



Perception on Sustainable Tourism in Sudaji Tourism Village Bali: Community vs Tourists

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Abstract. Tourism village is a way to sustainable tourism development in optimizing village resources while reducing any undesirable impacts on natural, cultural and environment, including water consumption, waste, garbage and environmental damage due to crowd activities. The activities in the tourism village requires a carefully integrated planning, to maintain the natural environment but still attractive for tourists to visit. Tourists, who have environmental awareness, like to visit tourist villages with sustainable development. The study is located in Sudaji tourism village and used mixed method by combining statistical analysis, both descriptive and inferential, with Focused Group Discussion (FGD) for variable of perception on sustainable tourism, constructed from two indicators; 1) Attention to Environmental Burden (AEB), and 2) Concerns for Conservation Efforts (CCE). The result is, the concept of Sustainable Tourism has been well understood by the community and the tourists, and no significant difference ($p > 0.05$) with the perception among tourists, but a bit difference among communities. The community and tourists have good awareness about sustainable tourism and it has become a prerequisite for Sudaji as a tourism village to organize an event, particularly because it has various potentials for organizing events that can also elevate the local cultures, and increase community economic welfare as well.

Keywords: Sustainable Tourism · Environmental Burden · Conservation Efforts · Organizing Events Event Activities

1 Introduction

Sustainable tourism has become a big concern and gained increasing attention particularly for the global tourism industry, such as Indonesia. UNWTO as a tourism world organization has a greater attention to sustainable tourism as mentioned by Indonesia Ministry of Foreign Affairs [1]. The Indonesian government has also a serious commitment in implementing sustainable tourism. Regulation of Indonesia Minister of Tourism No.14/2016 [2] states that sustainable tourism should refer to environmental, economic and socio-cultural aspects in developing tourist destinations. In addition, by UNWTO [3] that a suitable balance must be established between the three dimensions to ensure its long-term sustainability.

Tourism village is a form of tourism and as empowerment of local communities in tourism destinations. The local communities can develop and manage tourism potential in

their village. This condition will enable positive impact of tourism development on their community, standard of living and the sustainability impact in the long term. Exploring the tourism village potential by organizing event activities, while keeping attention to the diversity of biological resources, environmental and natural peculiarities and cultural preservation are good options to attract tourists, especially those who are interested and concerned in sustainability tourism. Kurniasih, et al. [4] mentioned, it is necessary to reorientation from the natural-based village model into the cultural-based village model by raising and exploring the existing culture through unique and different tourism products.

However, tourism villages face challenges. There is no strategic vision and perception of the local communities for sustainable tourism, low level of interest, awareness and human resource capabilities, cultural barriers and tourist scams [5]. These kinds of challenges are also being faced by Sudaji Tourism Village, especially the local community in relation to the perception differences and the community awareness.

Sudaji tourism village as one of the villages in Sawan District, Buleleng Regency, North Bali has many tourism potentials, such as Sekumpul waterfall which is the most popular waterfall in Bali, terraced rice fields as agricultural culture, wide range of fruit trees, Hindu ritual heritage and local wisdom of the community in maintaining the environmental wisdom in natural. The local wisdom of Sudaji Village has been obtained from generation to generation and practiced daily by local people through various events. Tourists who visit this village can enjoy the natural beauty of the village and participate in environmental activities with local people. Dahlan, et al. [6] mentioned that agricultural systems can maintain the existence of social organizations, value systems and cultural practices related to resource management and food production. Therefore, it should be able to guarantee conservation and have access to natural resources.

The efforts to keep local wisdom and culture of Sudaji Village in preservation are expected to improve the welfare of the community in relation to the tourism sector, especially after getting awarded as the best tourism village by Bali Provincial Government [7]. However, the relationship of community's event activities with the environment is complex. The negative impact of the tourism sector can gradually destroy the environmental resources. Are the benefits of economic and social factors proportional enough to the environmental impacts, before, during or after the event?

This research explains the techniques that can be done in relation to formulating problems of (1) What are the community's perceptions to sustainable tourism in relation with event activities in Sudaji Village? (2) What are the tourists' perceptions of sustainable tourism in relation to event activities in Sudaji Village? (3) Are the communities' and tourists' perceptions of sustainable tourism related with event activities in the Sudaji Tourism Village the same or different? (4) Do the demographic variables of communities and tourists make different perceptions toward sustainable tourism?

2 Objectives

The aim of the research is to find the similarities as well as differences between community and tourists towards perception on environmental sustainability, in order to see the feasibility to make event industry in the Sudaji village without harming the environment. This kind of potential economic generating is in accordance with the post

pandemic strategy regarding new orientation of the ministry of tourism, and time to find out the preparedness of the village for this kind of business.

3 Theoretical review

Perception on sustainable tourism of urban and rural eco-villages in Bali was conducted by Halim and Ervina [8] for two tourism villages in Bali, namely Sanur Kauh Village as a tourist village located in an urban area and Blimbingsari Village, located in a rural area. The research results indicate significant differences in perception on sustainable tourism between the community and the tourists in eco-villages located in urban and rural areas and it may be determined by the village's location and physical environment. Research of Setiawan, et al. [9] suggests that the emergence of communities of thematic environments is beneficial for some people, allowing them to learn from others so that they can improve their ability to collaborate in order to meet their household needs and the needs of the community. This readiness proves the adaptation process and social learning from new and flexible social networks, which have become practical tools to find sustainable means of livelihood.

Relevant to the research topic, Dahlan, et al. mentioned the knowledge and experience of Sudaji local people are being kept and practiced daily till now. Data shows that the Subak system is being used in managing natural resources in the village. Through Subak local people are not only managing social-economy needs but it is also a public area to maintain local spirit.

Astawa, et al. [10] on the research mentioned that community welfare is the goal in the tourism development and not easy to achieve, due to the diverse condition of resources owned by each village. Therefore, an innovative effort is needed through a study in order to create products that are able to strengthen the tourism village. The conclusion of the research is, the community has high awareness on the sustainability of tourism. It can be seen from their involvement in the event and the commitment in maintaining cultural and natural conservation.

4 Methods

There are three hypotheses to formulate the research problems:

- H1: There are significantly different perceptions on sustainable tourism in relation with event activities between Sudaji communities and the tourists.
- H2: There are significantly different perceptions on sustainable tourism in relation with event activities between Sudaji communities and the tourists based on demographic variables.
- H3: Demographic variables significantly determine attention to environmental burdens, concern for conservation efforts and perceptions of sustainable tourism

This research uses a Mixed-Method. A quantitative approach is carried out through a questionnaire survey by comparing perceptions between the local people and tourists through two indicators: 1) attention to environmental burden (Attention to Environment Burden/AEB), and 2) concern for conservation efforts (Concerns for Conservation

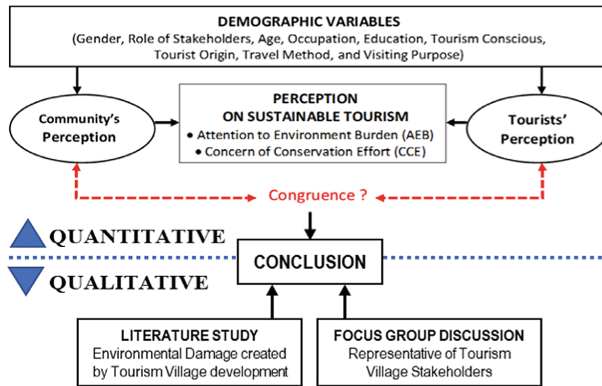


Fig. 1. Conceptual Framework

Efforts/CCE) as proposed by Sudarto [11]. A qualitative approach to seeing the environmental impacts that arise as a result of the event activity is carried out through a group discussion forum (FGD/Forum Group Discussion) for tourism village stakeholders and literature studies related to cases of environmental damage due to tourism village development as illustrated in Fig. 1.

A questionnaire for community and tourists consists of two indicators as explained above. Indicators of Perception on Sustainable Tourism are Attention to Environmental Burden (AEB) and Concern for Conservation Efforts (CCE). Each indicator has five items using 5 points Likert scale, then the interpretation of the score obtained.

The quantitative analysis was carried out through the significance of differences, T-Test and F-Test (Analysis of Variance/ANAVAR) which were applied to demographic variables. The survey form at the questionnaire uses a nominal scale for the variables 1) Gender, 2) Stakeholders, 3) Age, 4) Education, 5) Occupation and 6) Tourism conscious. Data was analysed to determine whether the scores differed among or within groups of the variables. For data with interval and ordinal scales, such as: 3) Age, 4) Education, and 6) Tourism conscious, the correlation can also be found. The difference between the mean value (means) is calculated and compared using the least squares method (Least Significant Difference/LSD). The qualitative data were obtained through FGDs and literature studies from previous research conducted by other researchers. Statistical analysis using SPSS and the results are presented in the form of a comparison table.

5 Findings and discussion

5.1 Quantitative Analysis of Community Group

Perceptions of sustainable tourism related to events activities are based on four groups of tourism village stakeholders: 1) Village Officials, 2) Village Organizations (Village Activists), 3) DeWi Managers (Village Managers), and 4) Community (community member). Mean Scores (μ) of Community's Perception on Sustainable Tourism.

- A. The gender variable: male have better AEB ($\mu = 19,5$) and CCE ($\mu = 2123$) than females as well as the perception of sustainable tourism in tourism ($\mu = 40,68$) is more positive for male than females ($M > F$).
- B. The stakeholder variable: village managers have the highest score of AEB ($\mu = 20,36$) and CCE ($\mu = 22,55$), followed by official and then community. Perception ($\mu = 45,91$) of tourism sustainability due to the development impact of a tourism village is perceived more positively by the tourism village managers, followed by the village officials, and then the community members.
- C. The age variable: the highest score of AEB ($\mu = 19,10$) is by the age group of 35–45 years, then > 45 years, 17–24 years, then 25–34 years. CCE ($\mu = 23$) and perceptions ($\mu = 41,33$) of sustainable tourism have more positive scores from the age group > 45 years, followed by 35–45 years, 25–35 years, then 17–24 years.
- D. The education variable: others have the highest score of AEB ($\mu = 21,25$) and CCE ($\mu = 21$), followed by undergraduate, then high school. As well as the perception ($\mu = 42,25$) of sustainable tourism, others have the highest score, followed by undergraduate, then high school.
- E. The occupation variable: the highest score of AEB ($\mu = 20$) is by others and civil servants, followed by entrepreneurs and private employees, then housewives. The highest CCE ($\mu = 22,89$) score is by others followed by entrepreneur and civil servant, private employees and housewives as the lowest one. The highest score of perception ($\mu = 41,22$) of sustainable tourism is by others, followed by entrepreneurs, civil servants, private employees, and housewives.
- F. The tourism awareness variable: the highest score of AEB ($\mu = 19,17$), CCE ($\mu = 20,83$), perception ($\mu = 40$) are from highly conscious, followed by conscious, then somewhat conscious.

5.2 Quantitative Analysis of Tourist Group

Summarizing of descriptive statistical results toward data processing, where the mean value stated for each measured group of tourist groups.

- A. The gender variables: male tourists have AEB ($\mu = 19,67$) and CCE ($\mu = 22,33$) higher than women as well as the perception ($\mu = 42$) of sustainable tourism due to the development of tourist villages is more positive by male tourists than women.
- B. The tourist origin variable: AEB ($\mu = 21$) and CCE ($\mu = 25$) of local Bali tourists are higher than foreign tourists. Likewise, the perception ($\mu = 42$) of sustainable tourism due to the development of tourist villages is more positive by local Balinese tourists than for foreigners. There was only one non-Balinese domestic tourist who came to Sudaji during the research carried out due to pandemic Covid-19 period, so the average value could not be calculated.

- C. The age variable: the highest score of AEB ($\mu = 20$) and a more positive perception ($\mu = 42,5$) toward sustainable tourism by the age group 17–24 years, followed by > 45 years, then 25–34 years. The highest score of CCE ($\mu = 22,75$) by > 45-year age group, followed by 17–24 years, then 25–34 years.
- D. The education variables, AEB ($\mu = 21$) and CCE ($\mu = 24$) have better and positive ($\mu = 45$) perception of sustainable tourism by the high school, followed by graduates, and then the postgraduate ones.
- E. The occupation variables, AEB ($\mu = 19$) and CCE ($\mu = 22,8$) have better and more positive perceptions ($\mu = 41,8$) of sustainable tourism by groups of private employees than other groups. The self-employed group was only represented by one respondent, so the average could not be calculated.
- F. The travel method variable, AEB ($\mu = 20,71$) and CCE ($\mu = 23,71$) have better and more positive perception ($\mu = 44,43$) of sustainable tourism by group of tourists who traveled with a partner, followed by alone, then with family.
- G. The visiting purpose variable, AEB ($\mu = 20,5$) and CCE ($\mu = 24$) have better and more positive perception ($\mu = 40,5$) of sustainable tourism by groups who wanted to enjoy agro-tourism, followed by cultural tourism, and then eco-tourism.

5.3 Inferential Analysis

The different test for community groups in between and within various measured groups was carried out through the one-way analysis of variance (Anavar) method with the F-test. From these various groups, the differences occurred at the gender variable on the AEB indicator ($F = 4,862$; $p = 0.035$) and the perception variable towards sustainable tourism ($F = 5.022$; $p = 0.032$).

Different tests for tourist groups were carried out through one-way anavar (F-test). The result shows that the difference occurs in the educational variable for the CCE indicator ($F = 4,970$; $p = 0.032$) and travel method for both the AEB indicator ($F = 10.024$; $p = 0.004$), the CCE indicator ($F = 5.348$; $p = 0.026$) as well as on perceptions toward sustainable tourism ($F = 8,046$; $p = 0.008$).

The correlation test for community groups is significant on the variables of age and tourism awareness with the AEB indicator, the CCE indicator and the perception variable towards sustainable tourism. The correlation between the age variable and the CCE indicator shows that the older the age, the higher the concern for conservation efforts ($r = 0.313$; $p < 0.05$). The correlation between the tourism awareness variable and the AEB indicator as well as the perception variable shows that the more people aware of tourism, the higher their attention towards the environmental burdens ($r = 0.288$; $p < 0.05$), and become more positive toward the perception or more aware toward the importance of sustainable tourism ($r = 0.426$; $p < 0.01$).

Different tests between community groups and tourist groups were carried out on the indicators AEB, CCE and perception variables towards sustainable tourism, where the results were no significant differences between the two groups as stated. Thus, both tourists and the community have positive perceptions of sustainable tourism. This statement means that both community and tourists have a good awareness of sustainable tourism as an absolute prerequisite for events activities in Sudaji Village.

Additional analysis was carried out for community groups. A significant correlation also occurred in the AEB and CCE indicators ($r = 0.328$; $p < 0.05$), which means that the

greater the community's attention to environmental burdens, the more they care about conservation efforts, and also between indicators. AEB and the perception of sustainable tourism ($r = 0.722$; $p < 0.01$) as well as the CCE indicator and the perception of Sustainable tourism ($r = 0.654$; $p > 0.01$) which automatically have a positive correlation because the perception variable is built because the perception variable is built by the AEB and CCE indicators. Whereas in the tourist group, a significant correlation also occurred between the AEB and CCE indicators ($r = 0.881$; $p < 0.01$), which means that the more tourists pay attention to the environmental burden, the more they pay attention to conservation efforts, and also between the AEB and AEB indicators. perception of sustainable tourism ($r = 0.932$; $p < 0.01$) as well as indicators of conservation efforts and perceptions of sustainable tourism ($r = 0.958$; $p > 0.01$).

However, the correlation coefficient of the two indicators and the perception variable towards sustainable tourism is higher by the tourist group than the community group, although the results show that both indicators are valid in compiling the perception variable towards sustainable tourism.

5.4 Qualitative Analysis

Data obtained from focus group discussion (FGD) through structured interview questions were analyzed and categorized into three main themes, namely a review of the environmental burden, conservation efforts, and tourism potential of the Sudaji Tourism Village.

The review of the environmental burden concluded that Sudaji Village already has a Waste Management Site based on Reduce, Reuse, Recycle (TPS3R), spring water available but has not been optimally utilized. Most people already had a fairly good level of environmental cleanliness in Sudaji Village, therefore the pollution level is relatively low, and they still rely on motorbikes as a means of transportation.

The review of conservation efforts concluded that the community's concern for the environment is quite high; people want to live in a green, sustainable, beautiful and comfortable environment. The Sudaji community is in a good level of living. Each house is equipped with adequate facilities including bathing, washing and toilet facilities. Fishing in rivers, rice fields and gardening are some popular outdoor activities in the village.

The review of village potential concluded that tourism development in Sudaji Village relies heavily on natural resources combined with local wisdom. The villages potential for organizing an event are as following:

- a. Bukit Cemara Geseng, a protected forest with cypress trees, clove and durian plantations is a good place for outdoor activities such as field lectures on the natural environment, mass yoga, bath forest/shinrinyoku, and others.
- b. River attraction is good for those who like adventure activities, such as tubing & rafting or outbound events.
- c. Agro-tourism is a good activity for those who like to know various fruits available in the village such as durian, mangosteen, rambutan, and cloves. Organizing an outbound event in the middle of a plantation can also be an attractive event package to be offered to companies/organizations/institutions.

- d. Agricultural attraction is a good option for those curious to do farming activities and also can be created for groups.
- e. Subak cultural attraction is a special product of the irrigation system and celebrated in the form of a mass ceremony known as the Bukakak. The Bukakak tradition is a special attraction for tourists. Ngusaba Bukakak is a symbol of gratitude that the farmers give to God Almighty.
- f. The attractions of spiritual tourism such as the celebration of melasti, novelty, odalan, aci-aci hari, sabe dalem, ngerebeg and wayonan.
- g. The attraction of local people's daily activities is an interesting activity and can be created in a special interest tour package including courses/learning gamelan or *nabuh*, making coconut oil, making palm sugar, making *canang*, and Balinese dance.
- h. The attraction of community game attractions as a preserved cultural heritage such as mud football, pillow gangs, gangsing, kring-kring crank and *meong bikul* are nice options to those who would like to try local games.
- i. The attractiveness of architecture is a good option for students who would like to learn more about traditional Balinese house standards, especially in gates and temples.
- j. Balkondes (Village Economic Hall), a large semi-open building that could be used for organizing events.

Based on the tourism potential stated above, Sudaji Village is the right place to hold outdoor event activities. However, the village must implement health protocols for the new era. A tourist destination must meet the requirements of health protocols that guarantee CHSE (Cleanliness, Health, Safety, and Environment) such as checking the body temperature of visitors before carrying out activities or entering tourist facilities, mandatory use of masks, providing hand washing places, keeping visitors' distance, and providing proper garbage cans.

The non-technical and environmental constraints such as internal conflict interest, no recommended public space for locals to do activities and attraction, poor accessibility, no recommended restaurant in the village are some challenges toward tourism development in the village. The quality of human resources and there is no special person in charge for promoting the village are other challenges.

6 Conclusion

The study results show that the Sudaji community's and tourists' perceptions of sustainable tourism related to event activities are positive. There is no significant difference ($p > 0.05$) in perceptions among the tourists and a bit of a difference from the community. The two groups give more attention to sustainable preservation and good awareness, also become a prerequisite for the village in managing event activities related to its various potential. This condition will constantly keep the concept of sustainable tourism, which was built upon the event. However, despite the community's and tourists' perception of sustainable tourism related to event activities is good, the non-technical and environmental constraints can disrupt the process of developing tourism destinations in Sudaji. Therefore, it's important to overcome those challenges to make the village reliable, self-supporting and increase community economic welfare as well.

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Authors' Contributions. The research can give useful information for the stakeholders of Sudaji tourism village, for they can explore the potential of the event industry in the village.

Competing Interest Statement. The research was conducted as a small part of the author's large body of research for 9 tourism villages across by examining 5 variables that contribute to developing a green tourism village. The data and analysis have never been published before, neither replicating nor modifying any sentences.

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