

Fostering Sustainability Advantage in Rural Tourism Destination at Kulon Progo, Yogyakarta

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ABSTRACT

The goal of this study was to assess the advantages of rural tourism development at Kulon Progo County based on 800 visitors who were observed about their perception of strength, weakness, opportunity, and threat on eight rural destinations. Respondent consists of tourist, local residents, and destination providers. SWOT and QSPM analysis were used to assess potential destination and deliver suggestions to providers and government, while correlation was used to improve the results of IFAS and EFAS especially in identifying the visitor's perceived of importance and performance from twenty-first attributes of SWOT. This study found main potential in improving small-scale rural tourism project, namely: changing interest in nature as market demand, nature's beauty and biodiversity as an asset of destination, and development of social media as technology in promoting rural tourism. Finally, it suggested numerous strategies for fostering sustainability advantages of rural destination, therefore could develop competitiveness in tourism sector.

Keywords: *Advantage, Kulon Progo destination, rural tourism, SWOT, QSPM.*

1. INTRODUCTION

Tourism industry has important roles in creating income and enhancing society's welfare. According to the highlights of Travel and Tourism in 2019 [1], this industry grew 3.9% which contributed 10.40% (\$8.8 trillion) to global Gross Domestic Product (GDP) in 2018. Indonesia gave contribution 10.30% to people's job, moreover approximately 5.530.000 people will get jobs in the next ten years. However, it is important to anticipate environmental risk and preserve social culture at tourism areas. The players have to consider sustainability as defined by WCED in 1987 [2]. Sustainable development must meet the present needs without ignoring the ability of future generations to meet their own ones. To ensure the future needs, improving the tourism should respect the sustainability aspects. Aligned to the statement, United Nation World Tourism Organization has declared as the international year of sustainable tourism for development since 2017, therefore the practice of tourism development must be in line with sustainability issues as well as society's welfare, cultural heritage, and conservation. The issue becomes an insight in studying the potential of eco-tourism in Indonesia.

This progress is suitable with Kulon Progo, which has been harmonizing between economic chances and preservation of local wisdom in developing the tourism sector. As part of Daerah Istimewa Yogyakarta (DIY) Province, this county utilizes tourism as a new asset for regional development. According to the regional planning of DIY during 2017-2022, the local government has decided the northern region of Kulon Progo as tourism areas, while the southern region as tourism, fishery, and agriculture areas. The government determines the areas that have to be supported with

infrastructures as well as the strategic areas for national tourism purpose. The Organization for Economic Co-operation Development (OECD) has declared ten areas of the new Bali e.g., Toba, Tanjung Kelayu, Tanjung Lesung, Borobudur, Bromo, Tengger, Semeru, Mandalika, Labuhan Bajo, and Morotai as excellent destinations outside Bali Island. Hence, Kulon Progo's area is nearby Borobudur which has been seven years gaining the greatest performance. Related to [3], in 2013 the number visitors as many as 227.337 tourists and two million tourists were targeted to visit Borobudur in 2019. Particularly Kulon Progo's tourism is positioned to support this destination, so it becomes an avenue to improve the eco-tourism. Statistically, the number of visitors reached 1.400.931 people contributing IDR5.323.777.984 as regional income [4]. Compared to other counties, the performance was the lowest, so it needs the improvement strategies for grabbing opportunity of the Borobudur's icon.

Related to the regional planning of Kulon Progo during 2017-2022, Community-Based Tourism (CBT) has been utilized in progressing rural tourism. It is a form of tourism that seeks to empower society to manage tourism growth and achieve aspiration related to sustainable development [5]. Society is involved to increase economic-social development as well as to reduce poverty, to create new jobs, and so on. For instance, Kalibiru has involved local society to utilize communal forest as natural tourism and to anticipate deforestation [3]. In order to optimize such potential, this study captured the interested society with respect to the regulation and regional planning.

The progress of tourism sector impacts the GDP [6] positively. Therefore, aligned to prior researches [7], [8], [9] and regulations, this study identified the advantages and improved strategies for tourist destinations. Based on the practice in managing rural tourism, this research questions

were: (1) What is the real potential of rural tourism destination at Kulon Progo? (2) Which strategy shall be suggested to government and rural tourism destination providers at Kulon Progo County? The main benefit of this study is to understand the creation of sustainability advantages and to suggest the strategies for encouraging people through small-scale tourism project. Although using the SWOT approach, this study was also combined with the correlation to anticipate the gap's perception between the importance and performance. This aspect becomes the novelty which could be used to capture the significant correlation and to determine progress of the insignificant items.

2. RESEARCH METHOD

2.1 Population and Sampling Method

The population consists of visitors and people who involve in providing facilities. Samples were as many as 800 people who visited the destinations e.g., Mangrove Forest, Sermo Reservoir, Kalibiru, River of Mudal, Kedung Pedhut, Embung Banjaroyo, Tea Field of Nglinggo, and Peak of Suroloyo. Stratified sampling method was used to collect the data from respondents that consists of experts, public figure, visitors, and residents. Profiles include student/under-graduate (51%), business person (19%), civil servant (13%), private servant (10%), and others (7%). The respondents coming from Kulon Progo was 46% and others was 64%. The majority of visitors got information from social media (70%) and others (30%). They came to the destinations for the 1st time (34%), 2nd - 3rd times (40%), and more than 4th times (26%).

2.2 Construct Measurement

Referring to Ceballos-Lascurain, eco-tourism was defined as "environmentally-responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate the nature (and any accompanying cultural features both past and the present) that promotes conservation, has low negative visitor impacts, and provides for beneficially-active socio-economic involvement of the local people" [9]. The principals deployed some points e.g., natural base, ecological sustainability, environment-related education, local benefit, and tourist's satisfaction. Points were generated in identifying eco-tourism at rural destination. Practically, SWOT attributes were developed by experts from tourism board, on-line media's news, regional planning, and others. The information of tourism service consists of attraction, accesability, amenities, ancillary services, activities, and available tourism packages [10], which are implemented with sustainability perspective. The analysis of internal environment such as cultural heritage, social cultural attraction, nature resources, and amenities among destination, can developed into the

strength and weakness attributes. Meanwhile, the analysis of external environment such as competitor destinations, regional planning, accessibility, media's news, and the power of social media, can be developed into the opportunity and threat attributes. The Strength is represented by five items while the Weakness has six items. The Opportunity consists of six items, while the Threat has four items. The complete attributes are summarized in Table 2 and Table 3.

Furthermore, primary data was collected through observation, interview, and questionnaire. Questionnaires were distributed to respondents during April-June 2018 and they were asked to self-administrate their perceptions through twenty-one items including the perceived importance vs performance. In the questionnaire, the scoring ranges from 1 (not really important) to 5 (very important), whereas the rating was determined by the range of 1 to 5, from bad to good.

2.3 Data Analysis

The Strength, Weakness, Opportunity, and Threat (SWOT) identifies the strategy matrix of Internal Factor Analysis (IFAS) and External Factor Analysis (EFAS), which are then computed into the Quantitative Strategic Planning Matrix (QSPM). Refer to [8] if total score of IFAS is lower than 2.5, it shows strength is less than weakness and the same criterion is required by EFAS. Results of QSPM are used to create strategies in the tourism sector. Correlation is used to identify gab's perception of both importance and performance. IBM SPSS analyze correlation while Excel for calculating SWOT and QSPM.

3. RESULTS AND DISCUSSION

3.1 The Description of Rural Tourism at Kulon Progo Region

Geographically, the areas of Kulon Progo is divided into three-level, which are: (1) The high land area of Menoreh Hill with the elevation of 500–1000 meters above sea level covering the destinations e.g., River of Mudal, Kedung Pedhut, Embung Banjaroyo, Tea Field of Nglinggo, and Peak of Suroloyo, (2) The hilly area with the elevation of 100–500 meters above sea level covering the destinations e.g., Sermo Reservoir and Kalibiru, (3) The lowland area with the elevation of 0–100 meters above sea level covering the destination such as Mangrove Forest. Majority of the territory is located in rural areas or in the tourism villages, therefore it is appropriate to become rural tourism. It is located on 7°38'42"–7°59'3" South Latitude and 110°1'37"–110°16'26" East Longitude which is impacted by the season. Therefore, it must have been cared by provider for anticipating the risk for tourists. The description of the eco-tourism destination at Kulon Progo is as follow:

Table 1. Description of the Tourism Destination at Kulon Progo

Name of Destination	Sustainable Offering
Mangrove Forest at Pasir Mendit village since 2012	Empowering the farmers / fishermen to manage the coast as mangrove tourism, conservation, which provide the facilities e.g., photograph spot, restaurant, parking areas, nature guide, and route guide
Sermo Reservoir at Hargowilis village since 1995	Empowering the rural community to create sub-destinations, conservation, local wisdom, which provide the facilities e.g., photograph spot, outbound, camping ground, restaurant, parking areas, homestay, and nature guide
Kalibiru at Hargowilis village since 2010	Empowering the forest community to create natural tourism, conservation, which provide the facilities e.g., photograph spot, outbound, flying fox, tracking, homestay, restaurant, parking areas, nature/route guide, and others
Kedung Pedhut at Jatimulyo village since 2015	Empowering the rural community to utilize water fall areas as eco-tourism, conservation, which provide the facilities e.g., flying fox, tubing, restaurant, home stay, nature guide, parking areas, and route guide
River of Mudal at Jatimulyo village since 2015	Empowering the rural community to utilize river areas as eco-tourism, conservation, which provide the facilities e.g., flying fox, tubing, restaurant, home stay, nature guide, parking areas, and route guide
Embung Banjaroyo at Banjaroyo village since 2015	Empowering the community to utilize mini reservoir areas as agro-tourism of Durian Menoreh, conservation, which provide the facilities e.g., restaurant, homestay, nature/route guide, and parking areas
Tea Field of Nglinggo at Pagerharjo village since 2004	Empowering the community to utilize tea field areas as agro culture tourism, cultivate tea lift, conservation, which provide the facilities e.g., restaurant, home- stay, nature/route guide, parking areas, and transportation
Peak of Suroloyo at Gerbosari village since 1963	Empowering the community to utilize peak areas as eco-tourism, agro culture tourism, religion tourism, conservation, which provide the facilities e.g., restaurant, homestay, nature guide, and parking areas

3.2 The Results of SWOT and Correlation Analysis

Table 2. Matrix of Internal Factor Analysis Strategy

Cod e	Attributes	Weight	Effective Score	Final Score
S1	Beauty and biodiversity of the nature	0,106	5	0,530
S2	The uniqueness of local culture	0,093	3	0,280
S3	The attraction of the culture of local community	0,089	3	0,266
S4	Promotion of nature's attraction in social media	0,100	4	0,400
S5	Tourist guide service providing	0,080	3	0,241
W1	The availability of social facilities	0,090	3	0,270
W2	The availability of public facilities	0,092	3	0,275
W3	The responses of local community	0,098	4	0,392
W4	The availability of souvenir shops	0,096	4	0,383
W5	Representative restaurants	0,071	2	0,142
W6	Environmental hygiene	0,086	3	0,258
Total		1,000		3,435

Table 2 showed the IFAS matrix consisting of five items for identifying the strength and six items for the weakness. The weight of the strength's items was allocated from 0.080 to 0.106 whereas the weight of the weakness was allocated from 0.071 to 0.098. This result identified the highest score for the Strength as 0.530 on "Beauty and biodiversity of the nature" then were followed by 0.400 (S4), 0.280 (S2), 0.266 (S3), and 0.241 (S5). The highest score for the Weakness

was 0.392 on "Responses of the local community", then were followed by 0.383 (W4), 0.275 (W2), 0.270 (W1), 0.258 (W6), and 0.142 (W5). The final score (3.435 > 2.5) concluded that the mean of the Strength's items were better than those of the Weakness's, therefore the potential as well as natural beauty and promotion in social media can be optimized to overcome obstacles in managing destination.

Table 3. Matrix of External Factor Analysis Strategy

Code	Attributes	Weight	Effective Score	Final Score
O1	Change of interest in nature’s attraction	0,107	4	0,428
O2	Development of social media as promotion	0,113	5	0,566
O3	Local regulation of <i>Bedah Menoreh</i>	0,104	3	0,312
O4	Cooperation with travel agents	0,098	3	0,293
O5	Cooperation with universities	0,096	4	0,384
O6	Creating employment and income	0,106	4	0,426
T1	Access to tourist attractions	0,094	3	0,283
T2	Access to public transportation	0,085	3	0,255
T3	Visitors’ knowledge of sustainable development	0,097	3	0,291
T4	Risk of natural disaster	0,099	3	0,298
Total		1.000		3,435

Table 3 showed the EFAS matrix consisting of six items for the Opportunity and four items for the Threat. The weight of the Opportunity was allocated from 0.096 to 0.113, meanwhile the weight of the Threats was allocated from 0.085 to 0.099. The highest score for Opportunity was 0.566 on “Development social media as promotion” then were followed by 0.428 (O1), 0.426 (O6), 0.084 (O5), 0.312 (O3), and 0.293 (O4). The highest score for the Threat was 0.298 on “Risk of natural disaster” then were followed by 0.291

(T3), 0.283 (T1), and 0.255 (T2). The final score result (3.435 > 2.5) showed that the Opportunity was better than the Threats, therefore the change of interest and the development of social media can be managed to overcome the constraints. Hence, in order to identify completely about the perception of visitors toward the importance & performance on rural destination, the correlation coefficients can be seen below.

Table 4. Correlation Items of SWOT

Attributes	Coefficient	Attributes	Coefficient
Beauty and biodiversity of the nature*	0,69392	Change of interest in the nature*	0,72286
The uniqueness of local culture	0,56111	Development social media*	0,69917
Local culture attraction	0,50739	Local regulation	0,59503
Promotion in social media**	0,66915	Travel agent cooperation	0,57210
Tourist guide service providing	0,62172	University cooperation	0,52965
The availability of social facilities	0,52589	Creating employment & income	0,67976
The availability of public facilities	0,57990	Access to tourist attractions	0,49723
Responses of the local community**	0,66976	Access to public transportation	0,42816
Environmental hygiene**	0,68135	Visitors’ knowledge	0,57880
The availability of souvenir shops	0,31259	Risk of natural disaster	0,51314
Representative restaurants	0,50014		

* means significant at 5%, ** means significant at 10%

Furthermore, this result identified the strongest correlation relatively among three items: change of interest in the nature, nature’s beauty and biodiversity, and the development social media. On contrary, this study also found lower correlation especially among the promotion in social media, responses of the local community, and environmental hygiene. Lastly, other attributes showed the lowest correlations. This result identified the consistence of value in IFAS, EFAS, as well as the correlations.

3.3 Recommended Strategies for Rural Tourism Destination

Table 5 resumed the result of QSPM which illustrated the combination of SWOT’s attributes and ranks of the total

attractiveness scores. The highest score was 5.463 in SO1, therefore it became the priority for creating the strategy. The elaboration of the first top-five strategies could be developed as follows:

1. Tourism board facilitates website and updates the content including photograph, video, vlog, blog, review, local food, or story related to the nature, local wisdom, and cultural attraction to impress the millennial tourists and to prepare in the digital tourism. [SO1]
2. Developer improves new spots, cultural attraction or create natural tourism package along with other destinations. For instance: Sunset in the peak of Suroloyo or Night in Nglinggo. [SO2]
3. Collaborate with craft makers for creating specific souvenir as the identity of Kulon Progo. Products will

- be promoted in social media e.g., Instagram, YouTube, and website. [WO2]
- Organize video contest or create song contest about Kulon Progo's nature. Best video and song will be copyrighted and uploaded in the YouTube Channel. [SO3]

- Cooperate with tourism study center or university for studying the sustainability of tourism development, entrepreneurial destination including evaluating the regulation of sustainability practice in tourism sector. [SO5]

Table 5. Summary Score of QSPM

Priority	Combination	Score	Priority	Combination	Score
SO1	S1-O2	5,463	WT2	W3-T3	4,973
SO2	S1-O1	5,374	WT3	W4-T4	4,537
WO2	W4-O2	5,249	WT5	W3-T1	4,466
SO3	S4-O2	5,200	WT1	W3-T4	4,466
SO5	S1-O5	5,198	WT4	W4-T3	4,369
WO1	W3-O2	5,178	ST2	S1-T3	4,368
WO3	W3-O1	5,178	ST1	S1-T4	4,130
SO4	S1-O6	5,093	ST5	S4-T3	4,122
WO5	W4-O1	5,082	ST3	S1-T1	4,050
WO4	W3-O6	4,973	ST4	S4-T4	3,956

Next, the description of the second top-five strategies are as follows:

- Creating short-duration cinema related to local wisdom as news in social media or cooperate with Didik Nini Thowok's studio in contemporary dance exhibition. [WO1]
- Developer involves small enterprises / home industry to promote products for souvenir or gift from Kulon Progo e.g., brown sugar, kopi Suroloyo, kopi Menoreh. [WO3]
- Extending tourist's staying duration in the rural destination by creating interesting program e.g., annual heritage and cultural festival, sport-event, outdoor-camp. [SO4]
- Involving craft maker to innovate Kulon Progo's destinations and involving tourists to make handicrafts for themselves. For instance: Tourists are involved to make some special products such as batik, brown sugar, coffee, tea leaf. [WO5]
- Involving the amenity of local people in managing homestays, cultural exhibition, nature guide, and local food for visitors. [WO4]

Other recommended strategies are generated as follows:

- Giving education for staff, visitor, and people about the role of sustainable development in tourism and the efforts to anticipate disaster or to avoid the nature's degradation. [WT2]
- Arranging shopping center in safety areas and nearby with meeting point for easy evacuation. Every destination must be ensured to have meeting points in strategic places [WT3].
- Involving local people as route guide and providing specific transportation in rural areas. For instance: Route guide in Kalibiru or Tea Field of Nginggo. [WT5]
- Training people as rescue guard and participate in early warning system for natural disaster in Menoreh destination and tsunami warning in mangrove destination. [WT1]
- Accompanying people to understand sustainable development and implement it in making handicraft or

gift. Sellers are advised to promote local products, for instance: Makaryo chocolate brown sugar from Kulon Progo. [WT4]

- Educating local people and visitors to maintain the nature's beauty including practicing daily zero-waste destination or making campaign about environmental conservation such as protecting the habitat for local turtle in south coast of Kulon Progo. [ST2]
- Synchronizing regional planning and rural tourism development for overcoming the overlapping regulations in other sectors and not ignoring the environmental preservation. [ST1]
- Organizing photograph contest to capture the local wisdom and conservation in rural tourism destination. This can be a kind of activity to impress the millennial tourists. [ST5]
- Facilitating the access to the destination and improving the alternative transportation through Grab, Gojek or make another online application for traveling at Kulon Progo. [ST1]
- Organizing the campaign in social media about the natural disaster's early warning system including tsunami evacuation in destination at south coast as well as insurance cover. [ST4]

3.4 Discussion

The change of tourist's interest in nature's attraction can be a market demand in the rural destination. This sub-sector choices becomes niche market, which is segmented in specific market e.g., eco-tourist / nature tourist, student, family, corporate, and European tourists. Traveler seeks for the authentic, unique experience and local lifestyle, so they become relatively more willing to pay [11], therefore the segment is loyal to purchase the eco-tourism services. Inspired by [7-9], [10], [12], short-term recommendations are as follows. (1) Tourism board updates website with exciting contents on the rural destination for utilizing the moment of global travel and tourism market trend, national

trend, and image of Yogyakarta as the center of education, culture, and destination to promote tourism. (2) Tourism board cooperates with provider and travel agents to organize contests and collaborate with stakeholders (e.g., university, NGO) to educate this sustainability to the society, visitors, and staffs. (3) Ensuring and monitoring the evacuation routes and natural disaster's early warning system installation and be usable in entirely destinations. (4) Provider should improve the amenities on every destination for ensuring visitor's satisfaction. (5) The government should improve the training programs for human resource in tourism sector and encourage people to involve in CBT system.

Moreover, related to regional planning, the mid-term recommendations are as follows: (1) The government should ensure the infrastructure's project for supporting the available access to the destinations. One of the projects is "Bedah Menoreh" for connecting Borobudur to the New Yogyakarta Airport. (2) Arrange regulation for investors who will invest in destinations at Kulon Progo. Therefore, activities will not adverse the purity of tourism village and other benefits for people. (3) Tourism board cooperates with travel agent to provide the trips for international / national journalists and travelers (bloggers) to report or review about the destinations. (4) Collaborate with the provider to pack thematically among the nature, social-culture, and history of Kulon Progo. This is for extending the duration of stay in the destination. (5) Collaborate with the information technology provider for arranging online application on the transportation system and preparing the digital tourism. Particularly, the long-term recommendation includes: (1) Issue the sustainability certification on eco-tourism. (2) Organize a cultural event by collaborating with Didik Nini Thowok and make cinematography related to the story of nature, history, and wisdom at Menoreh Mountain, such as Diponegoro story or Seri Api in Bukit Menoreh. (3) Collaborate with the county officers to conserve the habitats of turtle along the south coast of Java Island especially the conservation learning program. (4) Ensure the location and declare it as sustainable agriculture areas for supporting the agro-tourism destination.

4. CONCLUSION

Based on this study on rural tourism destination at Kulon Progo County, the result can be used to assess potential destination and deliver suggestions or recommendations for provider and government. There are three points in improving small-scale rural tourism project, namely: (1) The change of interest in the nature as market demand, (2) The natural beauty and biodiversity can become an asset, (3) The development of social media can become the technology to promote the destination. And lastly, this study suggested numerous strategies for fostering sustainability advantages from rural destination, therefore the competitiveness in tourism sector can be developed. The CBT can be a tool for ensuring sustainability in rural tourism management practice, therefore it changes the visitors to be tourists or travelers at Kulon Progo. This

recommendation also includes sustainable manner in balancing the financial benefit with preserving socio-cultural and ecological system. To overcome the limitation, the next study may improve the quantitative analysis toward tourist's satisfaction in the rural tourism and prepare the potential digital tourism to be implemented at Kulon Progo.

REFERENCES

- [1] WTTC: Travel and Tourism Global Economic Impact & Trends (2019)
- [2] WCED: Development and International Economic Cooperation: Environmental (1987)
- [3] OECD: Making the most of tourism in Indonesia to promote sustainable regional development. *Economics Department Working Papers. No. 1535*. pp. 1-41 (2019).
- [4] Dinas Pariwisata Daerah Istimewa Yogyakarta: Statistik Kepariwisataaan Jogja (2017)
- [5] ASEAN-Community-Based-Tourism-Standard. (<https://www.asean.org/storage/2012/05/ASEAN-Community-Based-Tourism-Standard.pdf>). August 26 (2019).
- [6] AL-Najjar, M.A.M., and Ishwara, P.: A Study on the global economic impact on the tourism industry in Yemen. *African Journal of Hospitality, Tourism and Leisure*, Vol. 7 (4). 1-10 (2018).
- [7] Mondal, M.S.H.: SWOT analysis and strategies to develop sustainable tourism in Bangladesh. *Journal of Economics*. 8 (2), pp. 159-167 (2017).
- [8] Ghorbani, A., Raufirad, V., Rafiaani, P., and Azadi, H.: Ecotourism sustainable development strategies using SWOT and QSPM model: A case study of Kaji Namaksar Wetland, South Khorasan., *Tourism Management Perspectives*, 16. pp. 290-297 (2015).
- [9] Sayyed, M.R.G., Mansoori, M.S., and Jaybhaye.: SWOT analysis of Todooreh National Park (NE Iran) for sustainable ecotourism., *Proceeding of the International Academy of Ecology and environmental Sciences.*, 3 (4), pp. 296-305 (2013).
- [10] Eichhorn, V. and Buhalis, D.: Accessibility—A Key Objective for the tourism industry. In Buhalis, D & Darcy, S. (Eds). *Accessible Tourism: Concepts and Issues*, pp. 46-61 (2011). Bristol: Channel View Publications
- [11] Patti, S.: Contingent valuation of "green" tourism within Regional Natural Parks of Sicily: a willingness to

pay analysis. *Economia Marche Journal of Applied Economics*, Vol. XXXVI, No. 1 pp. 34-54 (2017).

[12] _____: Sustainability and support for the ecotourism with in Etna Park Area. *American Journal of Tourism Research*, Vol. 2. No. 1 pp. 124-129 (2013).