Positioning Analysis of Bali, Bandung and Yogyakarta as Tourist Destinations Using Sustainable Tourism Triangle

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Abstract

Tourism is one of the largest and fastest growing economic sectors in the world, and has a considerable role to assist sustainable development in many countries. A well-managed tourism sector can benefits local communities and the natural and cultural environments. Sustainable tourism planning presented as a sustainability based ethos and principles that sensitive to the negative impact of economic, social and environmental problem in the present and the future, addressing the needs of tourists, the needs of industry, environmental, and local community.

This study aimed to describe the positioning map of three tourist destinations in Indonesia, namely Bali, Bandung, and Yogyakarta using sustainable tourism triangle variables namely *Social Sustainability, Economic Sustainability, dan Environmental Sustainability* by measuring sixteen attributes of sustainable tourism. Data were collected through questionnaires distributed to tourists who have traveled to Bali, Bandung, and Yogyakarta with a sample of 400 respondents. The data collected were analyzed by Correspondence Analysis (CA) technique that establish a perceptual map which illustrates the positioning of the three tourist destinations.

The result showed that each destinations has its own advantages and considered different from each other. Travelers saw that the advantages of Bali are degree of tourist satisfaction and facilities and basic services. Bandung is considered to have the advantage on the incorporation of environmental criteria in tourism planning compared to the other destinations. Yogyakarta is considered have advantages on solid waste management and low air pollution levels.

Keywords: Positioning; Sustainable Tourism; Tourist Destinations; Correspondence Analysis

Introduction

Indonesia as one of the international tourist destinations, received 9,435,411 tourist visits by foreign tourists in 2014 (Pusdatin Kemenparekraf BPS, 2015). Besides foreign tourists, domestic tourists also enliven the domestic tourism market. Natural and cultural resources is a major component of Indonesia's tourism product. There are thousands of islands that stretches along 5,120 km that reached 13,466 islands in total that consists of 5 large archipelagic and 30 small island groups. Each island has an uniqueness such as local cultures, hospitality presented by the local communities, various ethnicities, beliefs, traditional foods, historical stories, and the awesome charm of the nature as the main tourist attraction (Satya, 2015). Bali, Bandung, and Yogyakarta are listed as a major tourist destinations (DTW) in Indonesia also favorite tourist destinations among travelers (TripAdvisor, 2014; Satya, 2015; The Jakarta Post, 2015).

Generally, there are so many positive reasons why tourism in a developing country like Indonesia need to be well-managed (UNWTO, 2013; Antariksa, 2012). First of all, tourism is a driver for economic and social progress among countries in the world. Secondly, tourism has been recognized as one of the ten sectors towards green economy and is classified as a sector that could make a significant contribution into the "3 dimensions of sustainable development", which is closely associated with job employment (labor-intensive industries), generating trading opportunities and as a crossing-bridge into other economic sectors. Third, regarding to poverty reduction, there's a great opportunity for local communities to market their various commodities as well as a small-medium businesses that are not depend on a money-form capital, but also a natural capital is often a major asset that is owned by the poor. Fourth, by utilizing the branding to increase the value or image of a geographic region, shall encourage the revitalization of a geographical region that had lost its attractiveness, for example, the old town or the former mining territories to become an asset for the country's tourism.

Along with its positive impacts, tourism sector also brought number of negative impacts (Antariksa, 2012; ILO, 2012). Among them are first, due to the development of tourism, there began a diminishing of the green area, even hectares of farmland are converted into the location for hotels, villas and residential buildings. Secondly, over 87% of greenhouse gas emissions were generated by the transportation sector. Although it is not known how much the contribution of an air transport sector at a global level towards the volume of those emissions, it is estimated to contribute the greatest amount of all. Third, politicization of the tourism sector may also occur in certain things. Generally, governments in developed countries tend to have a bargaining position towards developing countries regarding traffic policy determination of its citizens abroad. For example, a travel warning/advisory is not only imposed for a conventional reasons such as natural disasters, health issues, and any other securities, but also to accommodate the protests made by the public and even for the purposes of the economic embargo. The shrouded policy that contain interests: "...to control where citizens visit and where their money is spent". Fourth, the tourism sector may create a conflict of socio-cultural aspects such as prostitution, the problem of racial intolerance, sexual harassment, and the outbreak of disease as well.

Sustainable tourism which based on the ethos and principles of sustainability is not a new term in tourism industries. The term "green", sustainable, and environmentally friendly has been propagated in the paper, tourism policy, even the tourism promotion material itself (Mearns, 2012). The research conducted by Mearns (2012), describes about the sustainable tourism framework that can be used to measure and analyze the "sustainability" of the tourism industry at a tourism destinations. The result showed that there are three main sustainability dimensions namely social, economic, and environmental sustainability.

Positioning is an important key in creating a marketing strategy for a tourist destinations (Wray, 2010). Positioning will help the government of Indonesia, especially the government of Bali, Bandung, and Yogyakarta in putting themselves as a sustainable tourist destinations that will be visited by tourists. A tourist are the consumers of tourism products. Before going into traveling journey, a tourist will collect some information from several tourist destinations, to choose and decide where would they going to visit. The purpose of this study was to describe the positioning of Bali, Bandung, and Yogyakarta as a tourist destinations based on attributes of sustainable tourism triangle. The main issue in this studt is, "How does the positioning of Bali, Bandung, and Yogyakarta as a tourist destinations based on attributes of sustainable tourism triangle?".

Literature Studies

- *Marketing*

  Marketing is defined as a process of value creation for customers and build a strong relationships with them to gain feedback in the form of value in return. Along with the development of the theory and practice of marketing, it has expanded into 10 main entities namely physical products, services, events, experiences, people, places, title, organizations, information, and ideas (Kotler & Armstrong, 2014).

- *Marketing Strategy*

  The marketing strategy is a logical thinking used by an organization (the manufacturer) to create value for its customers in order to achieve a beneficial relationship. The company then decides who they will serve and how they serve these costumers. Marketing strategy instrument is including the STP (Segmenting, Targeting, Positioning), that can be implemented by these following stages (Walker & Mullins, 2014):

- *Segmenting*

  Segmenting the market is a process of division into groups with similar characteristics and needs of the market so that the group can respond in a similar manner to the product and a certain marketing way.

- *Targeting*

  Targeting is done by evaluating the similarity of the requirements/characteristics of some market groups according to its segmentation such as the potential growth rate, competitive forces, and other factors of the market to consider the ability of the company to give what each market segment wants, in order to select which segments shall be served.

- *Positioning*

  Positioning is a way to arrange a product in order to occupy a clear position, distinctive, and desirable on customer's mind compared with competitor's products. Positioning maps are used as a visual representation of customers' perceptions of some competitive products, a brand, or model. It can be seen by doing a survey of customers about the various attributes of the product and develop the dimensions and the graph shows the positions of some products, brands, and models (Peter & Olson, 2010). This study will be carried out the observations through the approach of attribute positioning of the third object based on an attribute or characteristics of sustainable tourism triangle to figure out how the positioning distribution map of each object and where they have advantages at.

- *Tourism*

  Tourism is an activity of a traveling performed by someone temporarily away from their original places to the destinations area for some reasons that not intended to settle down or make a living but merely to satisfy their curiosity, to spend some free time or have a holidays as well as other purposes (Ismayanti, 2012).

- *Tourist Destinations*

  Tourist destinations is generally defined as the place where a person intends to travel or also directed to visit. Tourist destinations is defined as "the place where tourists intend to spend their time away from home". A place referred as a tourist destinations when it visited by tourists who also took the time to stay there temporarily (Hermantoro, 2011).

- *Traveler*

  In the Tourism Act No. 10 year 2009 article (2), presented that the traveler is a person or group of people conducting trip by visiting a particular place for the purpose of recreation, self-development, or to learn the uniqueness of the visited tourist attraction in the interim time period (DPRRI, 2009).

- *Sustainable Tourism*

  UNWTO defined the Sustainable Tourism as "*tourism that takes full account of its current and future economic, social and encironmental impacts, addressing the needs of visitors, the industry, the environment and hos communitites*". Furthermore, Wray (2010) said it would be very useful when conceptualizing sustainable tourism as a triangle. Three points in this triangle represents the value of the environmental, social, and economical situations of the tourist destinations. This triangle is called "The Sustainable Tourism Triangle" that can be seen in Fig. 1.

Fig. 1. *The Sustainable Tourism Triangle*

As well as Wray, Mearns (2012), Padin (2012), Delgado & Palomeque (2014) also using the model of socio,

economic, and environmental as a measure of sustainable tourism. The third dimension of sustainable tourism are explained as follows:

- *Social Sustainability*
  Social Sustainability also called socio-cultural sustainability is an attitude of respect to human rights and equal opportunities among fellow social beings. There is an equalization in the distribution of the benefits of tourism with a primary focus to reduce poverty. Their attention to the local communities, maintenance of living systems, recognize and respect indigenous cultural authenticity, preserving the architectural and cultural assets as well as traditional values, religious tolerance and avoid all forms of exploitation.
- *Economic Sustainability*
  Economic sustainability aims to improve the welfare of the whole society, employment opportunities with a competitive business sector, and the gain of profit on all the activities that have an economic value. The important thing is, economic sustainability ensure the survival of the country's economic sector and its ability to survive in the long run.
- *Environmental Sustainability*
  Environmental sustainability guaranteed environmental conservation and the management of environmental resources which is a key element in tourism development and is essential for life. It is required an action to reduce air pollution, land and water destructions, and the preservation of biodiversity and natural heritage.

Theoretical Framework

The assessment in this study broadly obtained based on the attributes of sustainable tourism that has been considerd from previous studies which were selected by sustainable tourism triangle. Sixteen attributes of the three dimensions of sustainable tourism which is based on the definition of each dimension according to Wray (2010), Mearns (2012) and Padin (2012). The sixteen attributes of the three dimensions are as follows:

1. Social Sustainability
   (1) local cultures, (2) diversification of tourist attractions and resources, (3) degree of tourist satisfaction, (4) tourist products suitable for the disabled,
2. Economic Sustainability
   (5) tourist accommodation offer, (6) tourism accesibility, (7) tourist expenditures, (8) facilities and basic services, (9) economic benefits of tourism,
3. Environmental Sustainability
   (10) solid waste management, (11) air pollution, (12) noise pollution, (13) water availability and conservation, (14) energy consumption, (15) biodiversity and nature reserves, (16) incorporation of environmental criteria in tourism planning.

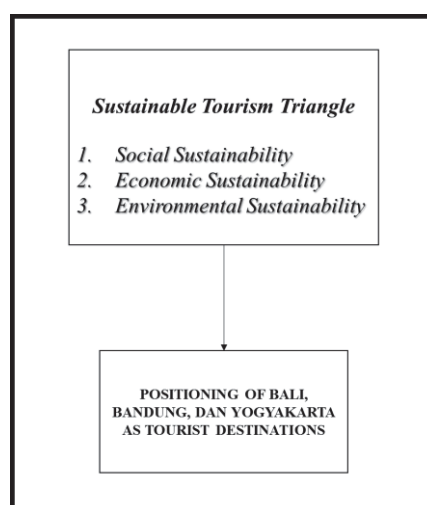The conceptual framework of the study can be seen in Fig. 2.

Fig. 2. Theoretical Framework

Research Methodology

This research is using a quantitative descriptive method which the data were collected through questionnaires. The sampling consists of 400 respondents which are tourists who have traveled to Bali, Bandung, and Yogyakarta that conducted by the convenience sampling technique. The data collected were analyzed by Correspondence Analysis (CA) technique using SPSS 20. Correspondence Analysis or also called ANACOR, is used to determine or assess a variable towards a tourist destinations that has been perceived by tourists then later known where each tourist destinations take an advantages of each attributes (Santoso, 2015). The advantages of the CA is the ability to place objects on a map, along with the attributes of the object, thus providing a relatively more complete information. Attributes that are used in this analysis is the sixteenth-dimensional attributes of sustainable tourism that had been identified previously. Step-by-step analysis of the data using the CA are as follows (Hair et al., 2010):

1. Arrange contingency tables
2. Calculating chi-square value
3. Make a perceptual map

Results and Discussions

- *Respondents' Characteristics*

  The primary data used in this study was obtained from distributing questionnaires to 400 respondents who were tourists who've been traveled to Bali, Bandung, and Yogyakarta (all three). Each respondent has a different demographics background. A summary of the characteristics of the respondents used in this study are presented in Table 1.

Table 1. Respondents' Characteristics

Respondents' Characteristics	Option	Q (People)	Percentage (%)
Genders	a. Male	179	45
	b. Female	221	55
Age	a. 18 – 30 years old	239	60
	b. 31 – 49 years old	99	25
	c. ≥ 50 years old	62	15
Occupation	a. Students/Scholars	200	51
	b. Private Employees	86	21
	c. Bureaucrat Officer	18	5
	d. Entrepreneur	54	13
	e. Housewives	35	9
	f. Other	3	1
Budget for traveling expenses	a. < Rp 2.000.000	102	25
	b. Rp 2.000.001 – Rp 3.500.000	102	25
	c. Rp 3.500.001 – Rp 5.000.000	64	16
	d. > Rp 5.000.000	132	34
Hometown	a. Jawa	330	83
	b. Sumatera	33	8
	c. Sulawesi	7	2
	d. Nusa Tenggara & Bali	21	5
	e. Kalimantan	9	2
Frequency of visits to Bali	a. 1x	168	42
	b. 2 – 3x	81	38
	c. 3x	151	40
Frequency of visits to Bandung	a. 1x	12	3
	b. 2 – 3x	41	10
	c. 3x	357	87
Frequency of visits to Yogyakarta	a. 1x	64	16
	b. 2 – 3x	135	33
	c. 3x	206	51
Total		400	100

Based on Table 1 it can be seen that out of the 400 respondents who had traveled to Bali, Bandung and Yogyakarta are dominated by female, aged between 18-30 years old, that were a students/scholars. Most of these tourists spend budget > Rp 5,000,000 for traveling and come from the island of Java.

- *Correspondence Analysis Results*

Contingency Table
The first step in the use of correspondence analysis is to make contingency tables or also called correspondence table is a cross-tabulation of two ordinal or categorical variables that contain frequencies in each cell response matrix that is based on data traveler preferences to the attributes of each travel destination. The contingency table, the category row are attributes of sustainable tourism triangle consisting of 16 attributes, while the category column is a tourist destination consisting of three destinations. The contingency tables can be seen in Table 2.

Table 2. Contingency Tables between the Attributes Sustainable Tourism Triangle and Each Tourist Destinations

Attributes	Bali	Bandung	Yogyakarta	Total
Local cultures	397	221	395	1013
Diversification of tourist attractions and resources	397	300	386	1083
Degree of tourist satisfactions	387	264	325	976
Tourist products suitable for the disabled	220	191	125	536
Tourist accommodation offer	384	359	297	1040
Tourism accessibility	394	313	375	1082
Tourist Expenditures	365	223	344	932
Facilities and basic services	389	263	278	930
Economic benefits of tourism	344	312	386	1042
Solid waste management	155	120	219	494
Air pollution	174	136	261	571
Noise pollution	148	214	328	1042
Water availability and conservation	364	349	365	1078
Energy consumption	148	327	322	797
Biodiversity and nature reserves	382	155	339	876
Incorporation of environmental criteria in tourism planning	194	359	288	841
Total	4842	4106	5033	13981

Table 2 shows the cell that contains the number of positive responses of each respondent on each attribute for each destination. From the total positive responses given by the respondents, Yogyakarta earn 5033 points, then Bali earn 4842 points and Bandung earn 4106 points from the total of N = 13981.

Chi-Square Test
The second step is to calculate the value of chi-square. Chi-square value describes the size of the proximity of each variable category, which in this study is the attribute of destination. From the chi-square value will also be known to the distance used to describe the points on the plot correspondence or perceptual map (Hair et al., 2010). The result can be seen in Table 3.

Table 3. *Chi-Square* test results

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	500.017[a]	30	.000
Likelihood Ratio	518.131	30	.000
Linear-by-Linear Association	63.226	1	.000
N of Valid Cases	13981		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 145.08.

Correspondence analysis was used to determine the advantages each destination on each attribute. The feasibility of correspondence analysis model can be seen from the significant value on Pearson Chi-Square test that valued 500.017a and Asymp. Sig. (2-sided) of 0.000 that less than 0.05, which means between categories of attributes and destinations shown have a decent use and a statistical meaning. Interrelation between categories of attributes and tourist destinations are tested by Likelihood Ratio Test and the Linear-by-Linear Association with test values obtained respectively 518.131 and 63.226, and Asymp. Sig. (2-sided) of 0.000 that less than 0.05, which means between categories are interrelated significantly.

Perceptual Map
The final step of the correspondence analysis method are describe the positioning of each travel destination through a perceptual map that shows how Bali, Bandung, and Yogyakarta are positioned towards the attributes of sustainable tourism triangle basen on the perception of tourists. The perceptual map can be seen in Fig. 3.
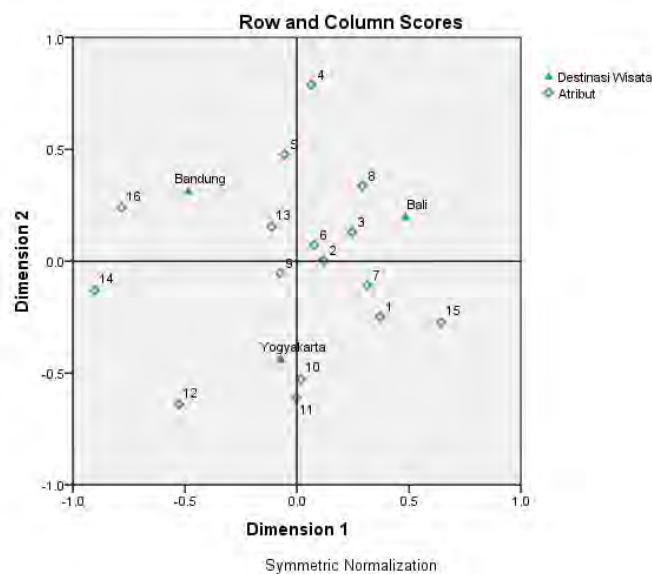

Fig. 3. Tourist Destinations' Perceptual Map Based on Sustainable Tourism Triangle Attributes

Fig. 3 shows the distribution of positions between attributes with tourist destinations. The distribution of these positions indicated that:

1. Bali is in quadrant II (top right), which is the same quadrant with attributes (2) the diversity of attractions, (3) the level of tourist satisfaction, (4) sensitive to the disability, (6) the ease of access and tourism (8) basic tourism services. However, when looked at more specifically, Bali has the advantage of attributes (3) and (8) that is caused by the proximity between Bali with both these attributes that make it identical. Thus, Bali as a tourist destination could further improve its tourism services such as hospitality at the hotel as well as other public services relating to tourism in order to continue to improve the satisfaction of tourists that Bali remains were positioned as a tourist destination that has a satisfactory tourism services.

2. Bandung is located in the first quadrant (upper left), which is the same quadrant with attributes (5) the availability of tourism facilities, (13) the availability of clean water and conservation systems, and (16) Integration of environmental elements in the planning of regional tourism. However, when looked at more specifically, Bandung has the advantage of attributes (16) which is caused by the proximity between Bandung with those attributes compared to other destinations as well as with other attributes that are in one quadrant. The local governments should further demonstrate its commitment to environmentally friendly tourism so that the position of Bandung in the minds of tourists is maintained.

3. Yogyakarta is in quadrant IV (below left), which is the same quadrant with the attribute (9) value of tourism to the local economy, (11) air pollution, (12) the noise pollution, and (14) the use of energy.

However, when looked at more specifically, Yogyakarta has the advantage of attributes (10) and (11). Although it is not in the same quadrant, Yogyakarta with attributes (10) that waste management is considered better than the other destinations. Thus, if Yogyakarta wants to stay ahead of other destinations, can be cultivated several programs that can reduce air pollution, such as bike to work, bike to school, car-free day, additional modes of mass transportation, and continue to empower historical transportations such as Onthel or Andong. In addition, because it is considered to have good waste management, should it be maintained for example by building a dispose of waste in place culture by providing bins in every tourism objects.

Conclusions

The result showed that each destinations has its own advantages and considered different from each other. Tourists saw that the advantages of Bali are degree of tourist satisfaction and facilities and basic services. Bandung is considered to have the advantage on the incorporation of environmental criteria in tourism planning compared to the other destinations. Yogyakarta is considered have advantages on solid waste management and low air pollution levels. The summary of the advantages of each tourist destinations can be seen in Table 4.

Table 4. The Summary of The Advantages of Each Tourist Destinations

Tourist Destinations		Advantages
Bali	(3)	Degree of tourist satisfaction
	(8)	Facilities and basic services
Bandung	(16)	Incorporation of environmental criteria in tourism planning
Yogyakarta	(10)	Solid waste management
	(11)	Air pollution

Acknowledgements

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