PalArch's Journal of Archaeology of Egypt / Egyptology

VILLAGERS' PERCEPTION ON SUSTAINABLE TOURISM THAT FORMED THE LEVEL OF COMMUNITY PARTICIPATION TO DETERMINE THE NEED FOR GREEN VILLAGE (N-GREENV): A VALIDITY & RELIABILITY TESTING

Deddy Kurniawan Halim¹, Syamsul Alam Paturusi², Wayan Suardana³, Sulistyawati⁴

^{1,4}Polytechnic International Bali, Tabanan - Bali

^{2,3}Faculty of Tourism, Udayana University, Denpasar - Bali

Corresponding Author Email: ¹<u>dk.halim@pib.ac.id</u>

Deddy Kurniawan Halim, Syamsul Alam Paturusi, Wayan Suardana, Sulistyawati. Villagers' Perception on Sustainable Tourism That Formed the Level of Community Participation to Determine the Need for Green Village (N-Greenv): A Validity & Reliability Testing-- Palarch's Journal of Archaeology of Egypt/Egyptology 19(1), 759-777. ISSN 1567-214x

Keywords: Need for Green Village, Community Participation, Perception on Sustainable Tourism, Perception on Green Tourist

ABSTRACT

This is a preliminary study to develop an instrument of n-GreenV that measures the need for Green Village to find out the feasibility of tourism village in response to the trend of tourist growth in Bali that has been moving from mass tourism in urban area the ecotourism in rural area. The measurement used two exogen variables: Perception on Sustainable Tourism and Perception on Green Tourist. One moderating variable named Community P: Perception participation in determining the need of Green Village and the type of Green Village. The study employed 30 villagers of Bongan Village. It used the PLS (Partial Least Square) method to get a Structural Equation Model for the instrument's construct where items with $p \ge 0.10$ will be terminated and excluded from the instrument. Results shows that 3 indicators of dimension Environment (p=0,137; p=0,126; p=0,363), 1 indicator of dimension Social (p=0,126) both of the variable Perception on Sustainability, and 3 indicators of dimension Environment Load (p=0,410; p=0,364; p=0,639), 3 indicators of dimension Conservation Effort (p=0,211; p=0,539 ;p=0,158) both of the variable Perception on Green Tourist, and 2 types of attraction of the variable Green Village are not valid, which are Cultural Tourism (p=0,246) and Adventure Tourism (p=0,534). The villagers preferred the remaining types: Nature Tourism (p=0,00) and Agritourism (p=0,029).

INTRODUCTION

The Central Bureau of Statistics of the Province of Bali noted that in the past decade, there has been a significantly increased number of tourists coming to Bali by 3,685,351 or 154.5% from 2,385,122 (in 2009) to 6,070,473 (in 2018), and estimated to reach 6.5 million tourists by the end of 2019 (BPS Provinsi Bali, 2019). Therefore, the environmental damage becomes a threat to Bali's island due to tourism activities.

However, there is a paradox towards the increased number of tourists with hotel occupancy rates, which have declined since 2017. The DPP IHGMA (Indonesian Hotel Manager Association) reported that the number of hotel rooms in Bali has already been oversupplied. And the addition of as many rooms would undoubtedly lead to a tariff war in the hotel industry which is contra concept of sustainability. This unhealthy competition will ultimately impact the image of Bali tourism to be of poor quality, with regional hotel occupancy in Bali is only 50%, so the excess supply of rooms must be moratorium (Sutawa, 2017).

The latest data regarding oversupply was reported by the Head of the Bali Provincial Tourism Office, who said in the Bali International Tourism Conference 2019 at Udayana University that as of September 2019, the number of hotel rooms in Bali was around 146,000 rooms, so a hotel moratorium policy for the whole island of Bali was needed. However, the authority is not at the provincial level at Bali's regencies and cities level (Putu Astawa cited by Suadnyana, 2019). It can be said that there has been an increasing threat of environmental damage due to the conversion of green land into hotel buildings and resort complexes.

In contrast to the DPP IHGMA, in 2018, Airbnb announced that Bali is the second most feasible villa and home rental market in the world (Nilsen, 2018). This fact drives the researcher to conduct a particular study of these trends in accommodation patterns because of the potential for homestay in the rural area to solve the problem of the excess supply of hotel rooms and to see it more comprehensively in a strategic and integrative way in a Tourism Village management. The paradigm shifts among the tourism industry stakeholders related to the concept of the Tourism Village will be helpful to accommodate market potential while educating the market to respect the environment, which tends to cause environmental degradation due to the construction of new hotels. Bali needs to have a pro-environment attitude in developing tourism that brings investment and a good image.

The researcher as the representative of the Green Building Council Indonesia (GBCI) for the Bali region, conducted this study and looked at the variables that can be the basis to develop a Rating Tool (instruments) for the Green or Eco Village, where the community-based tourism village can be one of its objects, or in this study is Bongan Village in Tabanan regency. Therefore, this research is a preliminary study for the Green Village Rating Tool, and it is expected that all Tourism Villages in Bali in particular, and in Indonesia in general will become Green Tourism Villages, as the government has wished and planned.

The result will be used as reference in developing a theory of the need for Green Village (n-GreenV) in regard to the identification of the variables as the Researcher has developed the theory of the need for Green Space (n-Green) as the result of his postdoctoral research in that measured and compared the needs between French and Indonesians (Halim, 2017). The study is a modification of the theory in a broader scale, from urban green space to tourism village. Based on the statement above, this study has three specific objectives as follows:

1. To measure the need of Green Village (n-GreenV) by identifying the variables that might be significant, such as Perception on Sustainability and Perception on Green Tourists.

2. To know the level of Community Participation in terms of planning, management, implementation, and monitoring of the Eco-Tourism Village.

3. To find out the types of tourism attraction that fit to the Eco Village.

LITERATURE REVIEW

The tourism industry is now one of the largest economies in the world, and ecotourism has become one of the fastest-growing sectors. The concept of Green Tourism has been developed since the 1980s. Initially, it was understood as small-scale tourism by visiting areas with beautiful natural environments while minimising the environmental impacts from the tourists' activities. The term Green Tourism is then used interchangeably with the concepts of ecotourism, nature tourism, and rural tourism (Sung-kwon et al. 2003).

Perception on Sustainability

Ecotourism is defined by The International Ecotourism Society (TIES) as "a nature tourism trip that is responsible for preserving the environment and improving the welfare of the local community". The main principles of ecotourism include minimising impacts, protecting biodiversity, building environmental awareness and respecting local culture. Usually, the main attractions for ecotourism are flora, fauna, and cultural heritage. These are by the concept of sustainable tourism that supports **environmental conservation**, **socio-cultural development**, and the **local economy**; UNWTO (2012) states that green tourism is in line with the concept of sustainable tourism and defines it as "sustainable tourism activities in the social, economic, cultural and natural environment context".

The concept of ecotourism is based on the controlled exploitation element of the natural and cultural environment. Green Tourism aims to facilitate a better understanding of the interrelationships between tourism and the environment and to contribute to the possibility of achieving a symbiotic relationship (Milenković and Bošković, 2012). So sustainability is an effort to maintain the community's environmental, socio-cultural and economic resilience because it can maintain the togetherness and attachment of citizens to their areas that need to be preserved and maintained for ecological sustainability. Unfortunately, the way the villagers perceive sustainability differs from one another. Not all people in the village have the "relatively" same perception towards it. Even they do not care about the three elements as the natural resources are still abundant to support their daily living without the threat of rural tourism.

Perception on Green Tourist

Often found differences in perceptions between local people (villagers) and tourists who come regarding the conception and values of ecotourist held by each party. Even this difference occurs in terms of perceiving sustainability and Green Tourism.

The perceived impact of tourism varies depending on the population's demographic characteristics and socioeconomic conditions, such as age, gender, education, employment, and income. In some cases, women are more opposed to tourism activities than men because of traffic jams, noise, crime, low wages, or different occupational characteristics. In several countries, some women are aware of the negative impacts of tourism but still up tourism development because their feminist identity is community-oriented, sensitive, and concerned about community development (Nunkoo & Gursoy, 2012).

Many villagers are worried that an increased number of tourists can negatively impact their ability to use recreational resources in the same way as they enjoy. The effect of the length on stay in the villagers' perception and support for tourism activities (packages) needs to be considered. Haralambopoulos and Pizam (1996) found that the average length of stay in an area with the same specific characteristics was an essential factor explaining differences in perceptions among villager groups related to the impact of tourism. This includes water and energy conservation, conservation projects, recycling and waste treatment, and paying them a decent wage and local products for restaurants and souvenir shops. The sustainable tourism industry aims to improve the welfare of local communities and make a positive contribution to nature conservation and cultural heritage.

Community Participation

Small businesses from the community that provide goods and services to visiting tourists contribute significantly to the economic sector of tourism. Community-Based Tourism (CBT) that is a form of tourism; that empowers local communities at tourist sites to manage tourism growth while meeting the community's needs to improve community welfare, both economically and socially in a sustainable environment. CBT also involves a partnership between tourism partners, including Village-Owned Enterprises (Badan Usaha Milik Desa/BUMDes) and the local community to benefit both parties.

Ramele & Yamazaki (2014) conducted a study that looked at the program's impact in the economic, environmental and socio-cultural fields of a village in Malaysia. This research was conducted to find a solution to reduce the social segregation of Chinese, Indians, and Malays in Selangor. The solution taken from the results can reduce the unemployment rate, increase infrastructure development, reduce environmental damage, and start integrating cross-cultural communities. Interaction between different racial communities strengthens the relationship between them. This research also shows that the cultural diversity in the area is maintained even though residents provide spaces in their homes

for others so that interactions occur that reduce distance and increase contact between them.

Another study was carried out by Lama (2013) on tourism program development in Nepal, which found a positive contribution in supporting sustainable tourism so that villagers could support the economic sustainability and the environment in rural communities. This is possible because social mechanisms in maintaining local traditions and culture are well integrated with programs for capacity building of local communities supported by local government and the provided infrastructure.

In his study, Kayat (2002) that CBT programs can last for a longer) found period if local communities are maintained. Community participation is an element of motivation that encourages community members (villagers) in the tourism program development, such as activities, attractions, amenities, etc. The existence of an individual in a program raises the participation of other individuals. This is increasingly apparent, especially in societies as collective as Balinese.

In this study, Community Participation consists of four stages; 1) Planning (symbolised by R), 2) Implementing (by P), 2) Managing (by K), and 4) Monitoring (by M) or overseeing. Boronyak, et al. (2010), in their work for APEC Tourism Working Group, has published a manual entitled Effective Community Based Tourism, that is intended for people and organisations planning, managing, implementing or overseeing community-based tourism, either as community leaders in government agencies or non-governmental organisations.

RESEARCH METHODS

Research Location and Time

This research was conducted in Bongan, a Tourism Village located in Tabanan Regency, Bali. From September to November 2019, the implementation lasted for three (3) months starting from items (indicators) and dimensions development, data collection, data processing, data analysis, and conclusion.

Population and Samples

As mentioned above, this research is a preliminary study in developing a Green Village Rating Tool. The result will be used as a reference in developing a theory of the need for Green Village (n-GreenV) regarding identifying the variables that might significantly contribute to the instrument. So that the minimum samples for Try-out purpose is applied. 30 (thirty) villagers ranging from 4 (four) stakeholders of Bongan tourism village are given the questionnaires; 1) village officials, 2) community organizations, 3) village tourism board officers, and 4) village communities.

The questionnaire was distributed using Snowballing method, where the researcher gives the questioners to the chief of the village (Perbekel) and his

staffs for them to distribute to their network purposively to fulfil all the four stakeholder groups to make sure that none of the group has missing values.

Sample Characteristics

As the data collected, the samples consisted of 28 males and 2 females with age ranging from 25 to \geq 45 years old, with other demographic variables such as Stakeholders group, Education background, and Occupation as follows:

Stakeholders	Samples	Ages	Samples
Village Officials	12	17-24 y.o.	0
Community Organizations	3	25-34 y.o	4
Village Tourism Board Officers	11	35-44 y.o	9
Village communities	4	≥ 45 y.o.	17
Total	30	Total	30

Table 1: Stakeholder Groups and Age of the Samples

Source: Data processed, 2021

Table 2: Education and Occupation of the Samples

Education	Samples	Occupation	Samples
Primary (SD)	0	Civil Servants	3
Elementary (SMP)	0	Private employees	17
High School (SMA)	21	Housewives	0
College (Sarjana)	9	Entrepreneurs	8
Unschooled	0	Unemployed	0
Others	0	Others	2
Total	30	Total	30

Source: Data processed, 2021

VARIABLES AND DATA ANALYSIS

The variables analysed in this study are: (1) Villagers' Perception on Sustainability (X1) & Villagers' Perception on Green Tourist (X2) (2) the level of Community Participation (Z, or moderating variable) and (3) the need of Green Village (Y). The data were analysed through the Structural Equation Modelling using the Smart-PLS (Partial Least Square) version 3.0.

Construct of Instrument

Based on the theoretical framework referred in this study, each variable consists of some dimensions that are also breakdown into items (indicators). Variable X1 has 3 dimensions (Economy, Environment, and Social) with 19 indicators, variable X2 has 2 dimensions with 10 indicators, variable Z has 4 dimensions with 20 indicators, and variable Y has 4 dimensions with 4 indicators. So there are 13 dimensions for the total with 53 indicators, as follows:

Variables	Dimensions	Code	Indicators
Perception on	Economy	ЕКа	1. investment should go back to
Sustainabilit		EIZ1	the local community
y (X1)		EKD	2. contribution to the preservation
		FKc	3 hiring local staffs & provide
			training for them
		EKd	4. use local supplies to support
			local community
		EKe	5. supply chain policy for fair
			trade
	Environment	LIa	1. responsible for environmental
		LIb	damage
		TT.	2. environmental policy in the
		LIC	business to comply.
		I Id	environmental performance
		LIG	4 incentives to use public
		LIe	transportation for staffs
			5. alternative public transportation
		LIf	to guests.
			6. tips & training to be
		LIg	environmentally responsible
		T T1	7. reduce, reuse, and recycle
			waste, water, and energy
		LII	8. plant tree or native plants in the
			9 tours with small groups to
			preservation flora & fauna
		SOa	1. advise to buy local products to
			support community
	Social	SOb	2. not to buy products made from
			endangered species
		SOc	3. support local projects by
		501	contributing profits
		500	4. tell guests about cultural/religious matters to
		SOe	respect
			5. no supplier exploits children or
			violates human rights
Perception on	Environment	PBLa	1. visitors like destinations with
Green	Load		recycling program
Tourist (X2)		PBLb	2. visitors dare to drink tap water
		DDY	in the destinations
		PBLC	3. visitors feel the waste collection
		PBI d	is good & efficient

Table 3: Variables, Dimensions and Indicators

		PBLe	4. visitors prefer clean destinations with clean streets5. visitors feel the air pollution in our place is low
	Conservation Effort	UKVa	1. visitors like people who aware of sustainability
		UKVb	2. visitors want to live in a
		UKVc	3. visitors like the culture &
		UKVd	4. visitors prefer to walk, bike or
		UKVe	5. visitors like outdoor activities related to nature
Community Participation	Planning	Ra	1. get tourism development plans info from the apparatus
(Z)		Rb	2. present at a tourism planning meeting in my area
		Rc	3. can share opinions/ideas related
		Rd	4. involved in preparing the
		Re	5. involved in decision making on
	Implementin	Pa	1. involved in tourism
	g	Pb	infrastructure improvement 2. give contributions
		Pc	(money/idea/skills) in the activities
		Pd	charm (hospitality, etc)
		Ре	attend training (language courses) to improve skillspromote tourism campaign in
	Managing	Ka	1. manage tourism levy, parking,
		Kb	2. involved in tourism management agency in my area
		Kc	3. aspirations are represented by village officials
		Kd	4. get info from village officials on any activities
		Ke	5. establish good communication with village officials

VILLAGERS' PERCEPTION ON SUSTAINABLE TOURISM THAT FORMED THE LEVEL OF COMMUNITY PARTICIPATION TO DETERMINE THE NEED FOR GREEN VILLAGE (N-GREENV): A VALIDITY & RELIABILITY TESTING PJAEE, 19 (1) (2022)

	Monitoring	Ma	1. supervise tourism activities in
		Mb	my area
			2. monitor negative actions that
		Mc	can damage the image
			3. evaluate the implementation of
		Md	tourism plans
			4. compiled evaluation report on
		Me	tourism development
			5. give suggestions & criticisms of
			tourism development
Need of	Nature	nGV1	Hiking, Jogging, Yoga, Forest
Green	Agriculture	nGV2	bath,Camp
Village (Y)	Cultural	nGV3	Plantation, Husbandry, Farming,
	Adventure	nGV4	Fishing,
			Heritage, Cuisine, Crafts, Art,
			Rituals
			Bungee Jumping, Paragliding,
			Rafting, Diving, Tree top
Total	13		53

Conceptual Framework

The conceptual framework as well as the path of the variables measured of this study can be seen in the structural Equation Model (SEM) below or can be said that the Perception of Villagers on Sustainable Tourism and on Green Tourists can form the level of Community Participation in determining the Need for Green Village (n-GreenV)



Figure 1: Structural Equation Model of the n-GreenV

RESULT

Path Analysis

The initial model specification of the path analysis can be seen in the table 4 as well as in the Structural Equation Method. The P values of all path coefficients before bootstrapping are significant with p < 0.05. But further process of the path

coefficient using bootstrap in PLS shows that there are some indicators are not significant between and within dimensions of each variable as indicated by the P values that is p > 0.10 as shown in figure 2 below.

Table 4: Path Coefficient before and after bootstrappir	ng
---	----

Нуро	Path	Original	l Sample	Sample		Standard		T-Statistics		P-values	
theses				Means		Deviation	n				
		before	after								
H1 H2 H3	$\begin{array}{c} Z \rightarrow Y \\ X1 \rightarrow Z \\ X2 \rightarrow Z \end{array}$	0,506 0,301 0,499	0,470 0,254 0,522	0,509 0,301 0,547	0,495 0,237 0,616	0,233 0,147 0,161	0,186 0,154 0,140	2,172 2,046 3,102	2,522 1,649 3,953	0,030 0,041 0,002	0,012* 0,100* * 0,000*

Source: Data processed, 2021 Note: * = significant at p = 0,05

** = significant at p = 0,10



Figure 2: Path Analysis of the n-GreenV before bootstrapping of the p > 0,10Source: Data processed, 2021

By dropping all the indicators with p > 0,10, the P values of all path coefficients are still significant with p < 0,10. This means that that 3 indicators of dimension Environment (LIa with p=0,137; LIb with p=0,126; LIg with p=0,363), 1 indicator of dimension Social (SOe with p=0,126) both of the variable Perception on Sustainability, and 3 indicators of dimension Environment Load (PBLb with PBLc with p=0,410; PBLd with p=0,364; p=0,639), 3 indicators of dimension Conservation Effort (UKVa with p=0,211; UKVb with p=0,539; UKVc with p=0,158) both of the variable Perception on Green Tourist, and 2 types of attraction of the variable Green Village are not valid, which are Cultural Tourism (p=0,246) and Adventure Tourism (p=0,534). The remaining types are preferred by the villagers, which are Nature Tourism (p=0,00) and Agritourism (p=0,029) as shown in the figure 3 below:





Validity and Reliability

Two construct validities are measured in this study. One is convergent validity, a parameter that refers to the degree to which two measures of constructs that theoretically should be related are related. Another is discriminant validity, which conversely shows that two steps that are not supposed to be connected

are unrelated. Both types of validity are a requirement for excellent construct validity.

In term of Convergent validity that can be tested by outer loading or Average Variance Extracted (AVE), the researcher uses a reflexive indicator if the outer loading correlates > 0.70 with the measured variable (Ghozali, 2014; Sarwono (2015) or AVE value > 0,50 indicates adequate validity (Sarwono, 2015) while > 0,40 considered low but still significant. In the sub-model analysis, there are 33 indicators with a value < 0.70 so that they are eliminated and the measurement analysis is repeated, t and the valid indicators remain only 20. Table 5 shows the convergent validity test.

AVE	Indicator	Community Participation	Need of Green Village	Perception on Green Tourist	Perception on Sustainabili
					ty
0,404	ЕКа				0,759
	EKb				0,822
	EKc				0,847
	EKd				0,832
	EKe				0,825
0,522	Kb	0,825			
	Kd	0,716			
	Ma	0,896			
	Mb	0,885			
	Mc	0,847			
	Me	0,771			
	Pb	0,806			
	Pe	0,746			
	Rb	0,823			
	Rc	0,826			
	Rd	0,760			
	Re	0,884			
0,633	nGV1		0,946		
0,601	UKVd			0,893	
	UKVe			0,881	

Table 5: Convergent Validity Test Result

Source: Data processed, 2021

Table 6 shows that all 4 variables have good or valid discriminant validity values. However, 1 variable consists of only 1 indicator, which is the variable need of green village (n-GreenV). Table 7 shows that all the composite reliability values of variables are > 0,60 for having good reliability.

Indicator	Community	Need of	Perception	Perception on
	Participation	Green	on Green	Sustainability
	-	Village	Tourist	
ЕКа	0,515	0,219	0,278	0,759
EKb	0,611	0,201	0,576	0,822
EKc	0,541	0,222	0,308	0,847
EKd	0,747	0,258	0,430	0,832
EKe	0,372	0,191	0,256	0,825
Kb	0,825	0,404	0,506	0,615
Kd	0,716	0,261	0,311	0,412
Ma	0,896	0,467	0,498	0,602
Mb	0,885	0,381	0,520	0,676
Mc	0,847	0,327	0,515	0,727
Me	0,771	0,464	0,567	0,523
Pb	0,806	0,531	0,525	0,607
Pe	0,746	0,249	0,675	0,612
Rb	0,823	0,273	0,356	0,499
Rc	0,826	0,067	0,377	0,577
Rd	0,760	0,292	0,341	0,548
Re	0,884	0,301	0,420	0,597
nGV1	0,481	0,946	0,291	0,396
UKVd	0,502	0,407	0,893	0,489
UKVe	0,561	0,236	0,881	0,396

Table 6: Discriminant Validity Test Result

Source: Data processed, 2021

Table 7: Composite Reliability Test Result

Variables	CR value
Perception on Sustainability	0,905
Perception on Green Tourist	0,854
Community Participation	0,954
Need of Green Village	0,767

Source: Data processed, 2021

Results of Measurement Analysis (Outer Model)

The measurement model (outer model) shows the role of indicators in reflecting the variables formed or shows the relationship between variables with their constituent indicators (Suryawardani, 2018). The highest outer loading value on each variable can be interpreted as the indicator that best represents its constituent variables. The significance of this relationship was obtained through bootstrapping of 500 sub-samples and 5% and/or 10% of significance. The results of the output model on the variable of Perception on Sustainability is reflected by 14 indicators (5 of dimension Economy, 6 of Environment, and 3 of Social), variable of Community Participation is reflected by 19 indicators (4

of dimension Managing, 5 of Monitoring, 5 of Implementing, and 5 of Planning), variable Need of Green Village is reflected by 2 indicators (1 of dimension Nature/Ecotourism, and 1 of Agritourism), and variable Perception on Green Tourist is reflected by 4 indicators (2 of dimension Environmental Load, and 2 of Conservation Effort). Total valid indicators are 39 as described in table 8 below.

As can be seen in the table 8, the indicators of hiring local staffs & provide training for them (EKc) with a value of 0,847, which is the indicator that best represents the variable Perception on Sustainability, the indicator of supervise tourism activities in my area (Ma) with a value of 0.896, which is the indicator that best represents the variable Community Participation, the indicator of Nature Tourism (such as Hiking, Jogging, Yoga, Forest bathing, Camping, etc.) (nGV1) with a value of 0,946, which is the indicator that best represents the variable Need of Green Village, and the indicators of visitors prefer to walk, bike or use public transport (UKVd) with a value of 0,893, which is the indicator that best represents the variable Perception on Green Tourist. Therefore, perception on Economy sustainability and conservation effort are always expected to maintain the Community Participation that can determine the Need of Green Village.

Variable	Code	Outer	Standard	T-	P values
		Loading	Deviation	Statistic	
Perception on	EKa	0,759	0,148	5,145	0,000*
Sustainability	EKb	0,822	0,115	7,130	0,000*
	EKc	<mark>0,847</mark>	0,124	6,853	0,000*
	EKd	0,832	0,092	9,048	0,000*
	EKe	0,825	0,130	6,353	0,000*
	LIc	0,531	0,178	2,978	0,003*
	LId	0,578	0,172	3,354	0,001*
	Lie	0,475	0,183	2,588	0,010*
	LIf	0,407	0,215	1,888	0,060**
	LIh	0,641	0,117	5,476	0,000*
	LIi	0,566	0,176	3,214	0,001*
	SOa	0,616	0,143	4,306	0,000*
	SOb	0,436	0,193	2,261	0,024*
	SOc	0,563	0,174	3,235	0,001*
Community	Ka	0,620	0,153	4,061	0,000*
Participation	Kb	0,825	0,059	13,871	0,000*
-	Kc	0,550	0,196	2,808	0,005*
	Kd	0,716	0,120	5,965	0,000*
	Ma	<mark>0,896</mark>	0,055	16,296	0,000*
	Mb	0,885	0,063	14,079	0,000*
	Mc	0,847	0,075	11,219	0,000*
	Md	0,641	0,155	4,145	0,000*
	Me	0,771	0,094	8,178	0,000*
	Pa	0,492	0,233	2,112	0,035*
	Pb	0,806	0.073	10,991	0.000*

Table 8: Output Model Measurement of all variables

VILLAGERS' PERCEPTION ON SUSTAINABLE TOURISM THAT FORMED THE LEVEL OF COMMUNITY PARTICIPATION TO DETERMINE THE NEED FOR GREEN VILLAGE (N-GREENV): A VALIDITY & RELIABILITY TESTING PJAEE, 19 (1) (2022)

	Pc	0,651	0,165	3,942	0,000*
	Pd	0,547	0,179	3,062	0,002*
	Pe	0,746	0,102	7,318	0,000*
	Ra	0,512	0,174	2,938	0,003*
	Rb	0,823	0,082	10,043	0,000*
	Rc	0,826	0,117	7,034	0,000*
	Rd	0,760	0,109	6,984	0,000
	Re	0,884	0,070	12,570	0,000*
Need of Green	nGV1	<mark>0,946</mark>	0,904	0,167	0,000*
Village	nGV2	0,609	0,555	0,274	0,027*
Perception	PBLa	0,671	0,188	3,567	0,000*
on Green	PBLb	0,616	0,211	2,924	0,000*
Tourist	UKVd	<mark>0,893</mark>	0,890	18,206	0,000*
	UKVe	0,881	0,869	10,289	0,000*

Source: Data processed, 2021

Note: * = significant at p = 0.05 ** = significant at p = 0.10

Results of Structural Model (Inner Model)

As shown in the path analysis in figure 1, after bootstrapping 500 times, the analysis of the structural model (inner model) shows the correlation between one variable with another variable. Ghozali (2014) suggests that the structural model is evaluated by looking at R^2 for endogenous latent variables and path coefficient estimation.

The R² is 0,254; 0,552; and 0,470 respectively are weak, good, and moderate. In the structural model there are two R² values, namely the endogenous variable Community Participation (Z) and the endogenous variable Need of Green Village (n-GreenV) or (Y). The R² value of Community Participation of 0,531 means that this variable can be explained by perception on Sustainability and Perception on green tourists by 53,1%. In comparison, 47,9% is explained by other variables not examined in this study. The R² value of Need of Green Space of 0,221 means the Need of Green Village variable can be explained by the Community Participation variables in the structural model is shown through direct effect and indirect effect with the criterion of a significance level of 5% and 10%.

Direct and Indirect Effect of Exogenous variables on Endogenous variables The direct effect influences exogenous variables to endogenous variables, which are correlated directly without the mediating (moderator) variables. In the first attempt, the researcher directly correlates Perception on Sustainability (X1) and Perception on Green tourists (X2) to the Need for Green Village (Y). Still, both correlations (H4 & H5) are failed to be significant either at level 5% or 10%. Even Community Participation (H3) also fails to affect the Need of Green Village if there are no exogenous variables (X1 & X2) affecting this endogenous variable. This means that all direct effect hypotheses (H4, H5, H6) are failed to have a significant influence on the Need for green Village, as shown in Table 9 below:

Table 9: Direct Effects on the n-GreenV without Mediating Variable

 Community Participation

Hypotheses	Path	Original	Sample	Standard	T-	P-
		Sample	Means	Deviation	Statistics	values
H4	$Z \rightarrow$	0,333	0,316	0,292	1,142	0,254
Н5	Y	0,011	0,030	0,413	0,028	0,978
H6	X1 →	0,202	0,214	0,396	0,509	0,611
	Y					
	$X2 \rightarrow$					
	Y					

Source: Data processed, 2021

The Indirect Effect is the influence of exogenous variables on endogenous variables correlated through mediating variables. It is explained in table 4 where both exogenous variables, the Perception on Sustainability and Perception on Green Tourist, significantly influence the Need of Green Village of Bongan people through the mediation of Community Participation either at the significance level of > 5% or >10%. So whenever the researcher put the variable of Community Participation (Z) as a mediator (moderator), the results show significant effects. Based on the indirect impact shown in table 4 in the column after, two variables are significant at the level of > 5%, namely the effect of Community Participation (Z) on the Need of Green Village (Y) with p values of 0,010, and the Perception Sustainability (X1) on the Community Participation with p values of 0,000, while the Perception on Green Tourist (X2) only significant at level of > 10% on the Community Participation. This shows that all hypotheses (H1, H2, H3) have a considerable effect on the Need for a Green Village of the Bongan people.

Structural Model Feasibility Analysis Results

Hidayana et.al (2019) cited that several researchers (i.e. Chin, 1998; Hair et al., 2012; Henseler et al., 2009) recommend that the feasibility of the model should be examined before interpreting the results of the structural equation model analysis of this study. Table 10 shows the measures that are commonly used to assess the feasibility of structural models, analysed by Smart PLS models as follows:

Variable	Type of	Number of	AVE	R ²
	Variable	Indicators		
Perception on	Exogenous	5	0,404	NA ^a
Sustainability	Exogenous	2	0,601	NA ^a
Perception on Green	Endogenous	12	0,522	0,531
Tourist	Endogenous	1	0,633	0,221

Tabel 10: Statistical values for assessing Model Feasibility

Community Participation Need of Green Village				
Average	-	-	0,506 ^b	0,376 ^a

Source: Data processed, 2021

Note: ^a = values is not available because latency is an exogenous type ^b = The weighted average is the number of indicators

By looking at the average values in table 10, it was obtained that the average value of AVE is 0,506, and the value of average R^2 is 0. 63. To assess the feasibility of the structural equation model (SEM) as a whole, the Goodness of Fit (GoF) value of the model by referring to the formula introduced as follows:

$$GoF = \sqrt{AVE} \ x \overline{R^2}$$

Average AVE is the weighted average value with the weight obtained from the number of indicators for each variable. Using this formula, the GoF value of the model is 0,436. This means that the value is below 0,50 and indicates that the model still cannot be accepted, and if we look at the SRMR (Standardized Root Mean Residual) value of this model is 0,144, which is > 0,09, this model is also not feasible to be used and must be refined.

DISCUSSION

Although Perception on Sustainability and Perception on Green Tourists significantly influence Community Participation, which is in line with villagers' Need of Green Village, the Structural Equation Model (SEM) is not feasible to be implemented yet. This might be because only 1 (one) dimension is valid for the variable the Need of Green Village, which is Nature or Ecotourism (such as Hiking, Jogging, Yoga, Forest bathing, Camping, etc.). The other 3 (three) dimensions of this variable, Agritourism, Cultural tourism, and Adventure tourism, are failed to be valid. The further possible explanation of this failure is because each dimension only has one indicator in the variable Need of Green Village. In comparison, measurements in the other three variables measured have more than one indicator. The indicators/items are not fairly distributed in each variable and affect the proportion of the indicators/items distribution since a single indicator/item cannot be calculated for correlation purposes.

Indeed, this result has encouraged the researcher to develop indicators/items of the variable Need of Green Village for further steps in making a good Green Village Rating tool, as mentioned earlier in the background of the study.

CONCLUSION

The following conclusions can be drawn: (i) the Perception on Sustainability has a significant effect on Community Participation; (ii) the Perception on Green Tourist significantly influence Community Participation, and (iii) Community Participation has a borderline effect on the Need for Green Village; (iv) Perception on Sustainability, and (v) Perception on Green Tourist do not directly influence the Need of Green Village.

REFERENCES

- Binti Ramele, R. & Yamazaki, J. (2014). The effects of Malaysian homestay program on economy, environment, society, and culture of Malay Kampung: A case of Banghuris Homestay in Selangor. Journal of Architecture and Planning, 79 (705), 2433-2442.
- Biro Pusat Statistik Provinsi Bali (2019). Jumlah Wisatawan Asing ke Bali Menurut Bulan 1982-2019 retrieved 11 Nobember 2019 at <u>https://bali.bps.go.id/statictable/2018/02/09/21/jumlah-wisatawan-asing-ke-bali-menurut-bulan-1982-2019.html</u>
- Boronyak, L., Asker, S., Carrard, N. & Paddon, M. (2010). Effective Community Based Tourism: A Best Practice Manual for Peru. Sustainable Tourism Cooperative Research Centre 2010: Gold Coast Campus, Griffith University QLD 4222 Australia
- Chin, W.W. (1998). The partial least squares approach for structural equation modeling. In G. A. Marcoulides (Ed.), Modern Methods for Business Research. 295–336. Lawrence Erlbaum Associates Publishers.
- Ghozali, I. (2014). Structural Equation Modelling: Metode Alternatif dengan Partial Least Square Aplikasi. Cetakan ke empat. Semarang: Universitas Diponegoro.
- Halim, D.K. (2017). Teori N-Green: Mempertemukan Psikologi Hijau Dan Arsitektur Hijau Di Ruang Publik Perkotaan. Edisi ke-2. Yogyakarta: Deepublish
- Haralambopoulos, N. & Pizam, A. (1996). Perceived impacts of tourism: The case of Samos. Annals of Tourism Research, 23, 503–526
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The Use of Partial Least Squares Path Modelling in International Marketing. New Challenges to International Marketing Advances in International Marketing, 20, 277– 319.
- Hidayana, F.F., Suryawardani,I.G.A.O. & Wiranatha, A.S. (2019). The Influence of Tourists' Motivation on Intention to Revisit at The Traditional Village of Prai Ijing, Waikabubak, West Sumba, East Nusa Tenggara. E-Journal of Tourism, 6 (01), 303-321.
- Joe F. Hair, J.F., Sarstedt, M., Ringle, C.M. & Mena, J.A. (2012). An assessment of the use of partial least squares structural equation modelling in marketing research. Journal of the Academy of Marketing Science, 40 (3), 414–433.
- Kayat, K. (2002). Exploring factors influencing individual participation in community-based tourism: The case of Kampung Relau homestay program, Malaysia. Asia Pacific Journal of Tourism Research, 7(2), 19-27.
- Lama, J.Y. (2013) China and Its Peripheries: Securing Nepal in South Asia. The Institute of Peace and Conflict Studies (IPCS).
- Milenković, S. & Bošković, N. (2012). Development tendencies of ecotourism Serbia, Teme, 36(2), 483-499.
- Nilsen, T. (2018). Is there an accommodation oversupply in Bali? Gapura Bali, 6 Juni, 2018 retrieved 7 April 2019 at

https://www.gapurabali.com/blog/terje-nilsen-seven-stones/thereaccommodation-oversupply-bali/bali-accommodation/airbnb-bali

- Nunkoo, R. & Gursoy, D. (2012). Residents' support for tourism: An identity perspective. Annals of Tourism Research, 39, 243–268
- Sarwono, (2015). Membuat Skripsi, Tesis dan Disertasi dengan Partial Least Square SEM (PLS-SEM). Yogyakarta: CV. Andi Offset.
- Suadnyana, I.W.S. (2019). 146 Ribu Kamar Hotel Di Bali Kini Dirasa Over Supply, Pemprov Bali Akan Moratorium Pembangunan Hotel, tribunbali.com, Kamis, 26 September 2019 retrieved 11 November 2019 at <u>https://bali.tribunnews.com/2019/09/26/146-ribu-kamar-hotel-di-balikini-dirasa-over-supply-pemprov-bali-akan-moratoriumpembangunan-hotel.</u>
- Sung-kwon, H., Jae-hyun, K. & Seong-il, K. (2003). Implications of Potential Green Tourism Development. Annals of Tourism Research, 30, 323-341.
- Suryawardani. I G.A.O. (2018). Evaluation of marketing strategy of Sanur Village festival based on visitor's behaviour. International Journal of Applied Business and Economic Research.16 (2), 261-275.
- Sutawa, G. K. (2017). Bali "Over Supply" Kamar, Tambahan Hingga Ribuan Kamar akan Sebabkan Perang Tarif, BALI POST Minggu, 14 Mei 2017 retrieved 7 April 2019 at <u>http://www.balipost.com/news/2017/05/14/8588/Bali-Over-SupplyKamar,Tambahan...html</u>
- UNWTO (2012). Tourism in the Green Economy: Background Report. Madrid: United Nation of World Tourism Organization.