Community Participation as Agent for Sustainable Tourism:
A Structural Model of Tourism Development at Bali Province, Indonesia

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Abstract: Tourism is become more important industry in emerging market countries. However, as a matter of fact that sustainable tourism development is intensively announces as a strategic issues to reduce poverty by increasing the positive economic impacts for local people as well as reducing the environmental degradation and disturbances of socio-cultural dimensions. This work studied the effect of local government policies and local community participation on the quality of destination and life's quality of local people at northern of Bali areas. A hundred of community leaders at Buleleng regency of Bali were chosen as the respondents in this work. By applying variance-based structural equation modeling, we found government policies significantly affect community participation on tourism development at northern of Bali. In addition, local community participation in turns positively affects the quality of destination. Furthermore, we confirmed quality of destination has significant effect on people's quality of life with people emotional well-being is the most reflection and material well-being is the least reflection of it.

Keywords: Bali; community participation; quality of life; SEM; tourism destination

INTRODUCTION

Tourism industries and their related sectors have been rising to become top agenda in many developing countries. Various researches findings proved tourism increase people income as well as providing job and business opportunities. In brief, tourism is believed and argued has capabilities to increase the quality of economic dimension of the society. However, on the other side, there is no doubt some negative impacts especially in socio-cultural and environmental aspects arise. For instance, excessive use of natural resources

such as water and energy supplies for tourism industries will endanger its availability for local society and environmental sustainability. Generally speaking, as a multi sector industry, tourism will affects the quality of human life as a means of the economic, socio-cultural, and the environmental changes(Mowforth & Munt, 2009; Sebele, 2010; Untong, Kaosa-ard, Ramos, Sangkakorn, & Rey-Maquieria, 2010).

The raising concerns for conducting tourism in more sustainable ways increase dramatically in the recent years, especially in Bali as central tourism of Indonesia. Many efforts have been promoted by Bali's government to increase the economic benefit for local people as well as to preserve the environment and protect Balinese socio-cultural aspects. For instance, Bali Goes Green campaign is an example of Bali's government to promote eco-friendly development in Bali. In addition, lot of cultural-related festivals have been conducted at various regencies in Bali to preserve and promote local culture in relation to tourists' activities.

According to Claiborne (2010, p. 1), tourism has become a major agent for socio-cultural and environmental changes in every destination it has touched. Of course these changes have their own prices that have to be paid by the community. Unfortunately, many communities particularly in developing world, unaware of the burden of costs arising from tourism activities. In these circumstances, communities' participation is an alleged solution.

In spite of much efforts and resources has been allocated by local government of Bali to promote sustainable tourism development (STD), program outcomes were not successful as expected. Mowforth& Munt (2009) argued the lack of the understanding about community' social structure is the main factor for the unsuccessfulness of STD. Community-based tourism development has a meaning if the community has attentions, interests, and concern to participate in tourism development. Furthermore, even though the community has these prerequisites for actively involves in tourism activities at his own backyards, there are some barriers exist. Refers to Tosun&Timothy(2003), operational capabilities, structural, and cultural barriers are three kind of barriers that were experienced by local community.

The principles behind community participation in tourism development may be easy to understand and promote, but the practices are far more complex (Claiborne, 2010). Communities are not formed by homogenous people, but they are more likely consist of people with different attitudes of their mind regarding the tourism that takes place on their own villages. Noting this, in order to reduce conflicts might be arose among people in their participation, some how the leaders (both formal and informal leaders) have to take place on community participation discourse.

In spite of the importance of community participation to promote quality of tourists' destination (Sproule, 1998; Kates, Parris, & Leiserowitz, 2005; Kencana & Mertha, 2014)very little researches had been conducted to study the underlying causes of local community participation in order to be effective. In this work we assume local government has an important role in directing Balinese people to participate for enhancing the quality of destination at Northern of Bali Island. Recently, tourism development at this region is actively promoted by Buleleng regency – local government at northern of Bali – and gets full support from Bali province in order to balance tourism infrastructure development between southern and northern of Bali. This work is aimed to study the effect of local government roles in affecting community participation on tourism development at Buleleng regency. In addition, the causal relationship between local community, quality of destination, and perception of life's quality are under studied.

RESEARCH METHOD

We applied quantitative approach in our work to answer our research goals. Variance-based structural equation modeling as well as factor analysis were used to analyzed the data and make research inferences. The data were collected from community leaders at eight districts in Buleleng regency. Community leaders were appointed as the respondents in our work because they are the representation of people at their villages.

Population and Sample

Buleleng regency that is located at northern of Bali Island covers the area as much as 136.58 km², approximately 24.25 percent of Bali's area. Buleleng is divided into nine subdistricts with total population recorded on 2015 is 646,200 people with sex ratio is 99.26 males per 100 females(BPS, 2016).The population in our research are traditional villages' leaders at Buleleng regency. According to (BPS, 2016), the number of traditional village at this regency is 557. In Balinese social structure, a traditional village is led by *kelihanbanjar* in a democratic atmosphere. By positioning the *kelihanbanjar* as our population, priori we fixed our sample size as much as 100 *kelihanbanjar* as the respondents. Member of our sample is chosen by applyingproportionally random sampling technique, based on the total number of *kelihan* at every subdistrict at Buleleng regency. Data were collected on July – October 2015.

Research Instrument

A five-option Likert's scale questionnaire is developed to collect data. Prior to its distribution, validity and reliability of questionnaire was examined in a pilot study conducted at Kintamani subdistrict of Bangli regency. An item is declared valid if its correlation value with the other item on the same construct is greater than 0.30 (Nunnaly, 1975). In addition, construct is assumed has reliability measurement if its Cronbach's alpha coefficient at least 0.60 (Hair, Anderson, Tatham, & Black, 1995).

Data Analysis

Basically, a structural model can be analyzed by applying the covariance-based or variance-based structural equation modeling (SEM). Both techniques have their own limitations (Henseler, 2007; Hair, Sarstedt, Ringle, & Mena, 2012). In our work, we applied variance-based SEM noting we included a formative construct in our model that cannot be analyzed by using covariance-based SEM.

Research Model and Hypothesis

In accordance with aims of this work, a structural model was developed as shown in Fig. 1:

Four hypotheses were built regarding aim of this work, i.e.:

H1 : perceived community participation positively affects the quality of destination;

H2 : local government policies positively affect community participation in tourism development;

H3 : local government policies positively affects the quality of destination; and

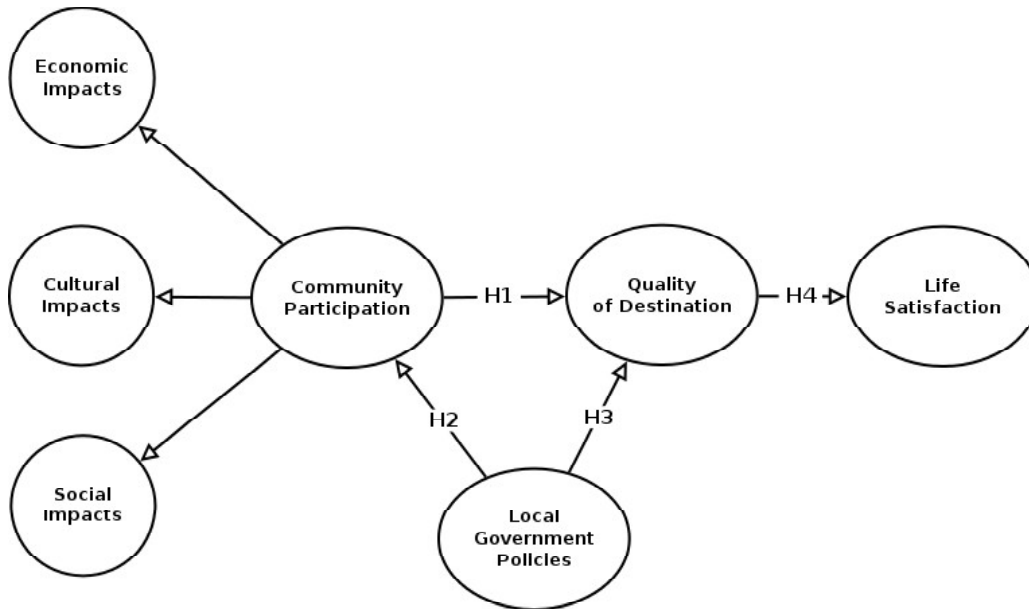H4 : quality of destination positively affects life satisfaction of local community.

Figure 1: Conceptual research model

RESULTS

Profile of Respondents

As aforementioned, 100 *kelihanbanjar* was chosen as our respondents by proportional random sampling technique. Table 1 showed the distribution of sample.

Table I
Distribution of Sample

Subdistrict	Number of Kelihan Banjar	Percentage	Number of Samples
Gerokgak	77	13.82	14
Seririt	80	14.36	14
Busungbiu	41	7.36	8
Banjar	74	13.29	13
Sukasada	63	11.31	11
Buleleng	41	7.36	8
Sawan	69	12.39	12
Kubutambahan	52	9.34	9
Tejakula	60	10.77	11
Total	557	100.00	100

Source: Own data (2016)

On the average, ages of respondents are 43.8 years old. Most of respondents had been completed their junior high school (65 percent), and 18 percent hold diploma or under graduate degree.

Quality of Questionnaire

Item validity and construct reliability for latent variable with reflective indicators can be assessed by observing item correlation and its Cronbach's alpha coefficient. Table 2 showed these values.

Table II
The Assessment of Validity and Reliability of Modeled Reflective Constructs

Construct	Code	Item Description	ñ
Cultural Impacts α = 0.901	Y1.11	increase the number of performing arts	0.610
	Y1.12	increase community's pride for their culture	0.857
	Y1.13	promotes culture authentic	0.847
	Y1.14	conserves culture identity	0.817
Social Impacts α = 0.942	Y1.21	disruption of life	0.846
	Y1.22	improve communication skill	0.863
	Y1.23	learn the new things	0.870
	Y1.24	change the traditional life	0.879
Economic Impacts α = 0.954	Y1.31	increase job opportunities	0.905
	Y1.32	attracts more investment	0.910
	Y1.33	increase the standard of living	0.881
	Y1.34	increase the economic income	0.870
Quality of Destination α = 0.936	Y2.1	increase community' support for CBT initiatives	0.884
	Y2.2	increase community' participation for CBT actions	0.881
	Y2.3	increase community' awareness for environment conservation	0.847
Quality of Life α = 0.936	Y3.1	increase the quality of material well-being	0.753
	Y3.2	increase the community well-being	0.896
	Y3.3	increase the quality of emotional well-being	0.899
	Y3.4	increase the quality of health and community safety	0.858

Source: Own calculation, using SPSS Package (2016)

Observing all of the items in respective constructs have correlation value greater than 0.30 as suggested by (Nunnaly, 1975), we concluded each constructs are valid reflected by its item. In addition, noting the Cronbach's alpha (á) for every construct greater than 0.60 as noted by (Hair, Anderson, Tatham, & Black, 1995), we argued the reflective constructs reached sufficient reliability measurement. Based on this finding, subsequent analysis is worth to be conducted.

Outer Model Analysis

SEM analysis basically involves two sub-type analysis i.e. (a) outer or measurement model analysis, and (b) inner or structural model analysis. Measurement model refers to the causal relationship between constructs and its reflective or formative indicators; structural model evaluates the causal relationships among constructs.

According toHair, Jr., Hult, Ringle, & Sarstedt(2014, p. 97), one should differentiates reflective with formative measurement models in conducting outer model analysis. For reflective outer models, one could assess the internal consistency by observing composite reliability (CR) of each of constructs, individual indicator reliability and average variance extracted (AVE) to evaluate convergent validity, and Fornell-Lacker criterion is used to assess the discriminate validity. For formative outer models, collinearity among

indicators and their significance outer weights have to be checked in outer model. Table 3 and 4 showed the outer model result for reflective and formative measurement in our model.

RefferstoHair, Jr., Hult, Ringle, & Sarstedt (2014), internal consistency of a construct can be measured by observing its CR. A construct is concluded has an internal consistency on its measurement if its CR greater than 0.708. In addition, AVE value has to be greater than 0.50 (Hair, Jr., Hult, Ringle, & Sarstedt, 2014; Peng & Lai, 2012)to say a construct achieved convergent validity, and the outer loading has to be greater than 0.60 (Hair, Anderson, Tatham, & Black, 1995) and significant (Peng & Lai, 2012) to conclude a construct has discriminant validity. Refers to these threshold values, we concluded all of reflective constructs in our model had satisfied internal consistency as well as achieved convergent and discriminant validity.

Table III
The Reflective Measurement Model Analysis Result

Construct	AVE	CR	Item Code	Outer Loading	p-Value
Cultural Impacts (Y1.1)	0.774	0.931	Y1.11	0.726	0.000
			Y1.12	0.942	0.000
			Y1.13	0.918	0.000
			Y1.14	0.917	0.000
Social Impacts (Y1.2)	0.855	0.959	Y1.21	0.912	0.000
			Y1.22	0.926	0.000
			Y1.23	0.927	0.000
			Y1.24	0.933	0.000
Economic Impacts (Y1.3)	0.883	0.968	Y1.31	0.948	0.000
			Y1.32	0.950	0.000
			Y1.33	0.932	0.000
			Y1.34	0.928	0.000
Quality of Destination (Y2)	0.889	0.960	Y2.1	0.948	0.000
			Y2.2	0.948	0.000
			Y2.3	0.931	0.000
Quality of Life (Y3)	0.842	0.955	Y3.1	0.866	0.000
			Y3.2	0.940	0.000
			Y3.3	0.942	0.000
			Y3.4	0.920	0.000

Source: Own calculation (2016)

Table IV
The Formative Measurement Model Analysis Result

Construct	Code	Item Description	Outer Weight	VIF
Local Government Policies	X1.1	formulates legal compliance	0.342^{ns}	2.11
	X1.2	establish tourism planning	0.482^{*}	3.29
	X1.3	improves public safety	0.216^{ns}	2.57
	X1.4	improves public services and infrastructures	0.098^{ns}	2.27

Note: VIF stands for variance inflation factor
^{ns} not significant
*significantat 5 percent
Source: Own data, analyzed (2016)

For formative constructs, measurement analysis is done by observing the indicator's outer weight and its significance. Furthermore, one has to assure there is no collinearityexists among indicators. One indicator is said collinear with others if its VIF less than 5 (Hair, Jr., Hult, Ringle, & Sarstedt, 2014). Noting all the indicators of local government roles less than 5, we concluded that collinearity issues does not exists in measuring this construct. However, only X1.2 has significantly outer weight, while the other three has not. Despite of their weights and significances, we retain all of the items for this construct considering we built our model based on theory-driven conceptualization.Noting the measurement model results for reflective and formative constructs, we argued to use the measurement model for assessing the causal relationships among latent variables in the model.

Structural Model Analysis

Structural or inner model relates to causal relationship among constructs (Hair, Anderson, Tatham, & Black, 1995). Variance-based SEM (VB-SEM) differs from covariance-based SEM (CB-SEM) in predicting model's parameters. VB-SEM does not relied on normal assumption for errors distribution and uses bootstrapping technique to estimate model's parameters. This technique is available in SmartPLS 3.0 (Ringle, Wende, & Will, 2014).

The assessment of inner model is conducted by examining the path values that represent the direct effects of exogenous on endogenous constructs. In addition, one has to note the R^2 of endogenous constructs. The R^2 indicates the amount of variance in the endogenous construct explained by all of its respective exogenous. According to (Chin, 1998), threshold values to claim an endogenous construct has weak, moderate, or substantial predictive accuracy are 0.19, 0.33, and 0.67. Fig. 2 showed path coefficient's values between exogenous and endogenous constructs in our structural model. The p-values for respective paths are given in brackets.

From fig. 2 we noted three out four hypotheses were made are significant. However, local government role did not show significant effect on destination quality. Furthermore, community participation is
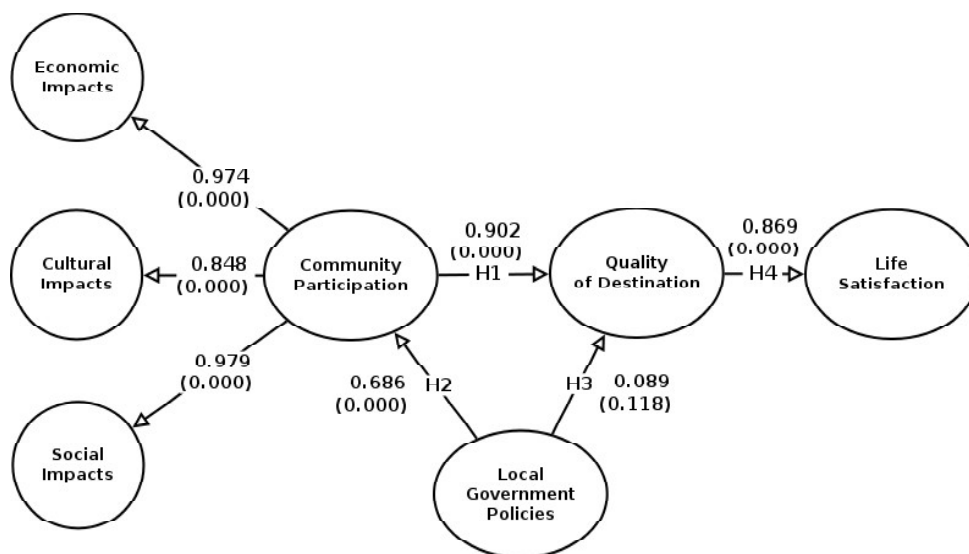

Figure 2: Path values and its p-values in structural model

significantly reflected on social, cultural, and economic impact. By elaborating the R^2s for each of endogenous constructs in our model, we concluded our endogenous constructs achieved substantial predictive accuracy as showed on Table 5.

In addition to examine the R^2 values to assess predictive accuracy of endogenous constructs, according to Hair, Jr., Hult, Ringle, & Sarstedt (2014), one has to elaborate the Stone-Geisser's Q^2 value as an indicator of the model's predictive relevance. The Q^2 value is obtained by using blindfolding procedure. This procedure is only applied to endogenous construct with reflective indicators as well as on single-item constructs. The Q^2 value larger than 0 suggests the model has predictive relevancy for respective endogenous constructs, and Q^2 value less than or equal 0 shows lack of predictive relevance.

Table V
The R^2 and Q^2 Values for Endogenous Constructs

Endogenous Constructs	R^2	*Has Predictive Accuracy?*	Q^2	*Has Predictive Relevance?*
Economic Impacts	0.949	Yes, substantial	0.791	Yes
Cultural Impacts	0.720	Yes, substantial	0.626	Yes
Social Impacts	0.959	Yes, substantial	0.743	Yes
Community Participation	0.471	Yes, moderate	0.552	Yes
Quality of Destination	0.932	Yes, substantial	0.743	Yes
Life Satisfaction	0.755	Yes, substantial	0.719	Yes

Source: Own data, analyzed (2016)

DISCUSSION

The philosophy of community participation as an element in development has been considered and promoted since 1950s under different names (de Kadt, 1982). Tosun argued community participation is the main actor in the development process, and through active and direct participation of local people, is an indispensable tool to educate community (Tosun, 2000).In a democratic atmosphere, the pressure for the (local) government give more space for people participate in the development process is increasing. The acceptance of H2 that stated government policies positively affect community participation supports Tosun's argument. We believe by establishing well-planned tourism development, the localgovernment of Buleleng regency success to increase public participation on tourism development at northern of Bali.

The increasing participation of local community, in turns, will increase significantly all of sustainable development's dimensions. Economic, cultural, as well as social dimensions of local people have positive impacts by people participation on tourism development as noted many researchers(Untong, Kaosa-ard, Ramos, Sangkakorn, & Rey-Maquieria, 2010; Sebele, 2010; Claiborne, 2010). Refers to its path values, social aspects are influenced with the most, whereas cultural aspects are the least affected by community participation. Observing the Q^2 values for these impacts, it is clear that local people perceives the economic impacts of tourism development is the most predictive. This finding is inline with the same results obtained by (Leksakundilok, 2004; Aref, 2011)that noted tourism give benefits in increasing local people income and job opportunities.

Despite of those findings, we concluded government policies did not affect quality of destination, directly. Only by the existence of mediating effect of local participation, tourism development planning may improves destination's quality as showed by total effect value of local government policies on quality of destination as much as 0.708 (p-value = 0.000). In addition, we proved quality of destination at northern of Bali is directly affected by level of community participation. This finding supports the research conducted by Leksakundilok who concluded in the case of Thailand's tourism, tourists' visit to the destinations at those country without any local control will led to negative impacts for community members. Tourist's activities that are conducted without any knowledge of local cultures and their way of life will caused misunderstanding even conflicts between agents of tourism development (Leksakundilok, 2004). Conflicts that are happened, especially when its arise between and/or among local people and 'the outsiders' will led to the degradation of destination quality. By empowering and enhancing local participation on tourism development at northern of Bali, the improvement of quality destination could be expected in the long run.

Frequently asked question regarding impacts of tourism on local people's quality of life (QoL) is does tourism contributes to QoL of people at tourism destination. Our answer for this question is yes. We found quality of tourists' destination positively affects local people's QoL. Quality of emotional well-being is the most reflection of people's QoL while the quality of material well-being is the least reflection of it. This finding also inline with the study conducted at destinations in Shiraz, Iran by Arez. He found the strongest impact of tourism in Shiraz is linked with emotional well-being (Aref, 2011).

CONCLUSIONS

The results of this work gave explanations regarding the causal relationship between local government policies, community participation, destination's quality, and people's quality of life on tourism development at northern of Bali. As an exogenous construct, government policies showed significant effect on participation of Buleleng's people at tourism development. This effect, in turn contributed on quality of the destination. The more local people want to participate, than the more the quality of destination. At the end of the relationship, we showed quality of the destination at northern of Bali positively and significantly affect people's quality of life at that region.

LIMITATIONSAND FUTURE EXTENSIONS

This study's results are subject to certain limitations that need to be considered. First, this studyis developed community participation model integrated with government policy, while the complexity of tourism destination quality must be inserting more other latent variables to make this research model become more realistic. Future research shouldbe directed towards developing a sound empiricalbase to extend the results and include other destination locations with different tourism object and with different environment condition. To be expanded, the role of local community participation support will be very interesting views to understand the form of community participation with different destination tourism object in determining the tourism destination quality.

This study is make an effort to provides research empirical model for the quality of destination at the beginning condition to growth, where all the community that leave around the destination still learn to adjust their perceptions to connect their resources with tourism service. The less developed destination

area might be slightly different community support compared with another destination places that were growth with more stable organized.

Finally, the inherent algorithm on which thePLS-SEM is based on a time periods of primary data, hence this limitation of data survey should not guarantee to predict as an establishment attitude in the future. The research activities using longitudinal data will be need to ensure the behavior change of community participation as the main construct in determining the tourism destination quality.

Such research would helpdetermine which segments hold a more positive impact of tourism destination quality in Bali Region of Indonesia, based on community participation. More research activities should be done for developing tourism destination area which segments needattention to improve community participation as the strategic key in supporting and strengthening more tourism destination quality, especially for income redistribution reason in Indonesia.

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