

Tumpek Uduh Ceremony as an Education Medium in the Preservation of Natural Environment in Bali : A case study in Canggu Village, Kuta Utara District, Badung Regency, Bali, Indonesia

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***Tumpek Uduh* Ceremony as an education medium in the preservation of natural environment in Bali: A case study in Canggu Village, Kuta Utara District, Badung Regency, Bali, Indonesia**

NI WAYAN KARMINI¹, NI MADE RUASTITI^{2*}
and GEDE YOGA KHARISMA PRADANA³

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This research aimed to explore the values of local wisdom in the *Tumpek Uduh* Ceremony, as an educational medium in the preservation of the natural environment in Canggu Village, Kuta Utara District, Badung Regency, Bali, Indonesia. *Tumpek Uduh*, also known as *Tumpek Pengatag* or *Tumpek Wariga*, is one of the Hindu holidays aiming to carry out ritual ceremonies asking for fertility in Canggu, Kuta, Bali. Commonly, advanced and modern societies will think more critically, effectively and efficiently. It is different from what the people do in Canggu Village, Kuta, Bali. Even though they have developed and are modern, and live in the area of tourism. However, they continue to celebrate *Tumpek Uduh* to invoke fertility until now. The questions are: (1) How is the form of the *Tumpek Uduh* Ceremony in Canggu, Kuta, Bali?; (2) What are the functions of the ceremony at Canggu, Kuta, Bali?, and (3) what are the implications for the people in Canggu, Kuta, Bali in this global era?

This study applied a qualitative method. The data collection was carried out by observation, document studies and interviews with related parties. The data analysis was conducted in a qualitative descriptive way using several theories in an eclectic way, i.e. religious theory, structural functional theory and Abraham Maslow's basic needs theory.

The findings showed that the people in Canggu Village, Kuta, Bali celebrated *Tumpek Uduh* in the form of a ritual ceremony for the birth of plants. They patted and applied marrow porridge to the trees so that they produce a lot of fruit. It can be seen from the educational material about *Tumpek Uduh* which is packaged in the form of brochures, posters, leaflets, pamphlets and audio visuals. Until now, the people of Canggu, Kuta, Bali continue to celebrate *Tumpek Uduh* because it has implications for the growth of attitudes and adaptive behavior towards nature, behavioral growth to protect the environment and the growth of behavior for environmental conservation as an effort to preserve sustainable tourism in Bali.

Keywords: *Tumpek Uduh*, educational medium, preservation of natural environment, sustainable tourism, tourist area of Canggu, Kuta, Bali, Indonesia

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INTRODUCTION

Bali is a destination tourism that is very famous for its unique culture. The uniqueness of Balinese culture is reflected in its life that becomes one with religion and art that it has. The small island of Bali with a population that is mostly Hindu has a lot of sacred buildings in the form of temples. It makes a lot of tourists called Bali as the Island of the Gods. In fact, since it has a lot of art, Bali is also often given called as an art island (Kartodirdjo 1987: 47).

Bali is a tourist destination that is very crowded with foreign tourists. The beauty of nature and the life traditions of the Balinese people are in great demand by tourists. It is closely related to the existence of two famous painters, Walter Spies and Rodulf Bonnet, who introduced Bali through the world of painting. Crowds of tourists visiting Bali encourage various tourism products to grow and develop in this area; for instance, hotels, natural tourism products, surfing in the Canggu Kuta area, rafting in Sayan Ubud Village, and so on. Besides having beautiful beaches and nature, Bali is also known to have thousands of temples (Hindu holy places). Therefore, Balinese people seem to be busy carrying out various religious rituals at any time. In addition to Galungan, Kuningan, and Nyepi days, Hindus in Bali also carry out religious ceremonies that are repellent, fertility ceremonies, and nature preservation. Although tourism development is lately growing very rapidly throughout Bali, however, the tourist area of Canggu Kuta Bali still maintains its agricultural land. With the predicate as an agricultural area, Bali has one of the most relevant ceremonies known as the *Tumpek Uduh* ceremony. This ceremony has a noble meaning related to the balance of human relations with nature. This is a concrete manifestation of the actions of Hindus in Bali in applying the concept of *Tri Hita Karana* (three causes of the balance of the universe).

Ideologically, the life of a developed and modern society will tend to apply certain strategies to increase their income in order to meet their lifestyle needs. In this regard, people's lives will tend to be involved in the construction of the capitalist market accompanied by a series of social relations, commodity flows, capital, technology and ideology from various cultures around the world. They will also place capitalistic economy in a central and dominant position in their social networks. This condition made them busy pursuing and competing to win the battle in obtaining financial benefits. As what Ritzer revealed (2004: 636), in this current era, people will tend to involve market construction so that it will indirectly drag the society into the tide of the capitalistic economy.

However, the reality is different from what happened in Canggu Village, Kuta Bali. In the midst of globalization that is identical to the capitalistic economy, the people in the area are still celebrating *Tumpek Uduh* which is held every 210 days or 25 days before the Galungan holiday which coincides with *saniscara kliwon wuku wariga* (Balinese calendar). Philosophically, *Tumpek Uduh* has meaning as an expression of gratitude and thanks for the gift of *Hyang Widhi Wasa* (God Almighty) in the form of plant fertility in producing abundant food for mankind. The effort to transform the values of *Tumpek Uduh* Ceremony is an effort to preserve the environment and compile educational materials to foster public awareness in environmental conservation.

Tumpek Uduh Ceremony as an education medium in the preservation of natural environment in Bali. *Tumpek Uduh* Ceremony reminds the people of Canggu Village to always maintain a harmonious relationship with nature (*palemahan*), as a tangible manifestation of the application of one of the concepts of *Tri Hita Karana* (the balance of human relations with God, humans with humans, and humans with the nature).

The society of Canggu Kuta Bali, which is busy struggling with the routine of their daily lives in the context of the tourism industry, continues to preserve the tradition until now. In fact, there is a stigma in the community that implementing tradition is related with old-fashion and orthodox society, and so on. However, the reality is that the people in Canggu Kuta Bali Village still preserve the celebration until now.

This phenomenon naturally raises a number of questions that can only be answered by using an in-depth research. Therefore, this research, which is located in Canggu Kuta Bali Village, was conducted by critically examining the matters related to the *Tumpek Uduh* Ceremony to know and understand the ideology underlying the people in the area to preserve this tradition even though they are already classified as advanced and modern society.

The rapid development of tourism in the Canggu Village has changed many agricultural lands into tourism supporting facilities such as lodging, food stalls and surfboard rentals. The rise in construction of tourism facilities has resulted in a narrowing of agricultural land. The development also has an impact on the destruction of the surrounding natural environment, as the irrigation system begins to be disrupted because many waterways are covered by buildings. Meanwhile, the development of Balinese cultural tourism is oriented towards **sustainable tourism development**.

2 The sustainable **tourism development** strategy applied by Bali today is guided by the **principles of sustainable development**; i.e. **development** that guarantees: (1) ecological sustainability; (2) continuity of socio-culture, and (3) economic continuity (Anom 2010: 5). However, Canggu Village seems to continue to strive and maintain sustainable tourism which is now threatened with various facts which tend to reduce the potential of natural resources and the environment. Tourism in the village has reduced agricultural land and has damaged ecosystems and the environment in the area. The construction of villas, restaurants and other tourism facilities has made use of living areas in the form of land, gardens and rice fields; therefore, the beauty of the environment is increasingly threatened.

Canggu Village, Kuta Utara District, Badung Regency is a fertile agricultural area. In addition to agriculture, Canggu Village also began to be known as a very good tourism area. Tourists begin to come to this village because Canggu Village is located adjacent to the Tanah Lot Temple, which has long been a spiritual tourism icon. The location of Canggu Village is on the edge of the beach which is quite good for the location of water-surfing sports. As the result, the village has never be deserted by tourist visits.

The development of tourism in Canggu Village has referred to the government policies of the Bali Province that Bali tourism is developed by taking into account

the natural potential and socio-cultural potential of the Balinese people. The role of tourism in development contributes to strategic areas in national development; such as, creating and expanding employment, creating and expanding business fields, increasing the income of the community and government, encouraging environmental preservation, encouraging preservation and development of national culture, encouraging improvement in other sectors of development, expanding the archipelago, strengthening national unity, fostering love of the homeland, and encouraging regional development. Tourism is one of the sectors that the government relied on to obtain foreign exchange from non-oil and gas income (Karyono 1997: 89).

The development of tourism also provides many benefits for Bali people, including expanding business opportunities; the widespread employment; increased income of the community and government; encouraging cultural preservation and historical fragments; encouraging the maintenance of the environment; maintenance of security and order; encouraging improvement and growth in the development of other sectors; and broadening the horizon of the archipelago and strengthen the unity of the nation, and fostering the love of the country. Community-based tourism has many advantages (Yoeti 1997: 95-99).

Bali Island, which has a majority of Balinese Hindus, is very well-known as a tourist destination due its unique culture and natural beauty. The beauty of Bali's natural panorama has turned Bali into a tourist destination that is highly sought after by local and foreign tourists. The small island of Bali has many interesting attractions including: Ubud as a center for art and relaxation, Kuta Beach, Sanur Beach, Seminyak Beach, Jimbaran Beach, Nusa Dua and Canggu which is famous for the beach and surfing as shown in Figure 1.



Figure 1. A tourist surfing in the Canggu Kuta Bali tourist area. (Photo: wisatania.com 2019)

Baum (1994: 108) stated that Bali is the key to Indonesia's tourism which is a world tourism destination. Since Ngurah Rai Airport opened in 1969, there has been an increase in arrivals of foreign tourists to Bali in the 1980s. According to him in 1991, Indonesia established the "Visit Indonesia Year" program which resulted in an increase of 1.9 million people to 2.1 million people. The emergence of the Teluk Wars has also affected the arrival of tourists to Indonesia, especially Bali. However, even in the 1990s tourists came to Indonesia and Bali out of what they were expecting.

The research findings of Burns and Holden (1997), about Bali tourism, especially in relation to the strategies that will be used to carry out the routine development of Bali tourism or tourism strategies, must be used by Balinese people in accordance with the conditions and resources of the Balinese people. Study on environmentally sound and sustainable tourism and cultural tourism in Bali has been carried out by Burns and Holden (1997). Bali tourism research, especially on the application of community-based tourism and Bali tourism that has local and sustainable wisdom has also been conducted by Bagus (2002) and Ardika (2003).

Munuaba (1998) in his article entitled "Tourism Planning Strategy in People's Dimension" stated that, tourism development planning that has absolute populist dimensions requires a strategic planning that is perceptual agreement with vision, mission, goals, objectives, work plans, and starting point equations, that tourism is just a tool to improve welfare. Therefore, it must be used effectively and efficiently, so that the negative impacts can be minimized as much as possible. It requires the existence of holistic, systemic planning and strict enforcement of legislation. Tourist visits can certainly improve the quality of life of the people in the destination. It also requires the participation of the local population in the decision-making process, including the type of development that the population wants. In addition, sustainable development has the meaning of preserving culture and landscape and at the same time increasing people's income and reducing negative impacts.

Bali tourism development, besides being able to support the efforts to strengthen the socio-cultural aspects of the Balinese people, must also be able to maintain the existing natural potential. Tourism must be able to preserve the environment and not the other way around; environmental damage. Environmental damage due to tourism in Bali needs to be anticipated by actively involving Balinese people. In this case, the local wisdom of the Balinese community needs to be lifted and turned on to support environmental conservation efforts. Among the local wisdom is the *Tumpek Bubuh* (*Tumpek Uduh*, *Tumpek Wariga*) ceremony held on the day of *Saniscara Kliwon Wuku Wariga* every 210 days. The *Tumpek Uduh* Ceremony carried out by the Balinese community can be interpreted as an effort to preserve the environment.

The *Tumpek Uduh* Ceremony is carried out in the context of worshipping the Almighty God in its manifestation as *Dewa Sangkara*, the God of plants. The basis of this ceremony is philosophical thinking to give before enjoying. In the context of the preservation of biological resources, it means that before humans enjoy or use something (read : natural products), it must be preceded by planting or maintaining

trees, as our devotion to God Almighty (*Ida Hyang Widhi Wasa*) who has bestowed His grace on humans.

In addition to *Tumpek Uduh*, the Balinese people also held the *Tumpek Kandang* Ceremony on the *Saniscara Kliwon Wuku Uye* day to express their gratitude to God the Almighty in its manifestation as God Pasupati, the creator of animals or pets. Pets are a part of the environment that also needs to be preserved. Because with domestic animals created by the Almighty God, humans can obtain a source of life in the form of proteins that are needed by the human body. In addition, by maintaining domestic animals, humans can also fulfill their other life needs by selling these animals and then buying various other necessities from the proceeds of the sale (Suda 2010).

The existence of the *Tumpek Uduh* Ceremony in the lives of Balinese people, especially in Canggu Village, Kuta Utara District, Badung Regency, has not given significant meaning in efforts to preserve the environment in Bali. Supposedly, the values of local wisdom contained in the *Tumpek Uduh* Ceremony can be implemented to support environmental conservation efforts. This research was conducted on the basis of educational values in *Tumpek Uduh* in an effort to preserve ¹the environment in Bali. This research revealed the *Tumpek Uduh* Ceremony in Canggu Village, Kuta Utara District, Badung Regency in order to foster community awareness of the environment as well as clean and healthy lifestyle.

This phenomenon raises public concerns. So, to anticipate this problem, the *Tumpek Uduh* Ceremony is held so that environmental damage can be avoided. This ¹study aims to explore the values of local wisdom in the *Tumpek Uduh* Ceremony in Canggu Village, North Kuta District, Badung Regency, Bali. This research on *Tumpek Uduh* Ceremony, which is also called *Tumpek Pengatag* or *Tumpek Wariga* which is one of the Hindu holidays for the balance of nature in Canggu Village, was conducted due the imbalance between assumptions and reality that occurred in the real situation. Commonly, advanced and modern societies will think more critically, effectively, and efficiently. It is different from what the people do in Canggu Village, Kuta, Bali. Even though they have developed and are modern, and live in the area of tourism, however, they continue to celebrate *Tumpek Uduh* to invoke fertility until now. The questions are: how is the form of the *Tumpek Uduh* Ceremony in Canggu, Kuta, Bali? What are the functions of the ceremony at Canggu, Kuta, Bali? and what are the implications for the people in Canggu, Kuta, Bali in this global era?.

The principles of local wisdom in environmental management are not contrary to the principles of environmental management as stipulated in the Republic of Indonesia Law Number 23 of 1997. This form of local wisdom can be seen in the Tenganan Pagringsingan Village through religious and magical behavioral patterns that prioritizing the principle of harmonization of human life with God, humans with humans, and humans with their environment. In Hinduism, it is called *Tri Hita Karana*. In addition, the close trust of indigenous people is supported by megalithic historical evidence. These behavioral patterns are in the form of local wisdom such as social organizations related to environmental management in the

form of customary villages, forest area restrictions that prohibit logging that is not in accordance with the provisions of customary law.

Prohibitions on forest areas are strictly guarded by the prohibition of cutting down trees specified in customary village law. These principles are contained in the form of customary village law which regulates a very strict and consistent system of environmental management. The application is accompanied by material and immaterial sanctions.

The principles of local wisdom in managing the environment, in its functionalization, can enrich the principles of national environmental management because this principle comes from the legal ideals of the society. It creates voluntary legal compliance because the substance regulated in law is in accordance with their legal ideals to achieve a sense of justice, comfort, and inner well-being. In addition, the sustainable use of natural resources is also useful for the benefit of the next generation. These principles have become part of the spirit of life adopted by native people so that it will facilitate the application and attachment of the society to the legal provisions that have been regulated by customary village. These principles, if they are adopted in the process of establishing legislation, will provide reinforcement of local wisdom which will be part of supporting the achievement of the objectives of environmental management in the Republic of Indonesia Law Number 23 of 1997.

Environmental preservation is closely related to the enforcement of environmental law. In this regard, Harahap (1997) wrote a book entitled "Some Overview of the Judicial System and Dispute Resolution". He mentioned that the enforcement of environmental law is related to one of human rights; i.e. the protection of every person for environmental pollution or environmental protection. This is based on various demands for environmental protection rights, among others: first, protection of productive and enjoyable harmony between man and his environment; second, protection for prevention or eliminating damage to the environment and biosphere and stimulating health and human welfare; third, the protection rights of air pollution caused by factories and motor vehicles from toxic gases of carbon monoxide, nitrogen oxide and hydro carbon, so that the air is free from pollution; fourth, guaranteeing the protection of pollution of industrial, land and sea waste, so that all water sources are protected from all forms of waste pollution.

The Balinese people have their own philosophy in protecting the environment. In this connection, Wiana (2010) wrote a paper entitled "Reward Glory in Maintaining Forest Sustainability". According to Wiana, in the Hindu philosophical level, the principle of forest protection can be seen in a number of sacred literatures. This principle is summarized in Sad Kertih as stated in the Book of Purana, especially regarding *Wana Kertih*, which is an effort to preserve the forest. *Sad Kertih* is six concepts in preserving the environment consisting of *Atma Kertih*, an effort to purify *Atma*, *Samudra Kertih*, an effort to preserve the ocean, *Wana Kertih*, an effort to preserve the forest, *Danu Kertih*, an effort to preserve freshwater sources on land, *Jagat Kertih*, an effort to preserve the harmony of social relations that are dynamic and productive based on truth, and *Jana Kertih*, an effort to maintain individual quality.

Forests, in Lontar Bhuwana Kosa VIII 2-3, are referred to as sources of natural purification where *patra* (plants) and *pertiwi* (land) are fusion of all things dirty in this world. For instance, the Holy Ayurveda III.51.5 literature states: “*Indraa ya dyaava osadhir uta aapah. Rayim raksanti jiyaro vanani*” means: *without protecting these natural resources human beings will never get a safe, peaceful and prosperous life*. Furthermore, in the Pancawati book as quoted by I Ketut Wiana, it describes three functions of the forest to build sustainable forests (*Wana Asri*). It includes *Maha Wana* which is a wilderness as a source and protector of various biological sources in it. *Maha Wana* is also a natural reservoir that will store and drain water throughout the year. In addition, *Tapa Wana* means the place of the holy people to establish a hermitage or *pasraman*. In this *pasraman* the holy prayers continue to be recited and the holy teachings are also implanted into the hearts of the people who come and beg for guidance for the saints. The last is *Sri Wana*, which means the forest as a source of building economic prosperity to protect and maintain the sustainability of trees along with the richness of flora and fauna in them (Wiana 2010).

Hindus in Bali highly respect the existence of trees and environmental sustainability. The respect of Hindus for the trees is one form of worship of God *Wishnu* and God *Wasundari*. In the mythology of *Linggod Bhawa*, it was mentioned that God *Wishnu* as the God of Water transformed into a black pig looking for the lower end of the *Lingga Yoni*. In the search, God *Wishnu* met and married God *Wasundari* (motherland). From this marriage *Bhoma* (Sanskrit language for tree) was born. This illustrates natural events where the water that meets the earth (*pertiwi*) gives birth to trees. The real manifestation of this respect can be seen from the *Tumpek Uduh* ceremony held by every *Wuku Wariga*. Figure 2 shows a form of human respect for trees at the *Tumpek Uduh* Ceremony at Cangu Village, Kuta Bali.



Figure 2. *Tumpek Uduh* Ceremony ritual in Cangu Village, Kuta Bali. (Photo: Ni Wayan Karmini 2018)

The community in Canggu Village Kuta Bali means *Tumpek Uduh* as the day of *Sanghyang Sangkara*'s arrival who safeguards the life safety of all plants (trees) to thrive, avoid pest and disease, and provide better and more abundant results. Even on the road, trees are often circled with *poleng* (black and white) cloth. It has a high philosophical meaning in which the ancestors teach to "humanize the environment", so that the trees will be treated like treating humans. Humans are expected to avoid cutting trees. However, if this has to be done, then every tree cutting must always be followed by planting another tree next to the felled tree. This tradition even has been maintained until now.

The principle of forest protection and environmental preservation contained in various national legal instruments, especially in Law No. 41 of 1999 concerning Forestry is actually rooted in customary law. Since the kingdom in Bali, the *Mantri Juru Kayu* profession has been known or is now known as the Minister of Forestry. Lontar Manawa Swarga stated "whoever cuts trees without the King's permission, he/she will be fined five thousand *kepeng*". The sanction was followed by spiritual sanctions in the form of imposition of a curse so that his/her head is bald for people who cut trees carelessly (Wiana 2010).

Regarding environmental conservation in the Tenganan Pegringsingan area, Permana et al. (2010) wrote an architectural article entitled "Changes in the Pattern of Traditional Spaces of Traditional Villages in Tenganan Pegringsingan". In the article published in the e-Journal (Volume 3 Number 1, November 2010), Faculty of Engineering, Brawijaya University, it was concluded that: The socio-cultural characteristics of the customary village communities of Tenganan Pegringsingan are very unique. It is a culture of Bali Aga (Original Bali) that is still well preserved. The life of the people is always based on tradition and maintained by the existence of village law. In the spatial distribution system, the Tenganan Pegringsingan traditional village follows the concept of "Tapak Dara", a concept of a meeting between the wind direction of *kaja-kelod* (north-south) and its axis in the middle. It means achieving a balance through the union of *Bhajana Alit* (humans and *karang paumahan* or home yards) with *bhuwana agung* (village yard). For Tenganan people, this spatial concept means self-protection from enemy attacks (*Jaga Satru*). Space patterns in residential units also refer to the four directions of the wind. In the middle there is a house yard. Each building in a residential house is oriented to the yard of the house. There are six building units in each village house. The buildings are *sanggah kaja*, *sanggah kelod*, *bale buga*, *bale meten*, *bale tengah*, and kitchen. Every building has its own value structure. In addition, in a basic concept, nothing has changed from the traditional space pattern of Tenganan Pegringsingan. There is only a shift in the value of the space. This shift is influenced by political, social culture, and the economic aspects (livelihood) of the people. The shift that occurred in the pattern of occupancy unit space was caused by factors of house renovation which had strong correlations and livelihoods, income levels, building functions and people's knowledge of customary law, all of which had sufficient correlation.

Efforts to preserve the environment in Bali also means sustainable tourism development efforts. Tourists visit Bali because they are interested in the socio-cultural potential of the Balinese Hindu community and because of the enchanting

natural resources. In this connection, Suradnya (2006) wrote a thesis entitled "Analysis of Bali Tourist Attraction Factors and Their Implications for Regional Tourism Planning in Bali". By using factor analysis, eight factors of attraction for foreign tourists to visit Bali were successfully identified which included: reasonable tourist product prices, culture in various manifestations, the beach with all its attractions, the convenience of traveling, extensive opportunities for relaxation, image or big name of Bali, natural beauty, hospitality of the native people. Based on the findings of this research, for planning the development of Bali as one of the world's tourist destinations, the eight factors of attraction can be used as consideration so that tourist perceptions of Bali are maintained.

Those are some of the research findings related to environmental protection. Various studies can be used to add insight in an effort to assess the implementation of the values contained in the Tumpek Uduh Ceremony in an effort to preserve the environment in Canggu Village, Kuta Utara District, Badung Regency.

MATERIALS AND METHODS

Duration and place of study. Results of Tumpek Uduh Ceremony as a medium for education in preserving the natural environment in Bali: A case study in Canggu Village, North Kuta Sub District, Badung Regency, Bali was conducted for three years. The research on Tumpek Uduh Ceremony as a medium for education in natural environment conservation in Bali was conducted in the village of Canggu, North Kuta, Badung Regency due to the following reasons: (1) Canggu villagers routinely carry out the Tumpek Uduh Ceremony; (2) Canggu Kuta Utara village which is known as a tourist destination; (3) the village of Canggu Kuta Utara is the location closest to the residence of the researcher, and (4) research on Tumpek Uduh in Canggu Kuta Utara village is most in line with the research plan.

Materials. Material objects from the research about Tumpek Uduh Ceremony as an education preservation of natural environment in Bali: Case study in Canggu Village, North Kuta District, Badung Regency, Bali centered on Tumpek Uduh Ceremony. While the object of the research study is formally from Tumpek Uduh Ceremony as an education medium in the preservation of natural environment centered on the environment and the media of education.

Methods. Research on Tumpek Uduh Ceremony as an education medium in the preservation of natural environment in Bali: case study in Canggu Village, Kuta Utara District, Badung Regency, Bali used qualitative methods. Secondary data from the research were obtained from references on Balinese culture, anthropology and Hinduism education through library studies. Primary data were collected through observation and interview techniques with informants. All data related to Tumpek Uduh Ceremony as an education in natural preservation of natural environmental in Bali: Case study in Canggu Village, Kuta Utara District, Badung Regency, Bali, were analyzed using basic needs theory, religious theory and functional structural theory.

RESULTS AND DISCUSSION

Local wisdom values in Tumpek Uduh Ceremony. *Tumpek Uduh Ceremony* is a memorial ritual that aims to make Balinese people realize how big and important the role of plants in sustaining life. *Tumpek Uduh Ceremony* gives a deep signal and meaning that humans love nature and the environment that have contributed to their lives and livelihoods. *Tumpek Uduh*, which is also often called *Tumpek Pengatag*, the momentum of love for nature is directed at plants. It is about how big is the role of plants in giving life to humanity. Almost all human life needs come from plants, starting from food, clothing to shelter (Anonymous 2015).

Generally, there are local wisdom values contained in the *Tumpek Uduh Ceremony*. Local wisdom is an important part of Balinese culture (Pradana & Parwati 2017, Pradana 2018b). In the life of the Balinese Hindu community in the Canggu Village, *Tumpek Uduh Ceremony* is held as a manifestation of human consciousness and faith as part of nature, a form of respect for nature, as well as an effort to maintain soil fertility and preserve the environment. This view is in accordance with the principle of *Tri Hita Karana*, that humans must be in harmony with the natural environment (*palemahan*), in addition to being in harmony with their fellow humans (*pawongan*), and their God (*parahyangan*). The Canggu community adheres to Hinduism and views the principle of balance in environmental management in three ways: the balance between humans and God, humans and humans, and humans and the environment. This principle in Hinduism is called *Tri Hita Karana*. In Sanskrit *Tri* means three, *Hita* means long/ prosperous/happy, and *Karana* means cause/because. So, *Tri Hita Karana* means three (things) that cause survival and prosperity. The three causes of welfare, safety, and happiness are created from a balanced and harmonious relationship between humans and God, humans and humans, humans and nature in a unified whole. In Bali, the three forms of relations are each called *parahyangan*, *pawongan*, and *palemahan*. Based on the study of anthropologists, this *Tri Hita Karana* is local wisdom. *Tri Hita Karana* has an element of the universe (macrocosm) which includes: natural/ physical environment, man as the driver of nature, and God who animates the universe. In humans (microcosm), the elements of *Tri Hita Karana* include *angga sarira* (gross human body), *prana* (power or energy) that activates humans, and *atman* (souls of human life-sustaining substances) (Ashrama 2005: 27).

In cosmological consciousness, humans are part of the cosmos (nature). The surrounding natural environment is seen as part of human existence itself. Humans are a microcosm and this universe is a macrocosm. The residents of Canggu Village live their lives in harmony with their natural environment. The tradition of *Tumpek Uduh Ceremony* is a human expression as an integral part of nature. In addition, the environment is a basic need for human life. Humans as a microcosm are an inseparable part of the natural environment. Furthermore, the universe (macrocosm) is a place or “big house” that guarantees human life itself. In this case, environmental preservation is a basic human need for its survival.

This is in accordance with Maslow’s theory of basic human needs that the environment is a place needed to live life (Jarvis 2006). According to Hindu beliefs, nature and its contents are God’s creation. The concept of *Tri Hita Karana* mandates

that the relationship between God and His creation is always harmonious, enjoyable and balanced. One way to maintain harmony and balance of relations is through the development of a spatial culture whose manifestations contain three main parts related to the concept of *luan-teben* (sacral-profane). These three main parts in the traditional Balinese space rules are known as *Tri Mandala* which means: *tri* (three), *mandala* (zone/region).

Tri Mandala means the division of the zone into a *toga*: *utama mandala* (most sacred zone) for shrines, *madya mandala* (zone that has a value of between/ middle) for residential buildings, *nista mandala* (the most profane outermost zone, in Bali it is commonly called *jaba sisi*, *teba*, *lebuh* or *telajakan*). The concept of *Tri Hita Karana* basically promotes harmony and principles of togetherness in human life. In the context of developing the principles of togetherness and harmony in line with an integrative-holistic approach to sustainability. This approach development does not only reduce material-economic aspects, but it also considers environmental, socio-cultural, and aesthetic/spiritual dimensions so that it can last forever (Ashrama 2005: 48).

Human life as God's creature and its position as a social being has a very high dependence on the environment to be able to live optimally. Human interaction with the environment can be categorized into two forms of ecosystem, that consist of natural and artificial ecosystems. One of the important natural resources in Indonesia is the forest area as the largest living natural resource. In this regard, Hardjasoemantri (1991: 3) stated that forests for humans have two main functions that include ecological functions (forests absorb carbon from the air and restore clean oxygen to humans) and economic functions (humans have used forests from generation to generation). Human use of forests is the harvesting of forest products, especially timber.

Humans and their natural environment can indeed influence each other. Humans affect nature and nature affect humans. It means that humans in relation to nature must take into account other values besides technical and economic values. It brings the consequence that threats to nature cannot be accounted for to other parties but to human attitudes themselves, as personal ones independently and members of the community (Hardjasoemantri 1991: 5).

Humans are part of the ecosystem and are managers of the system. The emergence of environmental damage is an influence on human actions that give consequences to the environment. In Indonesia, human relations with the environment have become one with their culture. Thus, human beings act as parties who benefit from nature and as parties who serve nature through efforts to preserve the environment. In this regard, the human environment can be classified into three that consists of: (a) physical environment, i.e. everything that is around humans in dead forms such as mountains, air, water, rivers, sunlight, and others; (b) biological environment, i.e. everything that exists around humans in the form of living organisms other than humans such as animals, plants, microorganisms, etc., and (c) social environment, i.e. the environment that has aspects of attitude, such as social attitudes, psychological attitudes, spiritual attitudes, etc. (Nurjaya 1985: 7).

In addition, the *Tumpek Uduh* Ceremony carried out by Hindu communities in Canggu Village is a form of their behavior to respect the nature. It is reflected in several ceremonies conducted by residents of Canggu Village. It is also reflected in the *Tumpek Uduh* Ceremony held on the day of *Saniscara Kliwon Wuku Wariga* every 210 days. This attitude of respect for nature is in accordance with the mythology of the forest area as a protector of humanity. In this case, there is a cosmological view that humans are part of nature. Basically, plants have all the attributes of a God, and plants are saviors of humanity. If humans destroy plants, then humans destroy the “guards of humanity”. All beings including humans and animals will live safely and prosperously on this earth if the cleanliness of the earth’s atmosphere is maintained in all ways for the success of this purpose in life (Atharvaveda VIII.2.25, in Titib 2004). In the tradition of Balinese society, living things are grouped into three groups based on a combination of *pramana* (main power). Plants are classified as creatures of *ekapramana*, animals as *dwipramana* and humans as *tripramana*. Plants as creatures *ekapramana*, characterized by the dominance of wind power (energy).

Plants have a core strength in the ability of nutritive soul. Plants have the independence of the ability to grow, breed and defend themselves. Animals as *dwipramana* creatures are characterized by the ability of *bayu* and *sabda*, which is one ability to speak as a means of protecting their generation (appetitive soul). Humans, as *tripramana* creatures, are characterized by their thinking abilities (thought); besides nutritive and appetitive abilities. On the basis of this understanding and reality, the presence of humans is very dependent on the existence of plants. Moreover, traditional societies recognize the existence of plants as creatures that have a protective power against humans. The pattern of the norm system adopted is the main reason why forests are seen as sacred areas. Salvation is not interpreted as worship, but a form of respect for plants as part of knots in the notation of life reality or *samodhaya*. *Samodhaya* does not only concern the reality of life but is wider than that; i.e. life support systems. The study of deep ecology recognizes that the reality of all creatures and systems of life support has value for themselves and is not only valuable on the basis of human interests.

The people of Canggu Village see that humans are part of nature. This view is a local wisdom. Local wisdom is part of culture and more specifically is part of traditional knowledge systems. In addition, some local wisdom that has universal values such as historical, religious, ethical, aesthetic, scientific, and technological is called local genius (Geria 2005: 3).

Substantially, the main points of the contents of local wisdom include the elements of local concepts, folklore, religious rituals, local beliefs, various taboos and recommendations that are manifested as a system of public behavior and habits. Functionally, one dimension of local wisdom in environmental management is the dimension of methods and approaches that prioritize policies and dimensions of direction and objectives that emphasize harmony, balance and sustainability.

In the mind of religious customary people, humans are required to maintain the balance of the universe. If human becomes greedy, damages the balance of

nature, or is not in harmony with nature, it will cause shock in the universe which can be a natural disaster.

The Canggu Village community as an agrarian society manifests the concept of harmony of life with the environment through the *Tumpek Uduh* ritual, which is a ritual in the form of offerings before the Almighty God as a gratitude to the Creator of Nature which has provided human resources useful for human survival.

The survival of the Balinese people is inseparable from the implementation of cultural traditions on Hindu religious holidays (Pradana et al. 2016). As Balinese Hindu community in general, the people of Canggu Village are religious communities. In the concept of religious society, various elements in the life of society are sacred value which must be distinguished from a number of other elements of profane value in accordance with the classification of opposition binaries. Some parts of the plants / trees around the temple/ customary land are sacred environments. They must maintain their beauty.

The Balinese Hindu community in Canggu Village respects nature as an environment which is manifested in the form of a *Tumpek Uduh* Ceremony which is a ritual that is in accordance with religious ceremonial theory. It is the extraordinary power theory which was introduced by a British anthropologist R.R. Marett (1909). According to Marett, this awareness is too complex for the new human mind to feel at their initial level of life on this earth. The basis of all religious behavior arises because of a feeling of inferiority towards the symptoms and events that are considered normal in human life. Nature, where the symptoms and events originated, was considered by humans as a place where forces exceeded the forces known to man in his natural surroundings; what so-called the Supernatural. The universe, including plants, has supernatural forces (Koentjaraningrat 1985: 12).

The essence of the *Tumpek Uduh* Ceremony teaches that people are in harmony with the environment (*palemahan*) and able to maintain plants and the beauty of the environment. By maintaining the beauty of plants and natural environment, the condition of soil fertility is also maintained. Some farmers in Bali try to cultivate land adaptively. They use compost and manure to maintain soil fertility. However, some farmers in Bali have used chemical fertilizers which can actually cause damage to soil conditions and reduce its fertility. For this reason, the values contained in *Tumpek Uduh* on the need to maintain soil fertility and preserve the environment must be realized. The values of greening teachings, as well as friendly treatment of the environment need to be more socialized more intensively, so that the values of *Tumpek Uduh* can be transformed into caring and loving behavior towards nature.

The practice of environmental preservation can directly maintain soil fertility. This is evidenced, among others, by the behavior of the people of Canggu Village who seek to uphold the law as local wisdom. It was proven to be able to maintain the fertility of rice fields and customary village yards. Humans have an obligation to safeguard and protect living things and green areas, including village gardens and forests. Protection of nature is an effort to protect humans themselves. The earth is a complex adapted system that is able to adjust itself in the face of change, especially changes caused by humans. Safeguarding and protecting agricultural

areas, plantations and village forests means maintaining the existence of humanity because humans are one of the scales in the life of the universe (Permana 2010).

The human attitude that is in harmony with preserving nature is in accordance with structural functional theory which has a balance basis. Community life will run normally if each element or institution performs its functions properly. This theory emphasizes orders and ignores conflicts and changes in society (Ritzer, 1992: 25). Tumpek Uduh Ceremony is a manifestation of obedience to the natural law that the happiness of Balinese Hindus can be achieved if humans are able to adapt in harmony with their natural environment. The universe, including the earth, is the most special planet in the history of science, because the earth is the only planet that can be inhabited by humans. The earth is considered holy, because the earth can meet human needs. Earth is analogous to motherland and forest area also called mother earth. The name Mother Earth almost applies to all ethnic archipelago. Land as mother of earth is material and has sacred value. Somvir in Permana (2010) stated that Mother Earth benefits all life.

The feeling of deep love for land is because agriculture gives life to humans. The earth is called *hiranyavaksah*, because it has a golden chest, which is full of potential resources. The constellation of the universe and the earth as their characteristics are expressed in the following order. The universe has sun, moon, planets, galaxies with clusters of stars. Earth has mountains, rivers, seas, clouds, and solid earth material which is covers by gusts of wind. Earth has a variety of plants ranging from grasses, shrubs, trees, and life in the sea (Reg. Samhita).

The *Tumpek Uduh* Ceremony can directly support the efforts to preserve the potential of nature as tourism capital in Canggu Village. The sustainability of tourism requires the conversion of capital in 3 productive relationship (Pradana 2017). In general, capital or tourism sources can be grouped into 3 that include natural potential, cultural potential, and human potential. Natural potential consists of physical potential, flora, and fauna. These three natural potentials can be tourist attractions that play the same role, but one attraction can stand out more. In general, tourists are more interested in the outdoors such as mountains, forests and beaches. The potential of culture, in its broadest sense, does not only include high culture but includes customs and all activities in the midst of society. Human potential is a capability that exists in humans that can be used for tourism purposes.

Canggu Village is a tourism area because the area in Kuta Utara of Badung Regency has a very strategic tourism potential. Canggu Customary Village keeps a very high charm. Natural wealth in the form of beautiful panoramas in the village environment and the beauty of beaches and agro-tourism in the vicinity of Canggu Village is very suitable to be a tourist attraction that has a high bargaining value. Before arriving at Canggu Beach, tourists who visit Canggu Village can also enjoy the natural beauty of the countryside (See Figure 3).



Figure 3. Rural landscape along the road to Canggu Beach.(Photo: Ni Made Ruastiti 2018)

Similarly, the Batubolong Temple archaeological site can also be used as an object tourism icon in Badung Regency that is located in the Canggu Customary Village. Batubolong Temple is one of the archaeological sites that is a tourist attraction in Canggu Village besides a panoramic view of beautiful rural rice fields. The existence of Batubolong Temple is associated with the story of Empu Kuturan. In Lontar Empu Kuturan and Lontar Lokakranti, it was mentioned that in the XI century, when King Udayana held a meeting in Samuan Tiga, Bedulu, Gianyar accompanied by his empress, Mahendradatta and accompanied by a Purohita named Empu Kuturan (Bali Post, 28 December 2005).

According to the history believed by the native people, during his holy journey in Bali, Empu Kuturan discovered a rock near the sea to the south of Linggasana (Tabanan). At that place, Empu Kuturan saw an old man meditating solemnly. Empu Kuturan rebuked the hermit. However, the hermit was not awakened from his meditation. After the hermit was awake, he had a dialogue with Empu Kuturan and the place of dialogue was agreed upon both to be named Parang Bolong. Besides, Empu Kuturan gave the name of the hermit with *Dukuh Dadap Sakti*.

According to Lontar Tuter Ida Pedanda Sakti Wawu Rauh, the collection of I Gede Suci, Puseh Temple Leader of Banjar Pipitan Canggu, related to Lontar Dwijendra Tatwa, it was mentioned that Batubolong Temple was established related to Anjangsana Ida Danghyang Dwijendra aka Danghyang Nirartha aka Ida Pedanda Sakti Wawu Rauh who visited Bali in 1489 AD, XV century. Batubolong Temple located on Canggu Beach is shown in Figure 4.



Figure 4. Batubolong Temple. (Photo: Ni Wayan Karmini 2018)

Literally, the name *Batubolong* consists of two words, namely “batu” means stone and the word “bolong” means hole. So *Batubolong* means a hollow stone. Batubolong Temple includes the *kahyangan jagat* which specializes in *Pangulun Danu/Ulun Suwi* with the emergence of *tirtha empul* which is also the purse of Ida Batara in Batur. Batubolong Temple on Canggu beach is a holy place to worship Ida Dang Hyang Dwijendra (Ida Pedanda Sakti Wawu Rauh) and Empu Kuturan. The Batubolong Temple was already existed in the reign of King Dalem Ktut Kresna Kepakisan of the 16th century. Batubolong Temple is called the place of worship of God *Wisnu*. Batubolong Temple or Segara Batubolong is patirthan of Batur Temple.

Environmental preservation efforts in the Kuta Village area are referred to as movements to realize clean, beautiful and sustainable Canggu that are in line with the principles of *Tri Hita Karana*, i.e. the harmony of relations between humans and each other (*pawongan*), harmony of relations between humans and God (*prahyangan*), harmony of relations between humans and the natural environment (*palemahan*). Policies that are oriented towards upholding the value of *Tri Hita Karana* are upheld by the Hindu society in Bali. This is consistent with the ecological concept that humans are only part of living things and are part of the web of life (Capra 2002: 372).

In line with regional autonomy, the management of tourism objects including the cultural heritage of the Batubolong Temple needs to involve the local community. The management of cultural resources is not only the responsibility of the local government, but also involves the local community.

Management of cultural heritage or community-based regional cultural attractions (community-based management) in this area needs to be developed (Ardika 2007: 120).

Transformation of Tumpek Uduh values in the preservation of natural environment. The essence of *Tumpek Uduh*'s lesson is respect for the environment. Balinese society with its transcendental awareness, seeks to treat plants and trees as part of the *palemahan* life. It borrows Capra's (2001) term that the environment is part of the webs of life that cannot be separated from human life.

Awareness of the environment is a global problem that endangers the future of Earth. This threat is very surprising because it occurs in a short time and cannot be returned to its original form (irreversible). Efforts to preserve the environment are the responsibility of all inhabitants of the earth. Similarly, Balinese people try to conserve their environment through the practice of Hindu religious teachings in cultural activities (2018a). In this regard, *Tumpek Uduh* Ceremony has found its relevance. The teaching to love and maintain trees, to be friendly to the environment needs to be transformed into real action.

The ritual of *Tumpek Uduh* Ceremony should support the greening movement in Bali. The *Tumpek Uduh* Ceremony can be developed into an educational medium about environmental health that can be applied from elementary school to university. Health education material implemented into the School Health Business package that cares about the environmental health around the school and the surrounding community can be used as a fostering place to implement this *Tumpek Uduh* teaching. Furthermore, the transformation of the *Tumpek Uduh* teachings for environmental health can also be marketed to the Balinese community through the institution of the traditional *banjar* and *banjar dinas* as maintenance of environmental health and waste management in the *banjar* system.

The transformation of the *Tumpek Uduh* values can also be carried out by rural communities to maintain the plants in gardens, rice fields, and home yards. The efforts and actions to implement *Tumpek Uduh*'s teachings can be synergized with the greening movement that is packaged through a living pharmacy program in the yard and the arrangement of city landscapes to maintain clean, beautiful, and pleasant environments. Efforts to use the home yard as a living pharmacy as initiated through one of the main programs of the group of women can be developed properly. *Tumpek Uduh*'s teachings that support environmental preservation are very much in line with the efforts to reforest around the home grounds.

The *Tumpek Uduh* Ceremony can be used as a means to cultivate the Clean and Healthy Life Behavior Education (PHBS). PHBS in Cangu Village in the Balinese community has been carried out among the early ages in schools, namely, through the School Health Business program. Students in elementary school, junior high school, and senior high school have implemented this School Health Business program.

At the family level, the education efforts of the Living and Healthy Behavior (PHBS) can be started with a greening movement that is packaged through a family pharmacy program living in the yard. The family life pharmacy program that has been promoted by a group of women can be developed to support the arrangement of city landscapes in maintaining a clean, beautiful and pleasant environment.

Clean and Healthy Life Behavior Education (PHBS) can also be carried out through an effort to adapt waste management to the environment at the village or

banjar level. Adaptive waste management efforts can increase public awareness at *banjar* level for the environment by implementing the teachings contained in Tumpek Uduh Ceremony.

The teachings contained in the *Tumpek Uduh* Ceremony can be transformed into a vehicle for environmental conservation education. The environmental education vehicle from the teachings of *Tumpek Uduh* can be packaged as environmental health education materials to foster a love and concern for environmental preservation efforts. Based on the suggestions from the informants who have been interviewed, there are several forms of educational material that can be developed from the *Tumpek Uduh* Ceremony teachings. The transformation of *Tumpek Uduh*'s teachings can be manifested in various forms of education related to environmental health. Among them are educational packages to the community in an effort to cultivate the Clean and Healthy Life Behavior Education (PHBS), school health development, environmental health and environmental preservation efforts. The teachings of *Tumpek Uduh* need to be supported by all parties, including the government to protect the preservation and beauty of the environment, including protecting forests from damage. Efforts to preserve the environment in Bali are very important because it is able to preserve the sustainable tourism development in Kuta. Similarly, the sustainability of cultural tourism attractions requires the support of cultural owners (Ruastiti et al. 2018).

Canggu as a tourist village, is strongly supported by the tradition of *Tumpek Uduh* Ceremony. *Tumpek Uduh* Ceremony strongly supports tourism potential in Canggu Village. Canggu Village is an area that supports tourism in North Kuta. According to the type and object, Canggu Village has various types of tourism. According to Pendit's concept (2002: 38-43), the type of tourism potential that develops in Canggu Village is cultural tourism, agricultural tourism, maritime tourism, and nature reserve tourism. Cultural tourism is a tourist activity that aims to see and learn about people's conditions, cultures, and customs of other peoples or tribes. Agricultural tourism is an object and tourist attraction that is supported by the existence of agricultural land, rice fields and plantations, seed fields, etc. which groups of tourists can visit and review it with the aim of study or just wandering and enjoying the fresh variety of plants and the fertility of various types of vegetables and fruit around the plantation they visited.

Maritime or marine tourism is a type of tourism that is related to water sports activities, especially on lakes, straits, beaches, bays, or high seas such as fishing, sailing, diving by taking photos, surfing competitions and others (**Figure 4.4?**). The potential of marine tourism in Canggu Village is supported by the potential of the waves on Canggu Beach. Canggu Beach can be reached in around 30 minutes from Kuta tourism center. This beach has interesting waves for tourists who want to do surfing activities.

On this beach there are also large rocks on the beach as a place to enjoy the sunset panorama in the afternoon while enjoying culinary tours. Nature reserve tourism is a type of tourism that is associated with the potential of cultural sites in the local village in the form of nature reserves, protected parks, mountainous forest areas and so on whose preservation is protected by law. The potential of nature

reserve tourism in Canggu Village is the site of Batubolong Temple (Sutika 2013: 70).

The effort to uphold the principle of *Tri Hita Karana* will be very meaningful for sustainable tourism development in Bali. Sustainable cultural paradigms include maintaining the quality of natural and cultural resources, increasing the welfare of the local community, and the realization of tourist satisfaction (Ardika 2006). The synergy between the quality of people's culture and the environment is very potential in realizing tourist satisfaction (Pradana & Pantiyasa 2018).

According to Soemarwoto (1991: 69), structuring in every human relationship with the environment causes every human action on the environment based on binding legal rules, so that the principle of sustainability will get optimal results. That's because environmental risks not only occur naturally, but can also occur through other technological and socio-cultural factors intentionally or unintentionally. Environmental benefits and risks have a close relationship. Something can be both a benefit and a risk at the same time, so the attachment between benefits and environmental risks also appears to be that taking environmental benefits will always pose environmental risks.

The *Tumpek Uduh* teachings can be used as a vehicle to reduce environmental risks. Balinese people who carry out the *Tumpek Uduh* Ceremony consciously try to care for and protect plants, trees and their environment. In this case, the *Tumpek Uduh* teachings actually become an educational vehicle for environment and health. More broadly, the *Tumpek Uduh* ritual also teaches that Balinese Hindus have an awareness to protect the environment. The Balinese people have their own philosophy in protecting green areas, including rice fields and green lane areas in Canggu Village. The principle of protecting green areas, rice fields, and forests is in the context of efforts to preserve the environment contained in various national legal instruments, especially in Law No. 41 of 1999 concerning Forestry which is actually based on customary law. Since the kingdom in Bali, the *Mantri Juru Kayu* profession has been known or is now known as the Minister of Forestry. Lontar Manawa Swarga stated whoever cuts trees without permission, he/she will be fined five thousand *kepeng*. The sanction was followed by spiritual sanctions in the form of imposition of a curse for people who cut trees carelessly (Wiana 2010).

Tumpek Uduh teachings can be transformed into a package of educational materials in the form of brochures, posters, leaflets, pamphlets and audio visuals. Material packages related to environmental health have direct or indirect implications. The *Tumpek Uduh* Ceremony can be transformed into educational material related to environmental health and preservation. The discourse is also a reflection of a socially influential environment (Pradana 2013). Furthermore, *Tumpek Uduh*'s educational materials which are packaged in the form of brochures, posters, leaflets, pamphlets and audio visuals have implications in fostering behavior that safeguards the environment and the development of Clean and Healthy Behavior (PHBS), improving environmental health, and strengthening waste management programs.

PHBS education can be carried out in the school environment through the School Health Business program, in the family/ household environment, as well as

in the wider community such as *banjar* residents and even the general public. In the *banjar* community environment, for instance, efforts to enforce the principles of PHBS and waste management programs in the local environment can be conducted. Furthermore, the principles of PHBS and the feeling of environmental love can also be implemented for the general public. Besides having direct implications in the effort to conduct PHBS and preserve the environment, the *Tumpek Uduh* teachings have direct implications in fostering behavior that supports environmental conservation efforts. Efforts to preserve the environment are a form of sustainable development, i.e. a development process that optimizes the benefits and suitability of available natural and human resources. "Sustainable" can be interpreted as sustainability that involves physical, social, and political aspects by taking into account the management of natural resources including forests, land, and water, management of the impact of development on the environment, and human resources development. This condition can be achieved if institutional instruments include multisectoral elements which include government, private sector, and international agencies.

Efforts to preserve the environment in Canggu Village are also constructive steps in supporting sustainable tourism development. Tourism as one of the development sectors cannot be separated from its connection with sustainable development that has been proclaimed by the government in accordance with national development goals. Multisectoral tourism is a very complex phenomenon and is difficult to define by default to be universally accepted. Thus, it raises various perceptions of understanding of tourism, either as industry, as an activity, or as a system.

By maintaining the beauty and efforts to preserve the environment, the people of Canggu Village have become the subject of sustainable tourism development in their villages. Besides developing economic prosperity, they continue to preserve the environment (ecology) and Balinese cultural traditions. Thus, the development of tourism in the Canggu Adat Village is supported by the existence of ecological capacity (the ability of the natural environment to meet tourist needs), physical capacity (the ability of facilities and infrastructure to meet tourist needs), and social capacity (the ability of the destination to absorb tourism without causing negative impacts for local people), as well as economic capacity (the ability of the destination area to absorb commercial ventures but still accommodate local economic interests).

In addition, tourism in Canggu Village includes sustainable tourism, which is a level of long-term tourism activity that maintains social, economic, natural environment and cultural environments. Sustainable tourism is expected to be able to prosper the wider community within a culture-oriented development framework.

Tourism development should not be viewed from an economic aspect alone, but must also be viewed from a broader perspective, i.e. from the aspects of politics, culture, development ethics, human resources, religion and culture, leadership and community participation.

Canggu Village has become one of the tourist destinations in Bali that is visited by domestic and foreign tourists. The attraction of Canggu Village is not only on tourist attractions in the form of its natural beauty, but also the unique cultural traditions of the native people in the village. Environmental conservation

efforts in Canggu Village are in accordance with the principles of sustainable tourism development; namely the construction of tourist objects and attractions. It is carried out by taking into account: the ability to encourage the development of the nation's economic and social development, religious values, customs, views, values that live in the community, cultural preservation and environmental quality, and the continuity of the tourism business itself (Law No. 9/1990, Article 6).

Efforts to uphold the law to preserve and conserve the environment of Canggu Village are very necessary. This is in accordance with the Code of Tourism Ethics (WTO) which states that "tourism is a factor of sustainable development" (Article 3; WTO General Assembly 1999).

In addition, efforts to maintain the cleanliness and beauty of the environment in Canggu Village strongly support the principle of sustainable tourism development in accordance with *Tri Hita Karana*; i.e. the concept associated with the inner harmony of the Balinese Hindu society. Mantra (1996) argued that *Tri Hita Karana* is a balance between humans and their fellow humans (*pawongan*), humans with their environment (*palemahan*) and human relations with His God (*parahyangan*). Efforts to uphold the principle of *Tri Hita Karana* (THK) will have much meaning for sustainable tourism development in Bali. Ardika (2006) stated that the paradigm of sustainable cultural tourism includes maintaining the quality of natural and cultural resources, increasing the welfare of local society, and the realization of tourist satisfaction.

CONCLUSION AND RECOMMENDATION

Based on the description above, it can be celebrated by Canggu Kuta Bali Village collected by *Tumpek Uduh* in the form of a ritual ceremony for rare plants, suburban plants and productive plants. At the *Tumpek Uduh* Ceremony at Canggu Kuta Bali village, they prioritize the celebration as a form of appreciation for productive plants because the plants have produced many economic and health benefits for the Canggu Villager, Kuta Bali.

The manifestation of local wisdom values in the tradition of the *Tumpek Uduh* Ceremony in Canggu Village, Kuta Bali contributes to informal education for preserve the natural environment and build the embodiment of the results of the development of natural and fertile soils for the desired natural resources of Bali.

The Canggu Kuta Bali Village Community continues to celebrate *Tumpek Uduh* Because this ceremony serves as a constructive medium for environmental conservation education about local wisdom values. It can be seen from the educational material about *Tumpek Uduh* which is packaged in the form of brochures, posters, leaflets, pamphlets and audio visuals.

Until now, the people of Canggu Kuta Bali are still celebrating *Tumpek Uduh* because it has implications for the growth of adaptive attitudes and behavior towards nature, behavioral growth in preserving the natural environment and the growth of Clean and Healthy Behaviors (PHBS) and behaviors that support environmental conservation efforts to protect sustainable tourism.

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LITERATURE CITED

- Anom, I.P. 2010. "Pembangunan Pariwisata Berkelanjutan", dalam *Pariwisata Berkelanjutan Dalam Pusaran Krisis Global* 1(1): 1-14. (in Bahasa Indonesia)
- Anonymous. 2015. Makna Tumpek Atag/Tumpek Uduh/Tumpek Bubuh/Dalam Mitologi Hindu Di Bali, pp. 1-6. (in Bahasa Indonesia) Available from <http://wayantarne.blogspot.co.id/2015/02/makna-tumpek-atag-tumpek-uduh-tumpek.html>
- Arikunto. 1989. *Prosedur Penelitian Pendekatan Praktek*. Bina Aksara, Jakarata, Indonesia, 413 p. (in Bahasa Indonesia)
- Baum, T. 1994. *Human Resource Issue in International Tourism*. Butterworth- Heinemann, Oxford, England, UK, 272 p.
- Burns, P.M dan A. Holden. 1997. "Alternatives and Sustainable Tourism Development, The Way Forward", In: France, L. (Editor). *The Earthscan Reader in Sustanable Tourism*. Earthscan Publication Limited, UK, pp. 26-36.
- Harahap, Y. 1997. *Beberapa Tinjauan Mengenai Sistem Peradilan dan Penyelesaian Sengketa*. Citra Adhya Bakti, Bandung, Indonesia, 460 p. (in Bahasa Indonesia)
- Jarwis, M. 2006. *Teori Psikologi*. Bandung: Nusa Media dan Nuansa, pp. 1-316. (in Bahasa Indonesia)
- Karyono, H. A., 1997. *Kepariwisataan*. Jakarta : PT. Gramedia, pp. 1-121. (in Bahasa Indonesia)
- Kirk, J., dan M.L. Miller. 2006. *Reliability and Validity Qualitative Research, Qualitative Research Methods Series 1*. A Sage University Paper, pp. 1-88.
- Koentjaraningrat. 1985. *Ritus Peralihan di Indonesia*. P.N. Balai Pustaka, Jakarta, Indonesia, pp. 1-270. (in Bahasa Indonesia)
- Lauer, R. 1977. *Perspektif Tentang Perubahan Sosial*. Bina Aksara, Jakarta, Indonesia, pp. 1-232. (in Bahasa Indonesia)
- Majelis Umum WTO. 1999. *WTO Organisasi Pariwisata Dunia Global Etik Pariwisata*, pp. 1-2. (in Bahasa Indonesia)

- Mantra, I.B. 1996. *Landasan Kebudayaan Bali*. Yayasan Dharma Sastra, Denpasar, Bali, Indonesia, pp. 1-74. (in Bahasa Indonesia)
- Manuaba, I.B. 1997. "Strategi Perencanaan Pariwisata yang berdimensi kerakyatan". Makalah dipresentasikan dalam dialog pariwisata di PS D4 Pariwisata Universitas Udayana, 29 Nopember 1997 di Denpasar, pp. 11-15. (in Bahasa Indonesia)
- Moleong, L.J. 2004. *Metodologi Penelitian Kualitatif*. Remaja Rosdakarya, Bandung, Indonesia, pp. 1-424.
- Nasution. 2003. *Metode Research: Penelitian Ilmiah*. PT. Bumi Aksara, Jakarta, Indonesia, pp. 1-156. (in Bahasa Indonesia)
- Permana dkk. 2010. Perubahan Pola Ruang Tradisional Desa adat Desa Canggu".E-Journal (Volume 3 Nomor 1, November 2010) Fakultas Teknik Universitas Brawijaya, Malang., pp. 83-99. (in Bahasa Indonesia)
- Pradana, G.Y.K. and I.W. Pantiyasa, 2018. Makotek as tourist attraction in Munggu Village, Bali. The International Conference on Tourism, Gastronomy and Tourist Destination. Atlantis Press, Jakarta, Indonesia, pp. 10-18.
- Pradana, G.Y.K. and K.S.M. Parwati. 2017. Local-wisdom-based spa tourism in Ubud Village of Bali, Indonesia. Russian Agricultural and Socio-Economic Sciences 8(68): 188-196.
- Pradana, G.Y.K., I.N. Suarka, A.A.B. Wirawan and I.N. Dhana. 2016. Religious ideology of the tradition of Makotek in the era of globalization. E-Journal of Cultural Studies 9(1): 6-10. (in Bahasa Indonesia)
- Pradana, G.Y.K. 2013. Diskursus fenomena hamil di luar nikah dalam pertunjukan Wayang Joblar. Online Journal of Cultural Studies 1(2): 11-27. (in Bahasa Indonesia)
- Pradana, G.Y.K. 2017. Deconstruction powers of relations behind the Shadow Puppet Performance for tourism in Ubud Village, Bali. Thinkshop: Building Collaboration and Network in Globalized World (Proceedings). UNUD Press, Denpasar, Bali, Indonesia, pp. 115-124.
- Pradana, G.Y.K. 2018a. Innovation in Cenk Blonk Performance: A strategy of empowering local language through Balinese Shadow Puppet. Proceedings of the International Conference on Local Language. UNUD Press, Denpasar, Bali, Indonesia, pp. 173-182.
- Pradana, G.Y.K. 2018b. The meaning of Makotek tradition at the Munggu Village on the global era. Proceedings of the International Bali Hindusm, Tradition and Interreligious Studies. UNHI Press, Denpasar, Bali, Indonesia, pp. 122-128.
- Pradana, G.Y.K. 2018c. Implications of commodified Parwa Shadow Puppet Performance for tourism in Ubud, Bali. Business on Hospitality and Tourism 4(1): 70-79.
- Pradana, G.Y.K. 2019. *Sosiologi Pariwisata*. STPBI Press, Denpasar, Bali. (in Bahasa Indonesia)
- Ritzer, G. and S. Barry. 2012. *Teori Sosial*. Nusamedia, Bandung. Indonesia, pp. 1-1180. (in Bahasa Indonesia)
- Ruastiti, N.M., G.Y.K. Pradana, I.G.K. Purnaya and K.S.M. Parwati. 2018. The Royal Dinner Party Puri Anyar Kerambitan Tabanan: A sustainable cultural tourism attraction based on local community, pp. 1448-1459. In: Proceedings of the International Conference on Social Science. Atlantis Press, Nusa Dua.
- Senastri, N.M.J. 2008. Pengelolaan Lingkungan Hidup Berdasarkan Prinsip-Prinsip Kearifan Lokal (Studi di DESA CANGGU, Kecamatan Manggis, Kabupaten Karangasem, Provinsi Bali) (Tesis). Program Studi Magister Ilmu Hukum, Pascasarjana, Universitas Jember, Jember, Bali, Indonesia, 231 p. (Unpublished) (in Bahasa Indonesia)
- Suda, I.K. 2010. Kerangka Konseptual Hindu dalam Kontek Pelestarian Lingkungan. Universitas Hindu Indonesia, Makalah Lepas, Denpasar, Bali, Indonesia, pp. 1-6. (in Bahasa Indonesia)

Tumpek Uduh Ceremony as an education medium in the preservation...

- Sugiyono. 2005. *Metode Penelitian Administrasi*. Alfabeta, Bandung, Indonesia, 389 p. (in Bahasa Indonesia)
- Suharsimi. A. 2002. *Metodologi Penelitian*. Penerbit PT, Rineka Cipta, pp. 1-57. (in Bahasa Indonesia)
- Suradnya, I.M. 2006. Analisis Faktor-Faktor Daya Tarik Wisata Bali Dan Implikasinya Terhadap Perencanaan Pariwisata Daerah Bali. Sekolah Tinggi Pariwisata Bali, Denpasar, pp. 1-12. (in Bahasa Indonesia)
- Sutika, I.N. 2013. Hegemoni Pembangunan Villa Terhadap Subak Di Desa Cangu, Kecamatan Kuta Utara, Kabupaten Badung (Tesis). Universitas Udayana, Denpasar, Bali, Indonesia, 150 p. (Unpublished) (in Bahasa Indonesia)
- Wiana, I.K. 2010. Muliannya Pahala Menjaga Kelestarian Hutan, disampaikan pada Dharma Wacana tentang upaya pelestarian hutan menurut agama Hindu yang diselenggarakan oleh Dinas Kehutanan Provinsi Bali di Desa Ban Kabupaten Karangasem pada 24 Juni 2010, pp. 1-5. (in Bahasa Indonesia)
- Yoeti, O.A. 1997. *Perencanaan dan Pengembangan Pariwisata*. PT. Pradnya Paramita, Jakarta, Indonesia, 211 p. (in Bahasa Indonesia)

Reference Laws

- Undang-Undang Nomor 41 Tahun 1999 Tentang Kehutanan. (in Bahasa Indonesia)
- Undang-Undang Nomor 32 Ta. (in Bahasa Indonesia)
- hun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup. (in Bahasa Indonesia)
- Undang-undang Republik Indonesia No 9 Tahun 1990 Tentang Kepariwisata. (in Bahasa Indonesia)



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