

# Model of Community Participation in Environmental Conservation to Support Sustainable Tourism

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**Abstract**—Sustainable tourism has always been a reference in the development of tourism all around the world, awareness of tourism industry players, local community and tourists, in supporting tourism development more aggressively heard as a discourse to improve community welfare. This study used cultural studies approach, tourism, and the theory of participation. The research used an interpretive qualitative method in accordance with the field of social humanities research. The data collection techniques were carried out by conducting in-depth interviews with key informants, Head of Kuta Customary Village/ Bendesa adat and head of sub village (Klian banjar) and Kuta community leaders. Direct observation was also carried out in 13 banjar of Kuta customary village which were supporters of the Kuta tourist area. Some documentation also examined for completing this research. The results showed (1) environmental problems that occur in the Kuta tourism area in the form of uncontrolled land conversion, air and water pollution, waste, loss of cultural spatial structure, (2) Form of community participation in Desa Adat Kuta (Kuta customary village) in environmental conservation seen from Arnstein's ladder of citizen participation which is citizen control, delegate power, and partnership or in division of levels included in the degree of citizen power, (3) The model of community participation is arranged in order to involve the community in term of environmental conservation. From those problems can be solved by increasing direct participation of the local community. So that they feel the sense of belonging of their village for the realization of sustainable tourism area.

**Keywords**—community participation, environmental conservation, sustainable tourism

## I. INTRODUCTION

The issue of sustainable tourism, it is always associated with the sustainability of tourism in several aspects, such as economic, environmental, social/cultural aspects which include tourist satisfaction and involvement of local communities who are the subjects in maintaining the environment of the tourism area [1], [2], [3]. Based on this paradigm, sustainability destination areas in the Kuta tourism area deserve attention in order to filter out the bad influences of the environment that cannot be avoided. The participation of Kuta community is very necessary related to environmental conservation, because *Desa Adat Kuta* as the main support of the Kuta destination may not sustain without community participation. Social environment and physical environment in *Desa Adat Kuta* which is a support for tourism in the Kuta area is a blend of natural beauty (Kuta beach) with cultural elements (religion, customs, livelihoods, arts, languages, and

technology) that work together to develop tourism in Kuta. However, empirically Kuta tourism that relies on the natural beauty of the beach is constantly being attacked by pollution coming from household waste, rivers, and from various tourism businesses and activities. Besides that, there are many interests that concerned of environmental conservation need to be given attention in order to see the conservation discourse under the guise of mutual interests [4], [5]. Therefore, it is necessary to do a study to find out the problems that occurred in the Kuta tourism area can be examined.

The hustle and bustle of tourism activities in Kuta has an impact on the physical and social environment [6], [7] therefore community and stakeholder participation are very much needed in the sustainability of tourism, especially in recruiting, equating perceptions and maintaining the sustainability of community participation [8], [9], [10]. Along with the increasing of tourist visits, the carrying capacity of the area is decreased due to the increasing of number of tourists supporting buildings. Moreover the external problems in the form of drifted waste which always complained by tourists and surrounding residents. In addition, the continuous use of the beach by tourists, and as a ritual activity by the surrounding community needs to be sought and made a strategy that can be used as a model of conservation as a reference for achieving economic, social/cultural and environmental sustainability tourism.

## II. RESEARCH METHOD

This study used qualitative-interpretative analysis [11], approached by cultural studies, sustainable tourism and Arnstein's ladder of citizen participation theory. Data was collected through observation in *Desa Adat Kuta* as the supporter of the Kuta tourism area. The research instrument was the researchers themselves assisted with research instruments in the form of voice recorders to conduct in-depth interviews with respondents. Then data collection techniques used in this study were observations, documentations, and in-depth interviews with the Head of *Desa Adat Kuta* and 13 *Klian Adat Kuta*. In addition, in order to complete data of interview, a questionnaire was also distributed through Google Form which was sent via WhatsApp to the leader of community, member of sub-village and head of *Desa Adat Kuta*. The analysis technique was related to qualitative analysis procedures as stated by Miles and Huberman [12], namely data reduction, data display, and conclusion or verification.

### III. RESULT AND DISCUSSION

#### A. Environmental Problems in Kuta Tourism Area

Tourism always brings positive and negative impacts on every aspect both environment, socio-culture and economy [13], [14]. Many positive impacts have been felt by various parties so that tourism continues to be developed to support the life of *Desa Adat* Kuta. However, the negative impact on the environment is also not small. Environmental problems in the Kuta Tourism Area have been going on for a long time, because the characteristics of this area are indeed integrated areas. Master plan was not designed like the Nusa Dua enclave area, where environmental problems were handled by the ITDC area manager. In this region, environmental problems are still a classic problem that is difficult to handle to be an ideal tourism area because development occurs spontaneously and integrated with the local community. The negative impact of tourism on the environment in *Desa Adat* Kuta can be seen as follows:

1) *Conversion of land functions*: The incessant conversion of land in *Desa Adat* Kuta, environments has been unavoidable because of investors' demand for land and the economic needs of the community to sell or rent their land. The conversion of land causes the loss of rice fields in the village, this is caused by the economic and social/cultural, demographic, and political needs of the community. But the most prominent are the economic and cultural factors that caused the people of Kuta to convert their land to tourism interests. With the loss of rice fields, Subak associations are also missing in terms of the distribution of water irrigation. Now, Subak members only gather to lead ceremonies or rituals in the Subak temple, because even though the fields are gone, the Subak temple is still surrounded by Subak members.

2) *Pollution*: There are many visits of domestic and foreign tourists who come to Kuta, of course this caused confusion, congestion, as well as being the main cause of air pollution that comes from exhaust emissions of motor vehicles whose numbers are increasing every year. This is due to the increasing number of motorized vehicles caused by the public transportation system not functioning properly, included the Kuta Tourism area. Air pollution in Kuta is also caused by the increasing number of migrants and visitors who always through Kuta tourism area every day. Especially on holidays or weekends where tourism activities are increasing such as surfing, sunbathing, seeing the sunset and just walking around taking selfi. In addition to air pollution, water pollution also occurs on Kuta beach, especially during the rainy season and the west wind season which results in various types of garbage being washed away on Kuta Beach.

3) *Rubbish*: Although the handling of waste in Kuta has been carried out by various parties, the problem of garbage has not been completely resolved, especially during the west wind season which usually occurs around September every year, and also during the rainy season when household, industrial, market and ceremonial waste, drifted into the river and ended at the beach. According to the Head of the Badung Environmental and Hygiene Service

(DLHK), the garbage transported during the rainy season, high waves and strong winds reaches 50 tons every day, even reaching 150 tons which is dominated by plastic waste, pieces of wood, household waste. The handling of garbage is very difficult to predict and deal with because the authority of the sea located in the central government, Regency government in this case can only handle if the garbage has already arrived at the beach. Handling of garbage is also often hampered by late transportation due to long lines of garbage trucks in Suwung Landfill.

4) *Changes in cultural spatial*: The reduced cultural space can be seen along the road segments in the tourism industry of Kuta which are dominated or closed by commercial and tourism buildings. This condition is accepted as a fact of life in the landscape of tourist areas and as an economic choice, taking into account all social, cultural and moral values, related to direct impact and influence of policies applied in this region. The relationship between customary villages and tourism industry areas seems to be dilemma, with the existence of cultural space conflicts mentioned above. The dominance of commercial space in this tourist area can be classified into three major groups, namely (1) a group of commercial small buildings in the form of outlets or storefronts of certain products, shops for daily tourist needs known as mini markets, service places, such as laundry, money changers and others; (2) recreational and tourist building groups such as: spa, karaoke, café and restaurants; and (3) large and wide- scale building groups for tourist accommodation such as lodging, budget hotels, star-rated hotels to tourist travel agency terminals.

According to Darmadi [15], the cultural space is marked and dominated by the 'motion' space of the established and legitimate economic activities in tourist areas. Now, Kuta is changing from the front face to the deepest corners of the space and residence of its inhabitants. *Kori* buildings or traditional house gates, including *telajakan* (front of the house fence) and even the wall of the yard already lost, and functioned as commercial places to get income from the rental or used for their own place of business.

#### B. Community Participation of *Desa Adat* Kuta in Conserving Environment

*Desa Adat* Kuta is a customary village located in a cosmopolitan tourism area that faces tourists and migrants every day. Whereas the community in question is *krama* or community which occupies the *desa adat* area as stated in the Bali Province Regulation (Perda) regarding *Desa Adat*/Customary Village (Perda no 4 th 2019) [16], which has just been approved by the Governor of Bali. The basic consideration is the reality of *desa adat* as a natural cosmological unit of Bali which is socio-religious bound to the universe, especially the Great Besakih Temple as *purusa* (male), Batur Temple as *pradana* (female). In addition, several *desa adat* areas are located across regencies/cities. Balinese custom must be managed related to unit of Bali, cannot be managed partially per district/city area. So that Balinese custom becomes strong unity of identity for Balinese people. The Regional Regulation also includes clear arrangements regarding categories of manners along with

their respective obligations and self-reliance (rights). As stated in chapter 8 of the regulation. There is an explanation that *Krama of desa adat*, namely (1) Balinese people who are Hindus who called *Mipil* (originated) and registered in the local customary village, (2) *krama tamiu*, ie Balinese people who are Hindu who not originated from that village, but registered at customary villages, and (3) *tamiu*, namely people other than, *krama* and *krama tamiu* who were temporarily stay in the authority of a customary village or residing and registered in the local customary village.

Likewise, what happened in *Desa Adat Kuta*, which had implemented customary village regulations before the Perda was ratified. So that the people of Kuta who take part in environmental conservation as stated in the regulation, namely the *original krama*, *krama tamiu* and *tamiu* who lives temporarily in *Desa Adat Kuta*. So, the three types of people who live in Kuta should participate in maintaining and conserving the environment. However, the participation varies according to agreed zones. The zones in question are as follows:

1) *Beach*: Cleanliness of Kuta Beach, which is an icon of the Kuta tourism area, shared responsibility between *desa adat* and tourism actors (hotel entrepreneurs, restaurants, vendors who make a living around the beach). The beach in front of the hotel and restaurant hold the responsibility of the concerned. While the public beach has become the responsibility of the *desa adat* delegated to several local entrepreneurs who also make a living on Kuta beach. According to Chairperson of the Samudra Jaya Kuta Fisheries Cooperation, in maintaining the cleanliness of the Kuta beach, it is divided into several zones, namely the public zone (the beach specifically for *melasti* ceremony), the *ngaben/cremation* zone near the cemetery, the fishery zone is divided into 4 groups. Group I is responsible for the fishermen's beach near the cemetery, group II and III on the *jerman* beach near the hotel Patra Bali, and group IV on the Segara beach. Each zone is delegated to those responsible (fishermen) who make a living along Kuta beach. In addition, the vendors were also invited to participate together in handling cleanliness. In addition, from the Coca-Cola company, it also supports beach cleaning programs by providing four beach tractors, two barber surf rakes, three garbage trucks, 78 workers employed from local communities around the beach, and 150 new bins per year. CCAI (Coca-Cola Amatil Indonesia is expanding the program through an integrated waste processing facility (TPST), to develop and improve the waste management system by launching the Bali Beach Clean Up learning center (BBCU). Starting this year, CCAI donates three types of systems a trash can for the community in their operation area to raise awareness about the importance of sharing the type of garbage. Biznet network, one of telecommunication operators, through its campaign of Bali Beach Cleaning Program, also participated in Kuta beach cleaning.

2) *Road*: Apart from the cleanliness of Kuta beach, as a tourism area, all roads in Kuta are also kept clean. According to Head of *Desa Adat Kuta* (Bendesa Adat) and Kuta Community Leader, the cleanliness of the road is the responsibility of the Regional Government, namely DLHK

(Boad of environmental and cleanliness) which sweeps the streets every day. Whereas the alleys that are not reachable by DLHK are cleaned by residents who occupy houses around the alley.

3) *Bale Banjar*: Public places such as the Bale banjar or village hall are used for meeting the customary sub-village (banjar adat) and Official sub-village (banjar dinas), the cleanliness of which is the responsibility of all banjar members. In maintaining the cleanliness of the banjar in the customary village of Kuta, each has a different way. Most banjar hire cleaning staff to clean the banjar hall and surrounding every day. Only on certain days are cleaned together, such as if there are ritual ceremonies in the banjar temple, visitation, counseling, socialization and regular banjar events such as Posyandu (integrated service), Karang Taruna (youngster organization) activity, competitions, and other events related to traditional and official events.

4) *Household*: The cleanliness of the household is the responsibility of each household member. The head of banjar and the head of member of banjar wife, appealed to members of the banjar wife or PKK always keep and maintain the environment to avoid mosquito nests and diseases caused by environmental hygiene. In connection with the Bali Governor Regulation No. 97. 2018 regarding restrictions on the generation of disposable plastic garbage, Head of *Desa Adat Kuta* have also socialized restrictions on the use of disposable plastics, for household purposes. For example, if you go to the market, you should bring your own bag, if you go to the temple, use a container or place that is not made of plastic for a single use.

5) *Temple*: Temple is a holy place for community of *desa adat* who are Hindus, where cleanliness is also the responsibility of the members of temple that are related. Based on the results of an interview with Bendesa Adat Kuta, that each temple in the authority of the village, was kept clean both by the members themselves and delegated to cleaners by paying or renting cleaning workers on a monthly basis. For cleanliness of outdoor *tempon* main road, handled by DLHK Badung, like other roads that are the responsibility of DLHK. When there is a temple celebration ceremony, the preparation including surrounding place of the temples are cleaned together by members of the temple itself.

From the above participation, community in *Desa Adat Kuta* which is a supporter of the Kuta tourism area, in preserving the environment can be seen in several environmental spheres which are divided into several places or zones. In accordance with the ladder theory of Arnstein [17], which consists of eight steps, (manipulation, therapy, informing, consultation, placation, partnership, delegated power, citizen control). From the eight steps, grouped into 3 groups of participation, (1) *Non Participation* (which does not participate), which is included in this group is manipulation and therapy, at both levels the management of *desa adat* completely eliminates community participation. (2) *Tokenism* (negative, discriminatory treatment), which is included in this group are informing, consultation, and

placation, in this group the community is allowed and even given a space to participate, but the management of *desa adat* remains in the original plan. (3). *Citizen Power* (community power), which is included in this group is partnership, delegated power, and citizen control. At this level, community participation is ideally created, they are given the freedom to participate, determine the future of their village and are able to control the performance of the Indigenous Village Administrators well.

From the three forms of participation, community participation in *Desa Adat Kuta* occupies the third level of citizen power, although overall it cannot meet the requirements, especially in citizen control points. This happen due to the division of environmental cleanliness in this village divided into several zones, and each zone already has responsibility.

### C. Model of Community Participation

The model of community participation in environmental conservation (Fig.1), generally starting with the globalization of renewing all aspects of life, including tourism which is a cross-country business and the movement of individuals or groups from, within, and to a destination. Globalization is also influenced by the advancement of information and communication technology, so that one's movements and intellectual development develop rapidly. Not only that from an economic standpoint it greatly facilitates capital movements, financial services, the exchange of goods and services so that it automatically facilitates people to transact. In terms of culture, some countries are increasingly open, making it easier for countries in the world to interact, establish cooperation in various fields which results in the entry of new cultures, new knowledge, new things from abroad into the country and vice versa. The existence of globalization causes positive and negative impacts on all aspects of life including tourism; therefore, it is necessary to have arrangements in a destination visited so that harmony can occur towards sustainable tourism [18]. Speaking of sustainable tourism, especially in environmental conservation in the customary village of Kuta for the sake of the sustainability.

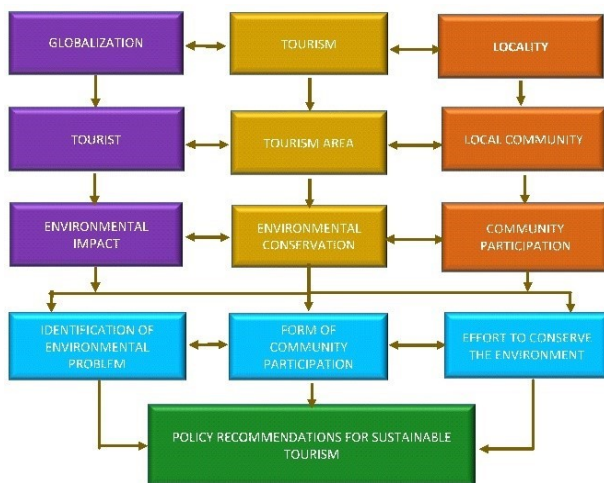


Fig. 1. Example of a model of community participation in conservation of the environment.

1) *Locality*: The localization referred to in this model is the opposite of globalization, which is an important component that can also counter and also offset globalization. In this case the localization was represented by the local community who hosted the Kuta tourism area. In preserving the environment that involves customary village communities as the main supporters of Kuta's tourism area, tourists need to have a high awareness to make tourists comfortable, and be able to maintain the environment and local culture, so that tourism can be realized. Kuta tourism area, utilizing the beach as a tourism icon. The cleanliness of the beach is very dependent on the responsible people who have been delegated according to the zone. In addition to the beach cleaning the area in general has also been carried out by various parties such as hotels, restaurants, banjars, fishermen, traders, and all parties involved in the business in the Kuta beach area.

2) *Tourism and Tourism Areas*: Tourism in this case is seen as a destination or tourism area that involves visitors and host communities. To make the tourism area a sustainable area, the participation of the community in environmental conservation must always be increased so that the sense of belonging of the community is increasingly high in maintaining its territory as a destination that can support people's lives in a sustainable manner. For this reason, a model is needed to create harmony together based on the concept of Tri Hita Karana proclaimed by *Desa Adat* in handling tourism.

3) *Tourists and Local Communities*: Activities and various activities carried out by tourists in the Kuta tourism area, have an impact on the physical environment and social culture environment of Kuta. The local community as the host who gets the economic benefits from tourism is obliged to preserve the environment together with stakeholders. So that, what is suggested by the *Bendesa Adat* through *Klian Adat*, should be carried out as well as possible for the sake of environmental sustainability.

Thus, the design of a model, can be used as a guide in increasing community participation through identification of environmental problem by understanding the environmental impacts caused by tourist activities. In addition, the forms of community participation need to be improved to increase the sense of ownership of their respective regions.

### IV. CONCLUSION

The participation of communities in Kuta related to conserving the environment is direct and indirect because the handling of the environment in *Desa Adat Kuta* is divided into several parts with the main focus is Kuta beach, because it is an icon of tourism in the region. The implementation of environmental preservation is directed to the concept of Tri Hita Karana (*Prahyangan, Pawongan, Palemahan*), especially *palemahan*. In terms of *palemahan* or physical environment that supports sustainable tourism begins the cleanliness of beach zoning, *banjar*, housing, public places, and shrines (temples). Residents of each *banjar* (*adat* and *dinas*) have different role related to participating because there are several *banjar* that apply environmental hygiene regularly, on the other hand only a few do it when there are activities in *banjar* or there are a certain ceremonies. At the

same time some people delegate their place cleanliness by paying or renting cleaning staff. In general, the Kuta customary village community participates both directly and indirectly or through other people who are hired or paid. It can be said that public participation in the Kuta tourism area based on Arnstein's ladder of citizen participation is at the level of Citizen Power which consists of partnerships, delegated power, and citizen control. At this level community participation is ideally created, they are given the freedom to participate, determine the future of the region or in this case the Kuta tourism area.

The recommended community participation model can be used as a suggestion to *klian banjar and bendesa adat* to increase direct participation to all communities, with the hope that they can better feel the sense of belonging of their region, while supporting environmental campaigns to realize sustainable tourism.

Realizing the participation of the community, *desa adat* is suggested to always coordinate with the Head of Kuta Sub-District, and stay alert with environmental conservation regulations that come from the regional or sub-district governments, so that they are immediately update all information to the all the head of *banjar*. Thus, each head of *banjar* can distribute the regulation to all members of the *banjar* to both male and female.

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