Comparative Study: Perception on Sustainable Tourism of Urban and Rural Eco-Villages in Bali

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Abstract. This study is motivated by the number of tourist villages in Bali that do not care about sustainability and are not as promoted as eco-villages, instead deteriorating the natural environment due to its development, and aims to analyze the community and tourist perceptions on sustainable tourism in eco-villages of Sanur Kauh village in urban area and of Blimbingsari village in rural area. Differences among community are analyzed based on gender, stakeholder roles, age, and occupation variables, education, tourism conscious. Also, the differences among tourists were analyzed based on gender, origin, age, occupation, education, travel method, and travel purpose. For the two groups, differences in perceptions were analyzed based on the indicators of Attention to Environmental Burden (AEB) and Concern for Conservation Efforts (CCE) that construct the Perceptions of Sustainability questionnaire. The results found that there were significant differences between the Community and the Tourists in terms of AEB ($F=26.561; p<0.01$), CCE ($F=32.508; p<0.01$), and Perceptions of Sustainability ($F=31.377; p<0.01$), and between the community and the community and tourists both in Sanur Kauh and Blimbingsari in terms of AEB ($F=113.490; p<0.01$), CCE ($F=96.540; p<0.01$), and Perception on sustainable tourism ($F=111.294; p<0.01$). However, the difference between the community and tourists in both Sanur Kauh and Blimbingsari only occurred in terms of CCE ($F=11.809; p<0.01$) and Perception of Sustainability ($F=5.831; p<0.05$). Thus, the difference in perceptions of sustainable tourism influenced by the village's location and environment. People and tourists in rural areas have better perception than those in urban areas.

1. Introduction
Tourism village development is one of sustainable tourism program implementations of the Ministry of Tourism of the Government of Republic Indonesia, and currently also strategic program run by the Government of Bali. The purpose of a tourism village is to create autonomous governance of the village and improve the welfare for the community. This support is written in Republic Indonesia Law No. 10/2009 [1] concerning tourism, which states the community as the main player in tourism development. Other policy stated in Regulation of the Minister of Culture and Tourism No.26/2010[2], declares that a tourism village is an integration between attractions, accommodation, and supporting facilities that are existed in a community and blended with the prevailing traditions. The community can serve as the hosts for the visiting tourists to grab opportunities and their...
enthusiasm in capturing the benefits of tourism activities, for eventually will improve the
community's economic welfare [3].

Tourism village program is expected to have a significant impact on village development and
the sustainability of tourism destinations. Through tourism, local communities can attract tourists to
visit their villages by exploring its potentials, as well as to improve the preservation of natural
resources, local traditions, the peculiarities of their cultures. This, of course, has a positive impact on
the economic welfare of the village. In this research, we used the term eco-villages rather than
tourism villages to emphasize the environmental of the three sustainable tourism dimensions
economic, social, and environment, because it is based on questionnaire that focused on environment
aspects.

The term eco-village is often used in Europe [4] and it is formed to empower the community
as direct actors to increase the awareness in responding to tourism potentials and the development of
tourist attraction locations. In Indonesia, many tourism villages have sprung up, initiated by the
community and non-government agencies and have been uncontrolled that can pose serious threats to
environmental damage, both in rural and urban areas. Many tourism villages were suspended due to
lack of good management practice. For instance, about 8 tourism villages in Yogyakarta [5] are
apparent death, as well as in West Java such as Mekar Jaya village in Sukabumi [6] and also in Bali
such as Pangsan village in Badung [7].

The development of an eco-village may damage the environment and for eventually will
change the community's social and economic aspects. Tourism activities that shift from cities to
villages would transfer their burdens and negatively impact the surrounding environment, such as
increasing water consumption, waste from tourism activities, damaging nature due to crowds, and
conversion of productive land. On the socio-economic side, tourism activities also have a direct and
indirect impact on the community's social behavior, such as increased crime, and the fading of local
culture. Therefore, if it is not well managed, the purpose of sustainable tourism can undoubtedly be
realized.

Overall, Bali has 636 villages divided into two categories: developing villages and
independent villages. With entire villages, 176 villages, or 27.67%, are in the independent village
category, and as many as 460 villages (72.23%) are in the developing category. Since 2013, the
Provincial Government of Bali has targeted the development of 100 tourism villages; so far, it has
exceeded the target, which recorded at 110 tourism villages and counting up to more than 170
nowadays (Forkom DeWi Bali, 2020). Regarding sustainable tourism, it is reported that 266 villages
have structured environmental conservation programs, and around 156 villages have implemented
waste management. This study has proven the attitude of community towards sustainable tourism
through their perception.

The presence of tourism village with all its potential and attractiveness cannot be measured
with certain impact, whether the village is sufficient to provide economic and social benefits that
pays off the tourism activities to environment. [8] States the lack of village programs in environment
conservation and waste can be aggregative in natural damage such as floods, landslides, and forest
fires. Other opinion [9] also states that people around tourist zones are more concerned about the
impact of tourism. Meanwhile, [10] states that sociodemographic variables influence people's
perceptions of sustainable tourism.

Therefore, it is necessary to analyze the community’s perception compares to tourists'
perceptions as critical stakeholders in the development of tourism villages that is sustainable, both in
urban and rural areas, to find out the similarities and differences between and among groups. This
research conducted in two tourism villages in Bali, namely Sanur Kauh Village as a tourist village
located in an urban area and Blimbingsari Village, which located in a rural area. Related to Covid-19
pandemic, Eco-village is the most fit tourism model for New Normal as for it keeps social
distancing, much lesser crowds, fresh air and outdoor.

Sanur Kauh and Blimbingsari are models of Bali’s eco-villages with different characters. As
tourist destination, these two villages have potentials with their uniqueness. Sanur Kauh, located in
Denpasar the capital city of Bali province, close to the capital city center, and has the potential of
coastal tourism development. There is also the Segara Giri village-owned enterprises (BUMDes) that
manages the ecovillage. Blimbingsari, located near West Bali National Park in Jembrana, has unique Balinese culture for 100% of the population are Christians, although the island is dominated by Hindus. Tourists can enjoy Church architecture with Balinese nuances. The number of tourists in both villages continues to increase every year until 2019, before the pandemic COVID-19 came.

2. Literature Review

Previous research relevant to this topic divide into two main focuses on the perception of sustainable tourism and the perception of tourism villages from both the tourist and community sides in Sudaji village, Buleleng in Northern Bali [11]. There are quite a lot of researches on sustainable tourism. However, studies on the comparison of perceptions between the community and tourists, especially in tourist villages, are still relatively minimal. Research done by [12] examines sustainable tourism in Jatiluwih tourism village. The results show that the management of the tourism village has not entirely performed the aspects of sustainable tourism. Tourism activities have not provided economic benefits for the local community. Although many tourists visit them, the local community's role in the planning and development process is still not involved. Unlike the case with [13] study examining Hawaiian people's perceptions of tourism activities that make a significant contribution to economic growth in Metropolitan Honolulu, the results confirm that there is a significant relevance of educational indicators in the development of tourism villages.

Alrawajfah (2019) suggests that people's perceptions of sustainable tourism are influenced by sociodemographic variables such as occupation, age, and educational background. The study results are in contrast with [14] whom expressed that more highly educated do not support tourism although they know it creates economic prosperity, but the impact on the fading culture and traditions as well as increasing crimes and prostitution have made them resistant to tourism development.

Research on the perception and management of homestays in tourism villages was carried out by Puspitasari, [15]. The research was conducted using qualitative approach. And found that the perception of the owner of homestay affects good homestay management referring to ASEAN standards. Prior studies showed that research comparing community and tourist perceptions of sustainable tourism in tourist villages has never been done before.

3. Research Method

A quantitative approach is carried out by analyzing the differences between research variables to examine the hypothesis. The population in this study were the eco-village stakeholders; 1) village government officials, 2) village organization activists, 3) tourism village managers, 4) community members, and 5) visiting tourists. A research sample was taken from this population using snowball sampling method, in which the tourism village manager distributed it to the four stakeholder groups and the visiting tourists. The number of samples in this study is 185 respondents consisting of 62 residents and 31 tourists in Sanur Kauh and 47 residents and 45 tourists in Blimbingsari. Data collection process was taken in 6 months from January to July 2020 by distributing 75 questionnaires to the residents and 50 questionnaires to the tourists for each village, or 250 in total. Therefore only 75% was returned. There are five hypotheses examined in this study:

H1: There are significant differences in perceptions of tourism between the community and tourists in urban and rural eco-villages

H2: There are significant differences within community groups on Perceptions of Sustainable Tourism in Urban and Rural eco-villages based on demographic variables

H3: There are significant differences within tourist groups in the Perceptions of Sustainable Tourism in Urban and Rural eco-villages based on demographic variables

H4: There is significant correlation between the Perceptions of Sustainable Tourism in Urban and Rural eco-villages with demographic variables among Community.

H5: There is significant correlation between the Perceptions of Sustainable Tourism in Urban and Rural eco-villages with demographic variables among Tourists.

The Conceptual framework of this study can be drawn in a figure 1. below to describe the relationship between hypotheses and the variables measured.
The data was obtained through survey by developing a questionnaire on community as well as tourists' perceptions, namely Perceptions of Sustainable Tourism questionnaire bases on Green Tourism. The questionnaire is structured on two indicators; 1) Attention to Environmental Burden (AEB), and 2) Concern for Conservation Efforts (CCE) [16].

| Dimension          | Indicators of Green Tourism | 5 | 4 | 3 | 2 | 1 |
|--------------------|-----------------------------|---|---|---|---|---|
| Environmental Load / Burden | 1. I like to visit tourist destinations that have a recycling program |   |   |   |   |   |
|                     | 2. I can to drink tap water in the village I visit |   |   |   |   |   |
|                     | 3. I feel that the waste collection system in the village is quite good & efficient |   |   |   |   |   |
|                     | 4. I see that the location of the tourist destination is clean and found no garbage scattered on the streets |   |   |   |   |   |
|                     | 5. I feel that the level of air pollution in the village is low |   |   |   |   |   |
| Conservation Effort | 6. I can say that the people in the village are quite aware of environmental sustainability |   |   |   |   |   |
|                     | 7. I want to live and stay in the village that is still beautiful and pleasant |   |   |   |   |   |
|                     | 8. I like the culture & the lifestyle of the people in the village (how to eat, bathe, etc.) |   |   |   |   |   |
|                     | 9. I prefer to walk, bike and/or use public transportation than using motorbike or rental car. |   |   |   |   |   |
|                     | 10. I like outdoor activities related to nature (camping, hiking, trekking, etc.) |   |   |   |   |   |

Each indicator has five questions with a choice of answers using a Likert scale with a range of 1-5 points where the assessment can be explained in the operational definition table below to interpret the score of the questionnaire obtained from each sample. The data then processed with SPSS program utilizing F-Test or Anova, between and within groups/subgroups. If a significant difference resulted, then there is a gap between "what is perceived by the community" and "what is perceived by the visiting tourists."

| No. | Score | AEB Score | AEB Definition | CCE Score | CCE Definition | Perception Score | Perception Definition |
|-----|-------|-----------|----------------|-----------|----------------|------------------|----------------------|
| 1   | Minimum | 5 | The least attentive to environment burden | 5 | No concern with conservation effort | 10 | Do not understand sustainable tourism |
| 2   | Maximum | 25 | The most attentive to environment burden | 25 | Very concern with conservation effort | 50 | Strongly understand sustainable tourism |

### 4. Result Discussion

With the results of the descriptive statistical analysis, the perceptions of the community groups, as shown in Table 3 as follows: On average, the Attention to Environmental Burdens (AEB) of Blimbingsari community with the entrepreneurial occupation group is better ($\mu = 22$) compared to the Sanur Kauh community, where the highest score is the housewives ($\mu = 16.50$). On the indicator of Concern for Conservation Efforts (CCE), the results show that the Blimbingsari community with the junior high school education and the housewives have the highest score ($\mu = 24$) compared to the...
Sanur Kauh with the housewives is the highest ($\mu = 16.00$). Overall, Perceptions of Sustainable Tourism of Blimbingsari community is better with civil servants is the highest ($\mu = 45$), compared to Sanur Kauh community with Housewife is the highest ($\mu = 32.50$).

### Table 3. Mean Scores ($\mu$) of Community’s Perception of Sustainable Tourism

| No. | Variable                  | N  | $\mu$ AEB | $\mu$ CCE | $\mu$ Perception |
|-----|---------------------------|----|-----------|-----------|------------------|
|     |                           | SK | BS        | SK        | BS               | SK    | BS   |
| A   | GENDER                    |    |           |           |                   |       |      |
| 1   | Male                      | 35 | 10.54     | 11.09     | 21.63             | 42.23 |
| 2   | Female                    | 27 | 11.30     | 12.67     | 23.06             | 23.96 |
| B   | STAKEHOLDERS              |    |           |           |                   |       |      |
|     | not Valid                 | 2  | -         | 14.00     | 28.50             | -     |
| 1   | Village Officials         | 15 | 10.87     | 13.60     | 24.47             | 17.57 |
| 2   | Village Activists         | 16 | 13.75     | 14.19     | 27.94             | -     |
| 3   | Village Managers          | 2  | 14.00     | 15.00     | 29.00             | 43.25 |
| 4   | Community Member          | 27 | 8.70      | 8.89      | 17.57             | 44.74 |
| C   | AGE                       |    |           |           |                   |       |      |
| 1   | 17-24                     | 16 | 7.44      | 8.25      | 16.19             | -     |
| 2   | 25-34                     | 10 | 10.30     | 12.11     | 23.91             | 41.6  |
| 3   | 35-45                     | 17 | 9.65      | 11.59     | 21.24             | 42.0  |
| 4   | > 45                      | 19 | 14.74     | 15.32     | 30.06             | 44.14 |
| D   | EDUCATION                 |    |           |           |                   |       |      |
| 1   | Primary School            | 0  | -         | -         | -                 | -     |
| 2   | Junior High               | 1  | 17.50     | 23.15     | 41.50             | -     |
| 3   | High school               | 35 | 20.48     | 23.30     | 35.62             | 38.56 |
| 4   | Graduate                  | 21 | 22.31     | 26.62     | 32.50             | 43.63 |
| 5   | Others                    | 5  | 10.20     | 21.00     | 42.49             | -     |
| E   | OCCUPATION                |    |           |           |                   |       |      |
| 1   | Civil servants            | 2  | 5.50      | 21.50     | 13.00             | 45.00 |
| 2   | Private Employees         | 34 | 17.44     | 21.38     | 35.62             | 38.56 |
| 3   | Housewives                | 4  | 16.50     | 21.00     | 32.50             | 44.80 |
| 4   | Entrepreneur              | 7  | 12.39     | 22.00     | 27.57             | 45.50 |
| 5   | Others                    | 12 | 8.00      | 22.94     | 43.61             | -     |
| F   | TOUR CONSCIOUS            |    |           |           |                   |       |      |
| 1   | Highly Conscious (3)      | 14 | 7.93      | 17.33     | 17.43             | 40.00 |
| 2   | Conscious (4)             | 30 | 13.50     | 20.84     | 27.60             | 43.63 |
| 3   | Somewhat Conscious (5)    | 16 | 8.06      | 8.81      | 16.88             | -     |
| 4   | Less Conscious (6)        | -  | 1         | -         | -                 | -     |

**Note:** SK = Sanur Kauh; BS = Blimbingsari

The results of tourists’ perception are presented in table 4 as follows: Tourists who visit Blimbingsari have better attention to environmental burdens with the group of tourists traveling with their families is the highest ($\mu = 24.25$), while in Sanur Kauh, the highest is tourists with the junior-high school education ($\mu = 18.00$).

Of the concern for conservation effort, the results show that Blimbingsari tourists with 25-34 y.o. and self-employed have higher score ($\mu = 25.00$) than Sanur Kauh tourists with junior high school education is the highest ($\mu = 22.00$). On average, tourists in Blimbingsari have better perceptions of sustainable tourism with the age group of 25-34 y.o. ($\mu = 49.00$) than in Sanur Kauh with junior high school is the highest ($\mu = 40.00$).

### Table 4. Mean Scores ($\mu$) of Tourists’ Perception on Sustainable Tourism

| No. | Variable             | N  | $\mu$ AEB | $\mu$ CCE | $\mu$ Perception |
|-----|----------------------|----|-----------|-----------|------------------|
|     |                      | SK | BS        | SK        | BS               | SK    | BS   |
| A   | GENDER               |    |           |           |                   |       |      |
| 1   | Male                 | 17 | 16.06     | 19.29     | 35.35             | 48.75 |
| 2   | Female               | 13 | 15.92     | 19.69     | 35.62             | 47.50 |
| B   | ORIGIN OF TOURISM    |    |           |           |                   |       |      |

5
The differences in each community group in both villages done by Oneway Anova (F-Test) as shown in table 5 below. In Blimbingsari (BS) there are differences between stakeholders on AEB (p=0.000), UKV (p=0.000) and Perception (p=0.000). Likewise, based on Occupation, the differences occurred in AEB (p=0.001) and Perception (p=0.002) but based on Tourism Conscious, the difference is only in AEB (p=0.013). But in Sanur Kauh (SK), there is no difference between all groups of variables, whether on AEB, CCE or Perception. Thus the perception of sustainable tourism is relatively similar.

Table 5. F values of Community Groups on Each Variable

| Variable       | AEB | CCE | Perception |
|----------------|-----|-----|------------|
|                | F   | Sig.| F   | Sig.| F   | Sig.|
| SK             |     |     |     |     |     |     |
|                |     |     |     |     |     |     |
| Gender         | 0.132 | 0.012 | 0.718 | 0.912 | 0.524 | 0.152 | 0.472 | 0.698 | 0.311 | 0.579 | 0.882 |
|                |     |     |     |     |     |     |     |     |     |     |     |
| Stakeholders   | 1,168 | 8,978 | 0.335 | **0.000** | 1,440 | 14,442 | 0.233 | **0.000** | 1,290 | 18,182 | 0.285 | **0.000** |
|                |     |     |     |     |     |     |     |     |     |     |     |
| Age            | 2,493 | 1,514 | 0.069 | 0.231 | 2,168 | 1,607 | 0.101 | 0.212 | 2,375 | 1,479 | 0.079 | 0.239 |
|                |     |     |     |     |     |     |     |     |     |     |     |
| Education      | 0.461 | 0.964 | 0.710 | 0.419 | 0.107 | 0.570 | 0.956 | 0.638 | 0.239 | 0.199 | 0.869 | 0.896 |
|                |     |     |     |     |     |     |     |     |     |     |     |
| Occupation     | 1.606 | 5,787 | 0.163 | **0.001** | 1.027 | 1,814 | 0.418 | 0.145 | 1.276 | 4,970 | 0.284 | **0.003** |
|                |     |     |     |     |     |     |     |     |     |     |     |
| T.Conscious    | 2,687 | 4,063 | 0.055 | **0.013** | 2.039 | 0.524 | 0.118 | 0.668 | 2,418 | 1,829 | 0.075 | 0.156 |

Note : *) = significant at p = 0.05 (2-tailed) ; ***) = significant at p = 0.01 (2-tailed)

Regarding Community between two villages as shown in table 6, it can be concluded that there is significant difference on the AEB indicator (F=60.126; p=0.000) as well as on on CCE indicator (F=73.884; p=0.000) and Perceptions of Sustainable Tourism (F=70.451; p=0.000). The community of Blimbingsari in rural areas have higher AEB, CCE, and Perceptions of Sustainable Tourism than the community of Sanur Kauh in urban areas.

Table 6. F values between the Sanur Kauh & Blimbingsari Communities

| Variable       | AEB | CCE | Perception |
|----------------|-----|-----|------------|
|                | F   | Sig.| F   | Sig.| F   | Sig.|
| SK             |     |     |     |     |     |     |
|                |     |     |     |     |     |     |
| Gender         | 0.132 | 0.012 | 0.718 | 0.912 | 0.524 | 0.152 | 0.472 | 0.698 | 0.311 | 0.579 | 0.882 |
|                |     |     |     |     |     |     |     |     |     |     |     |
| Stakeholders   | 1,168 | 8,978 | 0.335 | **0.000** | 1,440 | 14,442 | 0.233 | **0.000** | 1,290 | 18,182 | 0.285 | **0.000** |
|                |     |     |     |     |     |     |     |     |     |     |     |
| Age            | 2,493 | 1,514 | 0.069 | 0.231 | 2,168 | 1,607 | 0.101 | 0.212 | 2,375 | 1,479 | 0.079 | 0.239 |
|                |     |     |     |     |     |     |     |     |     |     |     |
| Education      | 0.461 | 0.964 | 0.710 | 0.419 | 0.107 | 0.570 | 0.956 | 0.638 | 0.239 | 0.199 | 0.869 | 0.896 |
|                |     |     |     |     |     |     |     |     |     |     |     |
| Occupation     | 1.606 | 5,787 | 0.163 | **0.001** | 1.027 | 1,814 | 0.418 | 0.145 | 1.276 | 4,970 | 0.284 | **0.003** |
|                |     |     |     |     |     |     |     |     |     |     |     |
| T.Conscious    | 2,687 | 4,063 | 0.055 | **0.013** | 2.039 | 0.524 | 0.118 | 0.668 | 2,418 | 1,829 | 0.075 | 0.156 |

Note : *) = significant at p = 0.05 (2-tailed) ; ***) = significant at p = 0.01 (2-tailed)
In determining the differences based on occupation in Blimbingsari, Post Hoc analysis was carried out with the results shown in Table 7. There are differences between civil servant and private employee on AEB indicator (p=0.024) and the perception variable (p=0.034). There is a difference between private employee and housewives, on AEB indicator (p=0.010), CCE indicator (p=0.033), and Perception variable (p=0.002), and differences between private employee and self-employed, on AEB indicator (p=0.000), CCE indicator (p=0.026), and Perception variable (p=0.000), as well as a significant difference between private employees and other groups on AEB indicator (p=0.001)

Table 7. Significance of Differences on Occupation in Blimbingsari Community

| Variable | Civil servant | Private Employee | Housewives | Entrepreneur | Others |
|----------|---------------|------------------|------------|--------------|--------|
|          | AEB | CCE | Percep | AEB | CCE | Percep | AEB | CCE | Percep | AEB | CCE | Percep | AEB | CCE | Percep |
| Civil servant | - | - | - | 0.024* | 0.200 | 0.034* | 0.708 | 0.800 | 0.949 | 0.769 | 1.000 | 0.862 | 0.617 | 0.752 | 0.622 |
| Private Employee | 0.024* | 0.200 | 0.034* | - | - | - | 0.010* | 0.033* | 0.005** | 0.000* | 0.206* | 0.000** | 0.001** | 0.062 | 0.002** |
| Housewives | 0.708 | 0.800 | 0.949 | 0.010* | 0.033* | 0.005** | - | - | - | 0.315 | 0.691 | 0.728 | 0.906 | 0.378 | 0.534 |
| Entrepreneur | 0.769 | 1.000 | 0.862 | 0.000** | 0.026* | 0.000** | 0.315 | 0.691 | 0.728 | - | - | - | 0.114 | 0.528 | 0.184 |
| Others | 0.617 | 0.752 | 0.622 | 0.001** | 0.062 | 0.020** | 0.906 | 0.378 | 0.534 | 0.114 | 0.528 | 0.184 | - | - | - |

Note: *) = significant at p = 0.05 (2-tailed); **) = significant at p = 0.01 (2-tailed)

In Sanur Kauh, the results of Post Hoc Analysis occur between stakeholder groups as shown in Table 8 where there is a significant difference between village organizations activits and the community members on the AEB (p=0.050), the CCE (p=0.050), and the Perception variable (p=0.046)

Another Post-Hoc analysis results the significance differences based on age in Sanur Kauh, as shown in Table 9 below. There is a difference between 17-24 y.o. group and 45-60 y.o. group on the AEB (p=0.012), on the CCE (p=0.014), and on the Perception (p=0.012).

Table 8. F Values Based on Stakeholder Roles in Sanur Kauh Community

| Variable | Village officials | Village Activists | Village Mgr | Community Members |
|----------|------------------|------------------|-------------|-------------------|
|          | AEB | CCE | Percep | AEB | CCE | Percep | AEB | CCE | Percep | AEB | CCE | Percep |
| Village officials | - | - | - | 0.320 | 0.846 | 0.551 | - | - | - | 0.967 | 0.897 | 0.930 | 0.404 | 0.086 | 0.190 |
| Village Activist | 0.320 | 0.846 | 0.551 | 0.846 | 0.551 | 0.605 | 0.825 | 0.710 | 0.404 | 0.086 | 0.190 |
| Village Manager | 0.605 | 0.825 | 0.710 | 0.967 | 0.897 | 0.930 | - | - | - | 0.370 | 0.323 | 0.338 |
| ComMembers | 0.404 | 0.086 | 0.190 | 0.050* | 0.050* | 0.046* | 0.370 | 0.323 | 0.338 | - | - | - |

Notes: *) = significant at p = 0.05 (2-tailed); **) = significant at p = 0.01 (2-tailed)

Table 9. Significance of Differences Based on Age in Sanur Kauh Community

| Variable | 17-24 years | 25-34 years | 35-45 th | 45-60 years |
|----------|-------------|-------------|-----------|-------------|
| AEB | CCE | Percep | AEB | CCE | Percep | AEB | CCE | Percep | AEB | CCE | Percep |
| 17-24 y.o. | - | - | - | 0.453 | 0.412 | 0.423 | 0.530 | 0.251 | 0.361 | 0.149 | 0.186 | 0.160 |
| 25-34 y.o. | 0.453 | 0.412 | 0.423 | - | - | - | 0.834 | 0.859 | 0.992 | 0.149 | 0.186 | 0.160 |
| 35-45 y.o. | 0.530 | 0.251 | 0.361 | 0.824 | 0.859 | 0.992 | - | - | - | 0.054 | 0.182 | 0.098 |
| 45-60 y.o. | 0.012* | 0.014* | 0.012* | 0.149 | 0.186 | 0.160 | 0.054 | 0.182 | 0.098 | - | - | - |

Notes: *) = significant at p = 0.05 (2-tailed); **) = significant at p = 0.01 (2-tailed)
Table 10. Significance of Differences Based on Tourism Conscious in Sanur Kauh community

| Variable       | Very Conscious (3) | Conscious (4) | Somewhat Conscious (5) | Less Conscious (6) |
|----------------|--------------------|---------------|------------------------|--------------------|
|                | AEB                | CCE           | Perception             | AEB                | CCE           | Perception             | AEB                | CCE           | Perception             |
| Very Conscious (3) | -                  | -             | -                      | 0.030*             | 0.092         | 0.050                 | 0.962             | 0.821         | 0.924                 |
| Conscious (4)    |                    |               |                        |                    |               |                      |                    |               |                      |
| Somewhat        | 0.030*             | 0.092         | 0.050                  |                    |               |                      |                    |               |                      |
| Conscious (5)    | 0.962              | 0.821         | 0.924                  | 0.027*             | 0.044*        | 0.031*                | 0.057             | 0.082         | 0.031*                |
| Less Conscious (6) | -                  | -             | -                      | -                  | -             | -                     | -                  | -             | -                     |

Notes: *) = significant at p = 0.05 (2-tailed) ; * *) = significant at p = 0.01 (2-tailed)

The differences in each tourists group in Blimbingsari and Sanur Kauh done by One Way Anova (F-Test) as shown table 11 below. The results for Blimbingsari (BS) as follows; There are differences based on Origin on the CCE indicator (p=0.005), based on Education on the AEB indicator (p=0.000) and on the Perception variable (p=0.000), based on Occupation on the AEB indicator (p=0.004) and on the Perception variable (p=0.000). But in Sanur Kauh (SK), there are differences based on Origin on CCE indicator (p=0.005), based on Education on CCE indicator (p=0.046), and Perception variable (p=0.052), and based on Travel Method on Perception variable (p=0.011)

Table 11. F values and the Significance Difference of Tourist Groups on Each Variable

| Variable     | AEB | CCE | Perception |
|--------------|-----|-----|------------|
|              | F   | Sig.| F      | Sig. | F    | Sig. |
| SK           |     |     |        |     |      |      |
| BS           |     |     |        |     |      |      |
| Gender       | 0.041 | 2.853 | 0.840 | 0.101 | 0.440 | 2.855 | 0.512 | 0.101 | 0.070 | 4.971 | 0.793 | 0.031* |
| Origin       | 0.430 | 0.324 | 0.733 | 0.573 | 0.784 | 8.961 | 0.513 | 0.005* | 0.779 | 0.261 | 0.516 | 0.613 |
| Age          | 0.503 | 1.614 | 0.683 | 0.207 | 0.673 | 1.545 | 0.576 | 0.223 | 0.709 | 2.863 | 0.555 | 0.053 |
| Education    | 1.035 | 96.970 | 0.419 | 0.000** | 2.671 | 0.381 | 0.046* | 0.767 | 2.572 | 22.054 | 0.052* | 0.000** |
| Occupation   | 0.269 | 4.501 | 0.926 | 0.004** | 1.792 | 2.285 | 0.151 | 0.073 | 0.807 | 10.012 | 0.556 | 0.000** |
| Trv. Method  | 3.178 | 0.494 | 0.057 | 0.615 | 2.698 | 1.751 | 0.085 | 0.190 | 5.288 | 0.091 | 0.011* | 0.913 |
| Visit Purpose| 0.163 | 0.384 | 0.921 | 0.684 | 1.099 | 0.239 | 0.367 | 0.789 | 0.225 | 0.560 | 0.878 | 0.577 |

Notes : *) = significant at p = 0.05 (2-tailed) ; * *) = significant at p = 0.01 (2-tailed)

Regarding Tourists between two villages as shown in table 12, it can be concluded that there are significant differences both on the AEB indicator (F = 375,121; p = 0.000) and on the CCE indicator (F = 325,531; p = 0.000), and Perceptions of Sustainable Tourism (F = 596,930; p = 0.000) between tourists visiting the two eco-villages. Tourists in Blimbingsari, located in rural areas, have higher AEB, CCE, and Perceptions of Sustainable Tourism than the tourists of Sanur Kauh in urban areas.

Table 12. F values between Sanur Kauh & Blimbingsari tourists

| Variable    | AEB | CCE | Perception |
|-------------|-----|-----|------------|
|             | F   | Sig.| F      | Sig. | F    | Sig. |
| Eco-Village | 375,121 | 0.000** | 325,531 | 0.000** | 596,930 | 0.000** |

Notes: *) = significant at p = 0.05 (2-tailed) ; * *) = significant at p = 0.01 (2-tailed)

In Blimbingsari as shown in Table 13 below, the results of Post Hoc Analysis occur between tourists based on age where there are significant differences between the 45-60 y.o. groups against all age groups; 17-24 y.o (p = 0.032), 25-34 y.o (p = 0.010), and 35-44 y.o. (p = 0.014) regarding their respective perceptions of sustainable tourism.

Table 13. Significance of Difference Based on Age in Blimbingsari Tourists

| Age   | 17-24 years | 25-34 years | 35-44 years | 45-60 years |
|-------|-------------|-------------|-------------|-------------|
|       | AEB | CCE | Perception | AEB | CCE | Perception | AEB | CCE | Perception | AEB | CCE | Perception |
| 17-24 y.o. | -   | -   | -         | 0.579 | 0.305 | 0.348 | 0.679 | 0.495 | 0.505 | 0.084 | 0.176 | 0.032* |
| 25-34 y.o. | 0.579 | 0.305 | 0.384 | -   | -   | -         | 0.874 | 0.712 | 0.764 | 0.052 | 0.052 | 0.010** |
| 35-44 y.o. | 0.679 | 0.495 | 0.505 | 0.874 | 0.712 | 0.764 | -   | -   | -         | 0.057 | 0.082 | 0.014* |
In Sanur Kauh, as shown in Table 14 below, the results of Post Hoc Analysis occur between tourists based on Travel Method, where there are difference between tourists who travel alone and those with a partner on AEB indicator ($p=0.022$), and perceptions variable ($p=0.007$), and between tourists travelling alone and those with families on the AEB indicator ($p=0.041$), on the CCE indicator ($p=0.029$), and perceptions variable ($p=0.005$).

| How to Travel | Alone | With a partner | With Family |
|---------------|-------|----------------|-------------|
| **AEB** | | | |
| Perception | 0.022* | 0.082 | 0.007** | 0.041* | 0.029* | 0.005** |
| **CCE** | | | |
| Perception | 0.022* | 0.082 | 0.007** | 0.041* | 0.029* | 0.005** |
| **Perception** | | | |

Notes: *) = significant at $p = 0.05$ (2-tailed); ***) = significant at $p = 0.01$ (2-tailed)

To find out differences in perception, F-test was employed and the results as shown in Table 15 where there are significant difference between the Community and Tourists as a whole in terms of AEB indicator ($F=26,561; p=0.000$), CCE indicator ($F=32,508; p=0.000$), and Perception variable ($F=31,377; p=0.000$), and between the community and the community, and between the tourists and the tourists both in Sanur Kauh and Blimbingsari in terms of AEB indicator ($F=113,490; p=0.000$), CCE indicator ($F=96,540; p=0.000$), and Perception variable ($F=111,294; p=0.000$), and also between the community and tourists both in Sanur Kauh and Blimbingsari but only in terms of indicator CCE ($F=11.809; p=0.0011$), and variable Perception variable ($F=5.831; p=0.017$).

**Table 14. Significance of Difference Based on Travel Method in Sanur Kauh Tourists**

| AEB | CCE | Perception |
|-----|-----|------------|
| Alone | With a partner | With Family |

Notes: *) = significant at $p = 0.05$ (2-tailed); ***) = significant at $p = 0.01$ (2-tailed)

**Table 15. F values between community & tourists on the AEB, CCE and the perception**

| Variable | AEB | CCE | Perception |
|----------|-----|-----|------------|
| Group (Community vs Tourists) | 26,561 | 0.000** | 32,508 | 0.000** | 31,377 | 0.000** |
| Ecovillage (Sanur Kauh vs Blimbingsari) | 113,490 | 0.000** | 96,540 | 0.000** | 111,294 | 0.000** |
| Group vs Ecovillage | 1,456 | 0.229 | 11,809 | 0.001** | 5,831 | 0.017* |

Notes: SK = Sanur Kauh ; BS = Blimbingsari
* ) = significant at $p = 0.05$ (2-tailed); ***) = significant at $p = 0.01$ (2-tailed)

Regarding correlation between variables, Table 16 and Table 17 explain the relationship of them as well the relationship with the indicators and variables measures.

As shown in Table 16, a significant positive correlation occurs among Sanur Kauh people on variable age where the older the person is, the more attention is paid to the environmental burden ($r=0.300; p<0.05$), the more concerned about conservation efforts ($r=0.308; p<0.05$), and had better perceptions of sustainable tourism ($r=0.309; p<0.05$).

However, if the samples of the two villages are combined, the correlation coefficient for variable age becomes increasingly significant, meaning that age has a relationship with attention to environmental burdens ($r=0.448; p<0.01$), concern for conservation efforts ($r=0.467; p<0.01$), and Perceptions of Sustainable Tourism ($r=0.465; p<0.01$).

**Table 16. Correlation coefficient ($r$) with indicator AEB, CCE, and variable Perception among Community**

| Variable | AEB | CCE | Perception |
|----------|-----|-----|------------|
| SK | BS | Combine | SK | BS | Combine | SK | BS | Combine |

Oppositely, age of tourists has a negative correlation as shown in Table 17, where the younger the age of the tourists, the higher the attention to environmental burden ($r=-0.637; p<0.01$) and the higher the concern for conservation efforts ($r=-0.644; p<0.01$), and the better the Perception of Sustainable Tourism ($r=0.661, p<0.01$). Tourist’s Education in Blimbingsari alone also has a positive correlation, where the higher the education, the higher the attention to environmental burden ($r=0.591; p<0.01$) and better perceptions of sustainable tourism ($r=0.459, p<0.01$).

Overall, Tourist’s education in both villages is positively correlated where the higher the tourist education, the higher the attention to environmental burden ($r=0.460; p<0.01$) and concern for conservation efforts ($r=0.330; p<0.01$) and the better the perception of sustainable tourism ($r=-0.419, p<0.01$).

| Variable | AEB | CCE | Perception |
|----------|-----|-----|------------|
|          | SK  | BS  | Combine    | SK  | BS  | Combine    | SK  | BS  | Combine    |
| Age      | 0.140 | -0.175 | -0.637** | -0.111 | -0.106 | -0.644** | 0.025 | -0.198 | -0.661** |
| Education| 0.105 | 0.591** | 0.460** | -0.113 | -0.184 | 0.330** | 0.001 | 0.459** | 0.419** |

Note: $SK = Sanur Kauh$ ; $BS = Blimbingsari$  
*) significant at $p=0.05$ (2-tailed) ; **) significant at $p=0.01$ (2-tailed)

### 5. Conclusion

The study results indicate significant differences in perceptions between the community and tourists on sustainable tourism in eco-villages located in urban and rural areas, and it may be determined by the villages’ location and physical environment. Sociodemographic variables of the community have a significant role in distinguishing their perceptions of sustainable tourism. These variables include Stakeholder roles and Occupation (in Blimbingsari), where Stakeholder roles also affect the Attention on Environmental Burden (AEB) indicators and Conservation Effort (CCE) indicators. Occupation also affects AEB indicator, while Tourism Conscious only distinguish the AEB indicators among Blimbingsari community. On the contrary, no differences at all in any variables measured among the Sanur Kauh community. The perception of tourists towards sustainable tourism can also be distinguished by socio-demographic variables such as Gender and Occupation (in Blimbingsari), Education (in Blimbingsari and Sanur Kauh), and Travel Method (in Sanur Kauh), while the Origin of the tourist also affects the CCE indicator along with Education and Occupation that affects the AEB indicator in Blimbingsari, but Education also affects CCE indicator in Sanur Kauh. Overall, the community of Sanur Kauh village, which is located in an urban area, lacks a sense of sustainable tourism compared to the community of Blimbingsari village in a rural area. However, both villages have a good sense of sustainable tourism, although those tourists in Blimbingsari have a higher sense. Variable Age for the community has significant correlation to the AEB, CCE and Perception, while Age and Education are for the Tourists. It is recommended for the future work to study all tourism villages in Bali to find out whether they are deserved to be entitled “Ecovillage”.

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