the implementation of environmental conservation. The high level of community participation is inseparable from the participation of soldiers in traditional institutions. Prajuru coordinates the implementation of environmental conservation in the customary village area actively and consistently referring to the awig-awig of the traditional village. In Penglipuran Village, the prajuru are not only leaders but also those who are elders in adat, so that all environmental conservation activities coordinated by the prajuru will be followed by the villagers.

Penglipuran Village teaches how local traditions can act as a fortress to preserve the natural environment in Penglipuran Village. Local traditions, especially related to environmental preservation, are maintained and carried out consistently by all components of society. The local community is significantly involved in preserving the village environment, including in setting regulations in the form of awig-awig and traditional village perarem. Traditions relating to the preservation of the natural environment that have been successfully implemented must be adopted by integrating the values contained in these traditions into spatial planning documents compiled by the government.

5. Conclusion

Local traditions in preserving the natural environment in Penglipuran Village are able to preserve the environment. This can be seen from the preservation of spaces that have a protective function in Penglipuran Village. Spaces that have protected functions that are still preserved include: village forest in the form of bamboo forest, village moor, telajakan Karang Kerti in traditional settlements, setra and hero's grave garden. In nature conservation, these spaces function as catchment areas and green open spaces. The preservation of these spaces is inseparable from the existing landscape preservation traditions, including: Preserving village forests, maintaining environmental cleanliness, preserving coral reefs, not using vehicles on the main village corridor. In its implementation, the application of tradition is carried out with full awareness by all components of society, both by indigenous people and prajuru as leaders in the Penglipuran Traditional Village. The success of nature conservation cannot be separated from the clear, firm, consistent application of awig-awig accompanied by sanctions, as well as public awareness of the importance of landscape conservation. The application of customary law in conservation is very important, but far more important than that is the awareness of the Penglipuran traditional village community about the importance of landscape preservation to support the lives of today's people and for generations to come.

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