

Culinary Tourism as A Place and Product Branding. Case Study: Batu Jamus Rubber Plantation in Karanganyar, Central of Java

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ABSTRACT

Rubber plantation of Batujamus, the largest plantation in Central Java Province and Tourism region of Suku Temple in Karanganyar regency, Central Java Province is taken as a case to focus discussion on the meaning of "A Place and Product Branding". This study aims to describe the concept of sustainable agro tourism with narrative description based on the consideration of "Finding a place and Product Branding Strategy". By using Multi-dimensional Scale of SPSS and Factor Analysis, this research found out that the desire to stay in a comfortable and green areas and the nearness to hinduism religion temple as the reason why they prefer the Rubber Plantation of Batujamus as a temporary shelter when they visit it.

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Keywords: Culinary Tourism, Product Branding, MDS call, Factor Analysis, Cultural Heritage.

1. Introduction

Culinary tourism in Indonesia is currently showing rapid improvement, yet only few of them have been properly managed and located in strategic area. This concern motivated us to held a research about the implication of local and human resources in an area that has culinary variables, such as a specific plantation or farm, to be improved and manageable as a potential culinary tourism centre. Rubber plantations of Batujamus, the largest plantation in Central Java Province and Tourism region of Suku Temple in Karanganyar regency, Central Java Province, were chosen as the case to be discussed on the meaning of "A Place and Product Branding" in term of culinary tourism. Being located at 450-600 m above sea level and having average normal temperature 26⁰-29⁰C, Batujamus Rubber Plantation became one of the best tourist destination in Central Java that have a comfortable micro climate. Every year this place attracts tourists who seek for a destination with wonderful natural scenery of rubber plantation or those who curious about the Suku Temple.

This study aims to describe the concept of sustainable agro tourism with narrative description based on the consideration of "Finding a place and Product Branding Strategy". This study also proposed an idea if an agro tourism area, in this case is Batujamus rubber plantation, is equipped with a culinary tourism which provided branded products, the society will be

able to know more about the products of Batujamus plantations while enjoying the beautiful natural resources and also the historical relics of Suku temple.

Being surrounded by the largest rubber plantation, PTPN IX, as one of Indonesia's state-owned plantation company, has a big potential to improve the commodities' marketing through its beverage products yet still properly maintain sustainability concept within the process.

2. Material and Methods

The study of Literature will be focused on aspects related to research titles, i.e.: Agro tourism and Sustainability, Culinary Tourism as product branding in Agroecological Tourism, Human Behaviour and Culinary Facilities, dan Cultural Heritage in Tourism. Another literature related to Multi-dimensional Scale of SPSS and Factor Analysis will be featured in this part as well.

2.1 Agro tourism and Sustainability

Batujamus rubber plantation is located on the slopes of Mount Lawu, Karanganyar regency, Central Java Province. Being located at 450-600 meters above sea level and normal temperatures between 26-29 °C, Batujamus rubber plantation has potential to be agro tourism destination because it's offering comfortable micro-climate and beautiful natural scenery.



(Source: jejak-bocahilang.com, 2015) [1]
Figure 1: Batujamus Rubber Plantation

The plantation is managed by **State-owned Plantation Company** or usually known as **PTPN**, abbreviated from *PT Perkebunan Nusantara*. The company has been known for professionally managing plantation areas in various provinces and has several premium commodities such as coffee, tea, rubber, cocoa, citrus and coconut. One of PTPN's marketing strategy is by making these plantations as Culinary Tourism destination, that is the main reason the previous stated commodities will be furtherly processed into various food and beverage brands (figure 2).



Source: (<http://ptpnix.co.id/>, 2013) [2]
Figure 2: Samples of Beverage Brands Produced From Local Plantations.

Those commodities are well maintained in the form of tourism with the concept of sustainability and efficiently distributed to society. The concept of sustainability in this area also can be seen through its sewage treatment. The company turns the sewage into natural compos that can be reused for the farming system on the tea or coffee field. Through that long process, the final output of those commodities are available from the best to the lowest one. The entire product will be packaged in plantation commodities and marketed with the concept of marketing strategy [3].

Agro ecology is a process, scientific discipline and movement with a variety of approaches including the approach to the concept of sustainable food systems. Plantation crops are processed with multiple stages, and then the results of processing are marketed at business culinary tourism as food processing in agro-eco tourism [4]. Agro ecology, however, encompasses not only aspects of ecology and agriculture, but the ecology of sustainable food production systems, including the technology and related societal and cultural values to

better promote healthy and functional environments for a sustainable quality of life [5][6][7].

2.2 Culinary Tourism as Product Branding in Agro Ecological Tourism

Food is not only a basic need for tourists, but also a cultural element that can positively present a destination [8]. Food not only always gives a message to the community about local culture, it also sparks people's interest on regional culinary, so this triggered the development of the culinary tourism especially in Indonesia [9]. Food Tourism is a tourist experience that adds beyond what tourists gain by visually gazing at the destination [10]. However, Long (2004) [11] in Karim (2007) [12] described Culinary Tourism as experiencing and participating in the foodways of other people which include but are not limited to consumption, preparation, and presentation of food items.

On the other hand, food is a symbol of modern life on how to socialize. Nowadays, people who came to a place not only to enjoy culinary menus, but also want to interact with friends, relatives, customer or partner. For that reason, culinary tourism now also becomes a media to conduct business activities and social interaction. Furthermore, when, where, what we eat, and with whom we eat, status, gender, and for what we aim for interaction, are the factors that distinguish us, social status, the dimensions of space and place [13]. Agro ecotourism which features culinary tourism should be able to provide convenience for the customer, because if the customer feel satisfied and comfortable then they will have the willingness to buy a product that is marketed in the culinary scene.

It is important for marketers of a culinary destination to know the image currently held by its targeted customers and how to affect their intention to visit through effective marketing strategies [12].



Figure 3: Product Branding in Culinary Tourism

2.3 Human Behavior and Culinary Facilities

The correlation between human's behavior and architecture will establish an environment to fulfilled human's need and satisfying user's need. This is how dimension and space system in architecture could affect human behavior within. 4 main aspects in behavioral environment science, which are: culture, social,

environment, and physical, should integrate with each others in order to create a proper dimension and system within the designed building [14]. Therefore, designing a building and its built environment have to consider the human's behavior who lives inside. But somehow, the erected building will also influence user's behavior [15][16][17].

The ability of the physical environment to influence behaviors and to create an image is particularly apparent for service businesses such as hotels, restaurants, professional offices, banks, retail stores, and hospitals [16][18][19]. Therefore, both comfortable and inconvenience atmosphere created from the design are able to influence human's behavior and feelings. Negative reaction from people will be shown as they feel uncomfortable, unsatisfied, disappointed, and scared. While those who got positive feeling, will show a comfort, happy, satisfied, and confident reaction [20]. Based on those positive responses, then hopefully there is a willingness to buy, enjoy the food and beverages supplied, chat or only enjoy the scenery provided in the destination.

2.4 Cultural Heritage in Tourism and the history of Suku Temple

Buddhist and Hindu temples are very valuable historical heritages in Indonesia for centuries. Suku, is one of those Hindu temples that located near the Batujamus rubber plantation. It's special because of its pyramid shape similar with the Indian's tribe temple in America (figure 4). Suku Temple Hindu is built around the 15th century, during the time of Queen Suhita, who ruled Majapahit Palace in 1427-1447, together with her husband, Bhra Hyang Parameswara Ratnapangkaja.

The temple is located on the western slope of Mount Lawu, in the hamlet of Suku, Berjo village, Ngargoyoso district, Karanganyar Regency, Central Java province, at an elevation of 910 metres from sea level. Suku Temple found in 1815 by Johnson, the resident of Surakarta during the reign of Raffles. It was examined by many experts like Van der Vlis (1842, *Prove Eener Beschrijten op Soekoe en Tjeto*), Hoepermans (1864-1867, *Hindoe Oudheiden van Java*), Verbeek (1889), Knebel and WF. Stutterheim (1910). Preservation of the Suku temple was conducted by the Indian Netherlands Archaeological Department in 1917. In the late 1970s Suku Temple underwent a restoration by the Ministry of education and culture of Indonesia. The situation and condition of Suku temple are described in the picture below:



Figure 4: (a) The enclosed footpath inside Suku's temple area; (b) Suku's front plaza; (c) The pyramid-shaped temple (Suku's main temple)

2.5 Muti-Dimensional Scale and Factor Analysis

In quantitative research, data collection is only implemented on the factors that are considered to represent or explain the phenomenon, as a consequence, the data collected will limit the possibility of analysis findings [21]. Among some of analysis, factor analysis become the first option when it comes to data reduction or structure detection in the relationship between variables. By using this technique, researcher will also be able to reduce the number of variables so the final result can be properly. To achieve this purpose, researcher should priorly conduct Multi-Dimensional Scaling (MDS) to result some principal components for factor analysis.

The methods used in this study were Factor Analysis and Multi Dimensional Scale of SPSS version 18. Methods of Factor Analysis was used to determine the exact location for culinary tourism in agro tourism taking into account various factors relating to the potential and the constraints of the site. Whereas, on determining the layout of the facility on a culinary tourism, researchers used a method of Multi Dimensional Scale (MDS call). Culinary tourism in the areas of Agro tourism has a concept of design based on product branding. To clarify the conceptual design method of Culinary Tourism is thus described in the following diagram:

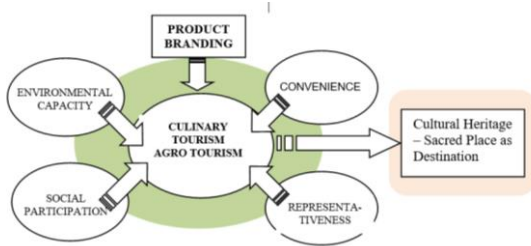


Figure 5: The Conceptual Diagram of Culinary Tourism in Rubber Plantation of Batujamus

The conceptual diagram in figure 5 illustrates that culinary tourism supports of mission as “product branding”, the culinary tourism in the area of agro tourism should have some criteria of representativeness, condition: convenience, environmental capacity as well as social participation partnerships. The condition criteria were later used as indicator assessed in the method of Factor analysis. The type of answers were covered in questionnaires distributed on respondents are ordinal of linkert scale: 1=disagree, 2=agree, 3=absolutely agree. Since this research took the case of agro tourist attractions near Sுகuh temple, all of criterion variables should totally support to tourism in Sுகuh temple that has a high value of sacredness. Based on this concept, the criteria for the condition owned by Culinary tourism should psychologically provide the convenience of the visitor in Sுகuh temple.

The agro tourism company of rubber plantations of Batujamus hopes that Sுகuh Temple could be the magnet that visitors stopped at the location of the Culinary tourism. With this concept, the product marketing of the company's plantation will positively impacts toward the company profit. In the method of Multi Dimensional Scale (MDScall), researchers use ordinal scale variables to describe the distance between facilities in the culinary area. The distance between the facilities described with 1 = very related, very close; 2 = related, close enough; and 3 = not related, far in distance. This MDScall method with the SPSS will map the coordinates of each facility accurately as Euclidean Distance Model Graphs. Later, with the Euclidean Distance Graphs, new layout of the facilities will be easily designed.

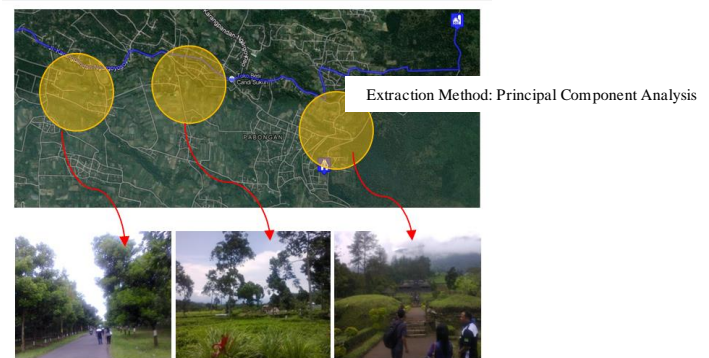
3. Results and Discussions

Culinary tourism has a vision of product branding must be conveniently located and representative. With a location that is easily accessible by the public and product branding mission will succeed. Some of the factors examined in determining the location of agro-culinary tourism are: level of compliance as a culinary,

power support environment, social participation, the representative, the sacredness and the comfort of a climate-related. Three locations were reviewed and observed are:

1. Rubber plantation of Batujamus
2. The land around the Cafe of Doro Donker
3. The land around the Sுகuh temple

The image below illustrates clearly the three locations observed:



Source: (google earth & author’s documentary)
 Figure 6: The location of 3 observed objects

Researchers were assessing the six factors on the observed locations. So there were 18 factors analyzed by using SPSS – Factor Analysis method. Questionnaires distributed to 25 respondents with 18 questions related factors that are examined. In the output of the early methods of Factor analysis known that Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0,585, meaning that the operational analysis of the Factor can be proceed (see table 1)

Table 1. KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.585
Bartlett’s Test of Sphericity	Approx Chi-Square	190.300
	Df	105
	Sig.	.000

At this stage of the analysis of the factor Reduction, three factors were eliminated because it has value, i.e. aspects of .500 < representative location 02, 01 location climate comfort, convenience and climate site 03.

Table 2. Component Transformation Matrix

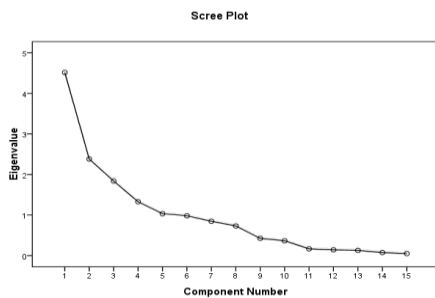
Component	1	2	3	4	5
1	-.645	.575	-.254	.431	-.055
2	.048	.427	.895	.013	-.123
3	.711	.290	-.164	.601	.152
4	.012	-.336	.035	.376	-.863
5	.276	.539	-.327	-.559	-.463

Extraction Method: Principal Component Analysis
 Rotation Method: Varimax with Kaiser Normalization

Table 3. Component Transformation Matrix

	Initial	Extraction
Convenient 01	1.000	.743
Convenient 02	1.000	.527
Convenient 03	1.000	.844
Environmental Cap 01	1.000	.897
Environmental Cap 02	1.000	.723
Environmental Cap 03	1.000	.859
Social Participation 01	1.000	.803
Social Participation 02	1.000	.704
Social Participation 03	1.000	.685
Representative 01	1.000	.743
Representative 03	1.000	.541
Sacred 01	1.000	.913
Sacred 02	1.000	.654
Sacred 03	1.000	.742
Climate Comfort 02	1.000	.717

The table shows the value of Communalities factors that explain the Variant variables. The value of Communalities must be in positive number. For example, the variable "convenience of location 01" has been 0,743, while the value of the variable "climate comfort of location 02" has the value of 0,717. These results indicate that both have enough significance value < 0 .500 [22].



Source: (SPSS Version 18 output)
Figure 7: Screenplot Diagram

As seen on Screenplot Diagram in figure 7, there were 15 points connected by a line that has a different slope. The number of dots indicates the indicator variables that influence the significance. While the 3 indicator variables eliminated consists of: representativeness of location 02, climate comfort of location 01, comfort of climate and location 3.

At this stage of extraction and Varimax found that there are 5 (five) is a highly influential variable in determining the location of agro culinary tourism, the fifth such variables can be seen in the table below:

Table 4. Variables and Factors

VARIABLE	FACTOR	CODE	SIGNIFICANCE
Variable 01	Convenient Agro-Cullinary Tourism - 001	P-01	0,768
	Environmental Capacity - 001	P-04	0,923
	Social Participation - 001	P-07	0,818
Variable 02	Convenient Agro-Cullinary Tourism - 003	P-03	0,863
	Environmental Capacity - 003	P-06	0,886
	Social Participation - 003	P-09	0,701
Variable 03	Environmental Capacity - 002	P-05	0,517
	Representativeness - 001	P-10	0,769
	Sacred Place - 001	P-13	0,814
	Sacred Place - 003	P-15	0,809
Variable 04	Convenient Agro-Cullinary Tourism - 002	P-02	0,670
	Social Participation - 002	P-08	0,717
	Representativeness - 003	P-12	0,688
Variable 05	Sacred Place - 002	P-14	0,645
	Climate comfort - 002	P-17	0,743

Based on the results of the analysis of the Factors above, it was concluded that Locations 01 rubber Batujamus in the Garden have all the required location criteria as a culinary tourism destination that supports Sukuh Temple in Karanganyar Regency, Central Java Province. Although the value of the sacredness of The rubber Batujamus is lower than the area of Sukuh temple, however this area has 4 other criteria that most of the observed location 3.

At the stage of determining the lay out facilities, MDS call method to analyze the correlation between facilities in the tourism and culinary and mapped them in a Eucladian graph Distance Model. Type of facility in culinary tourism is described by the code facilities (see table 5).

Table 5. Variables and Factors

CODE	FACILITY	CODE	FACILITY
F1	RESTAURANT	F6	COTTAGE 02
F2	AUTHORITY BUILDING	F7	COTTAGE 03
F3	MUSHOLLA	F8	PLAYGROUND
F4	PARKING AREA	F9	PLAZA
F5	COTTAGE 01		

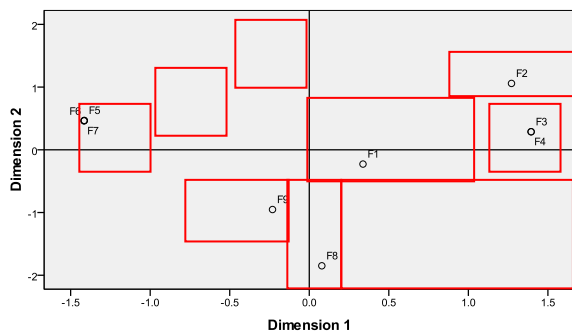
(Source: Final Report, Coffee and Tea- Rubber Plantation of Batujamus)

The correlation between the value of the facilities indicated by table 6, while mapping distances between facilities are shown in the graph in Figure 7 below:

Table 6. Variables and Factors

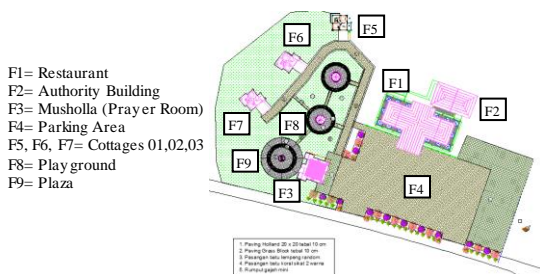
	F1	F2	F3	F4	F5	F6	F7	F8	F9
F1	1	1	1	1	2	2	2	1	1
F2	1	1	2	2	3	3	3	3	3
F3	1	2	1	1	3	3	3	2	2
F4	1	2	1	1	3	3	3	3	2
F5	2	3	3	3	1	1	1	2	2
F6	2	3	3	3	1	1	1	2	2
F7	2	3	3	3	1	1	1	2	2
F8	1	3	3	3	3	3	3	1	1
F9	1	3	2	2	2	2	2	1	1

In the table above values are 1 = "very close, strong correlation"; 2 = "close enough, the correlation is strong enough" and "3 = far less powerful, correlation". This Table is then put into tabular data SPSS version 18, to be analyzed. SPSS analysis results against the value of the nearness between the facilities described in the chart below:



Source: (SPSS version 18 output)
Figure 7: Euclidean Distance Model Graphs

Eucladian graph Distance Model above then explored a floor plan of the facility was in culinary tourism object as follows:



Source: (author's analysis)
Figure 6: (a) Site plan of Coffee and Tea Gardens of Batujamus rubber plantation ; (b) Three Dimensional Image of Culinary Tourism in Batujamus based on analysis result.

4. Conclusion

Based on the results of the analysis of factor then it can be concluded that:

1. The most convenient places for agro-culinary tourism is the third location with value of 0,863 due to the religious pace consideration (Convenient place for religious activities)
2. The most environmental capacity was found in the first location with significant value of 0,923. It can be understood because this location is pretty close to settlements and highways. Furthermore, that this location is owned by the estate of Government so the environmental support capacity is very strong.
3. The most sacred place is the third location where the Suku temple is located. Its value of significance is 0,809. Due to the purity, then this location is not quite worthy of the interest of culinary agro-tourism.
4. The most comfort place is the second location with the significant value of 0,743.
5. The most representative place is the first location where the rubber plantation of Batujamus is located with the value of 0,769. This location is closest to the highway of Solo-Tawangmangu so that the value of accessibility is very high.

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