The Strategy for Ecotourism Development in Plantation Area: 
A Case Study from Kalibendo Plantation, Banyuwangi East Java

Linda Herawati*, Muhammad Izzuddin Faizal, Paisal Ansiska, Rona Aji Lestyaningrum, 
Zulfaidha Zulia

Master Program of Environmental Resources Management and Development, Graduate Program, University of 
Brawijaya, Malang, Indonesia

Abstract
Kalibendo plantation have a high potential value to be developed as an ecotourism destination. As far, the development 
of tourism in the area is still lack of visitors’s enthusiasm due to several reasons such as lack of tourism product, 
promotion, poor management, and the low involvement of local people in tourism development. The aims of this study 
are to determine the visitor’s perceptions at Kalibendo plantation tourism objects and arrange the strategy to develop 
devolution in that area. The results of visitors’ assessment about tourism on Kalibendo plantation was moderates. 
Many programs should be developed systematically. The indicators of visitor’s satisfactions are ‘Sapta Pesona’ that 
consists of security, order, cleanliness, coolness, beauty, friendliness, and memories should be improved. The strategy 
of tourism development in the Kalibendo plantation tourism objects which is based on SWOT analysis are: 1) The 
operation between local government with tourism management, namely PT. Kalibendo should be improved; 2) 
Organizing the education concerning to the prevention of environmental damage should be formulated; 3) The 
 improvement of local human resources around the tourism objects through training should be implemented; and 4) The 
 improvement of facilities for tourists should be planned and developed following ecotourism principles.

Keywords: Ecotourism, Banyuwangi Regency, plantation, tourism attraction development.

INTRODUCTION
In recent years, the tourism sector in Indonesia focuses on ecotourism development due to this tourism sector is able to contribute to environmental conservation [1,2]. The natural tourism object areas become a top priority for visitors because beside they are doing excursion, the visitors are demanded to keep the environment. Conceptually, ecotourism can be defined as a concept of sustainable tourism development that aims to support environmental conservation (nature and culture) and increase people’s participation for the management, thus it gives benefit for the local communities [3]. On the other hand, from the management point of view, ecotourism can be defined as tourism organization that responsible in managing natural places or areas which are formed based on natural principles and sustainable economy that supports environmental preservation (nature and culture), and increase the welfare of local community [4,5].

Banyuwangi is the largest district in East Java, which is located in the east of Java Island. The district stretches from the highlands to the lowlands that have potential natural resources.

Banyuwangi has various tourism attraction objects, i.e. beaches, mountains, forests or national parks and others. There are numerous plantation was established in the past by Dutch colonials government. Many of them are recently under management of State Owened Enterprises for Plantation. Tourism assets in Banyuwangi are more dominant to nature tourism. Therefore the recommendation for the tourism development is Ecotourism.

One of the tourism objects that get a top priority for tourism objects development is Kalibendo plantation. It is located in the village of Kampung Anyar, Glagah District, Banyuwangi. Natural tourism object includes waterfall, rivers, and plantation [6]. As far, the involvement of local community in tourism was low. Development of tourism objects could give a positive value not only for the environment and economic, but also to empower the local communities around Kalibendo Water-fall tourism objects [7]. Based on these conditions, therefore the aim of this study is to develop the strategy for the ecotourism development in Kalibendo.

MATERIALS AND METHODS
This research was conducted in October 2015 located in Kalibendo plantation, Kampung Anyar Village, Glagah District, Banyuwangi, East Java. Geographically, Kalibendo plantation located at
Ecotourism Development of Kalibendo Plantation, Banyuwangi (Herawati et al.)

50 L 199 767 m E 9096299 m S. Tourism object in Kalibendo is located in the north Banyuwangi and a part of Kalibendo agro tourism, where there are rubber, coffee and cloves plantation are planted. Kalibendo agro-tourism area is located at Ijen Mount (Fig.1).

Data Collection

Primary data was collected by questionnaires, interviews, and field observations. On the other hand, secondary data were collected through the review of literature. Questionnaires distributed to the visitors at Kalibendo to assess the general characteristics of visitors including age, sex, origin, education level, and occupation. In addition, the questionnaires were distributed to assess the visitors’ motivation, perception, and expectations for Kalibendo ecotourism development.

Respondents were selected using random sampling method. It means that visitors have the same opportunity to become respondents [8]. The number of respondents is 30 respondents. Interview method that used in this study is semi-structured interviews and informants are determined using purposive sampling technique. Field observations are performed to match the data obtained from the literature review and information gained from the questionnaires supported by the facts in the fields.

Data analysis

The data analyzed using a scoring analysis, descriptive analysis and SWOT analysis. Scoring analysis is performed for analyzing questionnaires that completed by the visitors to assess the tourism resources including infrastructure, coolness, shade, cleanliness, and safety. Descriptive analysis is a method to describe all qualitative and quantitative data. Data analysis methods used to analyze the data is a SWOT analysis (Strong, Weakness, Opportunity and Threat). SWOT analysis is used to identify the relationships between ecotourism resources with other resources [9].

Table 1. Matrix of SWOT

| Internal Audit | Strength | Weakness |
|----------------|----------|----------|
| External Environment |          |          |
| Opportunities     | S-O      | W-O      |
| Threat            | S-T      | W-T      |

Description:
SO: use the power optimally to seize opportunities.
ST: use the power optimally to anticipate threats, and trying to make it into opportunity.
WO: minimize weaknesses, to grab opportunities.
WT: minimizing weaknesses to prevent the threat.

RESULT AND DISCUSSION

Historical Plantation

Kalibendo Plantation, Banyuwangi, East Java is one of the largest plantation areas in Indonesia in 1900 (Fig.2). The plantation is a commercial plantation and capitalistic which had been applied by the Dutch and the Japanese against the colonies. Socio-cultural in a coffee plantation owned by BUMN/PDP generally still maintain the local culture community by holding local culture rituals for each activity from picking up until the harvest time. The cultural activities are related to the company’s interests in order to maintain the production continuity concerning to the employment and security. The findings show that these plantations are one of the largest plantations in Indonesia because there are 123 coffee plantations established since 1900 to 1967 (Observation).

Kalibendo Plantation, Banyuwangi constitutes coffee, rubbers, cloves plantations and some other plants (Fig. 3) which estate is managed by PT. Kalibendo in cooperation with the local society and local government. One of the plants at Kalibendo Plantation is coffee. The variety of coffee which grow in Kalibendo Plantation are Arabica and Robusta. The private entrepreneurs founded the coffee company across the region because the climate and soil condition suitable for planting the coffee. Moreover, the areas are inhabited [10,11].
Ecotourism Development of Kalibendo Plantation, Banyuwangi (Herawati et al.)

Tourism Attraction
One of tourism attractions at Kalibendo plantation, Banyuwangi, East Java, is Kalibendo agro-tourism. It is located at the west of Banyuwangi about 20 km from the city central. Kalibendo tourism objects are located in the highland therefore the temperature is relatively cool and still natural. The landscape characteristics in the plantation are cloves, coffee, and rubber. These conditions are suitable for the educational ecotourism activities for the tourists.

The Accessibility of Tourism Object
Kalibendo plantation is located about 15 km from the Banyuwangi city central. There is also accessibility from Ijen Crater. From Banyuwangi city center, the tourist can go directly to the Sasak Perot bus station at Bakung village, Giagah District. Next, the tourist remains straight towards to the west until find the junction of ‘Barong’ statue at Banjarsari village. Next, the trip goes to Kampung Anyar village. After entering the the gate of PT. Kalibendo Plantation, the tourists can park their vehicle in parking area in front of the meeting building. The trip can be done by land transport or tour services. From Juanda Airport, it may take about 7 hours to go there and if it comes from the Ketapang Port, it takes about 90 minutes. The road condition is quite good and decent in the form of slopes and hills (Observation).

Seasonality of Tourism Object
Kalibendo tourism object is crowded during the noon until afternoon. Moreover, this place may become the alternatives place for tourists after they climb Ijen mount. There are also provided tour package covering Ijen Mount and Kalibendo tourism objects could be an alternatives after offering Ijen Crater. The tourism objects are also full of visitors on holiday or when the time for harvesting rubber, coffee, and cloves at Kalibendo agro-tourism because the tourists are interested in educational value from harvesting time.

Facilities
In the area of Kalibendo tourism objects, there is a parking area provided by the manager. The standard facility such as toilet and simple restaurant was found. The quality of standard was limited. In order to maintain area cleanliness, some baskets and bins are provided in every corner of the place.

Characteristics of Respondents
One of the respondents’ characteristics is gender because gender determines what kind of tourism objects that are chosen by the tourists. Based on the Table 2, the numbers of male respondents are greater than female respondents with a ratio of 67% to 33%. This suggests that men prefer traveling rather than women. The age of respondents are related to the physical condition in visiting tourism objects and respondents’ productivity. The visitors are categorized into three groups based on their age, there are 16-23 years old, 24-31 years old and 32-38 years old. The range of respondents’ age between 24-31 years old has the highest percentage compared to the other age range. The range age between 24-31 years old classified as teenagers. Teenagers or youths tend to like an adventure for seeking new experiences.

The tourists’ origin in determining the respondents’ characteristics is categorized into two, there are domestic and non-domestic. Domestic tourists are local people of Banyuwangi, while non-domestic tourists are comes from abroad. Based on Table 2, domestic tourists have a higher
percentage of 57% compared to non-domestic tourists reach 43%. The manager of Kalibendo must be developed new strategy in order to seeking other visitors from other cities. When the percentage of non domestic tourists are higher, it could be concluded that many of non domestic tourists are already known the tourism objects.

Respondents’ occupation in this study was divided into five groups: housewives, employees, students, civil servants and entrepreneurs. Entrepreneurs respondents have a higher percentage, i.e. 43%. Employees and students have the same percentage of 20%. Housewives and civil servants have less percentage of 10% and 7%.

| Table 2. The Characteristics of Visitors’ Respondent |
|---------------------------------------------------|
| Characteristics   | Amount | Percentage (%) |
|-------------------|--------|----------------|
| Gender            |        |                |
| Male              | 20     | 67             |
| Female            | 10     | 33             |
| Age               |        |                |
| 16-23             | 6      | 20             |
| 24-31             | 15     | 50             |
| 32-38             | 9      | 30             |
| Origin            |        |                |
| Domestic          | 17     | 57             |
| Non-domestic      | 13     | 43             |
| Occupation        |        |                |
| Housewives        | 3      | 10             |
| Employee          | 6      | 20             |
| Student           | 6      | 20             |
| Civil Servants    | 2      | 7              |
| Entrepreneur      | 13     | 43             |
| Visiting intensity|        |                |
| First             | 14     | 47             |
| Many times        | 16     | 53             |

The visiting intensity indicates that whether or not the tourism objects are attracting. The more often of tourism objects are visited, it means that the tourism objects are attracting. The table above indicates that the respondents who visit Kalibendo many times are higher than the respondents who visit for the first time. It means that Kalibendo waterfall is categorized as interesting tourism object to visit.

Visitors’ Assessment towards Tourism Objects

In general visitors assess Kalibendo Plantation tourism objects as moderates from the indicators of ‘Sapta Pesona’ (Table 3). It shows that visitors quite satisfied when visiting Kalibendo Plantation tourism objects. However, it is still need the improvement of each component of ‘Sapta Pesona’ in order to increase the visitors’ satisfaction on Kalibendo Plantation tourism objects. By increasing the level of visitors’ satisfaction, hopefully in the future, the tourism objects organizers could increase the number of visitors.

Policy Development of Tourism

SWOT analysis on Kalibendo Agro Tourism was showed in Table 4. Based on Table 5, it shows that the attraction between internal and external factors is at variable points (X) 0.92 and (Y) 0.12 (Fig. 4). These coordinates are in the first quadrant, therefore it requires a progressive strategy that utilizes the power of opportunity, and Strength factors for the development of Kalibendo Plantation tourism object.

| Table 3. The distribution of respondents’ assessment for Sapta Pesona components on Kalibendo Plantation tourism objects. |
|---------------------------------------------------------------------------------------------------------------------|
| Component | Categorizes | Total visitors | Percentage (%) |
|-----------|-------------|----------------|----------------|
| Security  | 5-11 (poor) | 0              | 0              |
|           | 12-18 (enough) | 25             | 83             |
|           | 19-25 (good)  | 5              | 17             |
| Order     | 4-9 (poor)   | 0              | 0              |
|           | 10-15 (enough) | 27             | 90             |
|           | 16-20 (good)  | 3              | 10             |
| Hygiene   | 4-9 (poor)   | 0              | 0              |
|           | 10-15 (enough) | 30             | 100            |
|           | 16-20 (good)  | 0              | 0              |
| Coolness  | 5-11 (poor)  | 15             | 50             |
|           | 12-18 (enough) | 15             | 50             |
|           | 19-25 (good)  | 0              | 0              |
| Beauty    | 4-9 (poor)   | 0              | 0              |
|           | 10-15 (enough) | 25             | 83             |
|           | 16-20 (good)  | 5              | 17             |
| Friendliness | 4-9 (poor) | 4              | 13             |
|           | 10-15 (enough) | 26             | 87             |
|           | 16-20 (good)  | 0              | 0              |
| Memories  | 3-7 (poor)   | 1              | 10             |
|           | 8-12 (enough) | 26             | 87             |
|           | 13-15 (good)  | 3              | 3              |
Table 4. Identify the SWOT components

| Strength (S) | Weakness (W) |
|--------------|--------------|
| 1. The road infrastructure is good | 1. Lack of information on the plantation board |
| 2. The agro-tourism activities | 2. Number of Bins is still inadequate |
| 3. The fresh air in the tourism objects | 3. The lack of vegetation in the way to tourism objects |
| 4. The hospitality of the local people | 4. Peoples’ participation in managing and promoting the tourism objects is low. |
| 5. There are two natural attractions at tourism object | |

Table 5. The Results of External and Internal Factors Analysis

| Internal Factor Attractive Score/IFAS | External Factor Attractive Score/EFAS |
|--------------------------------------|--------------------------------------|
| 3.38                                 | 3.49                                 |

| Strength score (S) | Opportunity score (O) | Threats score (T) |
|--------------------|-----------------------|------------------|
| 0.62               | 0.49                  | 0.52             |

\[ S \cdot W \] 0.92 \[ O \cdot T \] 0.12

By looking at all the potential in the Kalibendo Plantation tourism objects, there are alternative strategies that could be performed as follows.

1. The cooperation between the local government and the organizer of tourism object by PT. Kalibendo (S\(_1\)-O\(_2\)). By the collaboration between local government and private, the entrepreneurs could increase the quality of Kalibendo Plantation tourism objects to be developed as ecotourism.

2. The organizer of tourism objects organizes the education about environmental conservation (S\(_3\)-O\(_3\)). By giving advices to the organizer to conduct an education-based program for tourists such as not littering, not picking the plants, etc.

3. The improvement of local human resources through training (S\(_4\)-O\(_3\)). By collaborating with private ecotourism entrepreneurs, NGOs, and government to conduct training such as ecotourism socialization in order to boost the communities’ economy around the tourism objects area without damaging the environment.

4. Increase the facilities for tourists (S\(_4\)-O\(_3\)). By offering ODTW (Objek Daerah Tujuan Wisata/Tourism Objects Destination) such as biodiversity (flora and fauna), the beautiful landscape, tourism products (e.g. tracking, outbound, camping, etc.) to attract foreign and domestic tourists.

5. The local government of Banyuwangi should integrated tour packages with Ijen crater sightseeing (S\(_1\)-O\(_1\)). By making linkage between travel units such as tour packages, it is expected that it can increase the amount of foreign and domestic tourists who visit the tourism objects if the route has been determined.

CONCLUSION

Kalibendo plantation is agro-tourism area which can be developed into ecotourism that attractive for domestic and foreign tourists who...
want to enjoy the concept of ecotourism. Ecotourism development at Kalibendo Plantation must involve the local government and community optimally in every process. This involvement must be performed due to give a wide space for the local community to enjoy the benefits from ecotourism development. The collaboration between other institutions could be enhanced, such as the collaboration between travel agents, students’ organization, in order to create creative ideas for the development of ecotourism. Besides, their involvement are expected to strengthen ecotourism concept at Kalibendo Plantation.

REFERENCES
[1] Harmini, A. A. 2005. Community management in Wenara Wana tourism objects, Padangtegal, Ubud towards sustainable tourism. Graduate Program, Udayana University, Denpasar, Bali. Thesis.
[2] Ross, S. and G. Wall. 1999. Evaluating ecotourism: the case of North Sulawesi, Indonesia. Tourism management 20(6), 673-682.
[3] Damanik, J. and H. F. Weber. 2006. Ecotourism planning: from theory to applications. PUSPAR UGM and Publisher Andi. Yogyakarta.
[4] Cochrane, J. 1996. The sustainability of ecotourism in Indonesia. Environmental change in South-East Asia: People, politics and sustainable development, 237-259.
[5] Semyadi, I. A., Hartayo, M. Agus and M. Harini. 2012. Ecotourism development strategy Sebangau National Park in Central Kalimantan. Journal of Management and Agrobusiness 9 (1), 1-12.
[6] Zakiyah, Z., S. Indriyani and L. Hakim. 2013. Pemetaan sebaran dan karakter populasi tanaman buah di sepanjang koridor jalur wisata Desa Kemiren, Tamansuruh, dan Kampunganyar, Kabupaten Banyuwangi. Journal of Indonesian Tourism and Development Studies 1(2), 46-51.
[7] Suriani, N. E. and M. N. Razak. 2011. Pemetaan potensi ekowisata di Taman Nasional Baluran. Jurnal Masyarakat, Kebudayaan dan Politik 24(3), 251-260.
[8] Thompson, S. K. 2012. Sampling 3 Ed. Wiley.
[9] Rangkuti F. 2005. Analisis SWOT teknik membedah kasus bisnis. PT Gramedia Pustaka Utama. Jakarta.
[10] Siswoputrananto. 1993. Kopi internasional 2 nasional. Kanisius. Yogyakarta.
[11] Statistic Center Banyuwangi. 2014. Banyuwangi dalam angka. Satistic Center Office Banyuwangi.