Application of 4A Concept in Bogor Botanical Garden Tourism Development Strategy

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ABSTRACT

Indonesia is very rich in natural tourism potential (ecotourism), one of which is natural tourism in conservation areas. Bogor Botanical Garden is an ex-situ conservation area that has long been used by the wider community as a tourist attraction and in many countries, Bogor Botanical Garden is one of the most popular tourist destinations because it presents a panoramic view of natural landscape architecture. The research entitled "Application of the 4A Concept in the Development of Bogor Botanical Garden Tourism" focuses on the 4A concept, namely Attraction, Accessibility, Amenities, and Ancillary services. This type of research is qualitative, using qualitative descriptive analysis methods. Data collection is carried out by means of field observation, interviews, and literature studies. SWOT analysis was also used in this study, to identify the strengths and opportunities of Bogor Botanical Garden, and determine strategies to reduce weaknesses and challenges. The results showed changes in the management system of Bogor Botanical Garden. By analyzing the 4A concept, this study seeks to provide recommendations for the right development strategy for KRB, so that it can develop better and the vision of Bogor Botanical Garden can be achieved.

Keywords:
4A Concept
Bogor Botanical Garden
Nature Tourism
SWOT Analysis
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1. INTRODUCTION

Tourism is a sector that has an important role in the country’s economy, including Indonesia [1]. The country is known for its natural wealth and cultural diversity, making it an attractive tourist destination for domestic and international tourists. One of the most popular tourist attractions in Indonesia is natural tourism [2].

An interesting natural tourist destination in Indonesia is the Bogor Botanical Garden (KRB). As an ex-situ conservation area, Bogor Botanical Garden has long been a popular tourist attraction offering panoramic views of natural landscape architecture. However, to ensure the sustainability and growth of Bogor Botanical Garden as a tourist destination, it is necessary to determine the right development strategy so that it remains the destination of choice by many tourists [3].

Bogor Botanical Garden has become a significant destination with great potential for...
further development. The 4A concept, which consists of Attraction, Accessibility, Amenities, and Ancillary services, is one of the concepts that is often used in tourist destination development strategies [4]. This concept emphasizes the importance of attraction, accessibility, amenities, and ancillary services in creating a satisfying travel experience for tourists [5].

Attractions refer to elements that attract tourists to visit a destination, such as natural beauty, culture, history, or activities that can be done. Accessibility refers to the ease with which travelers can reach destinations, such as infrastructure, transportation, and information [6]. Amenities refer to facilities that support the needs of tourists during the visit, such as accommodation, restaurants, entertainment facilities, and the like. While ancillary services, that can enhance the tourist experience, such as tour guides, information services, educational activities, and the like [7].

The previous research that became a reference for this research was entitled "Creative Product Development Strategies in a Dunia Fantasi Ancol" by [8], which discusses creative product development strategy at Dunia Fantasi Ancol which also discusses the 4A concept of the destination product. The results showed, that the 4A concept of their product strives to provide a satisfying and unforgettable experience for visitors. Aspects Attraction which provides a variety of rides and shows, providing accessibility well, providing amenities adequate, and offers a variety of ancillary services.

This study aims to analyze the concept of 4A, in the development of the Bogor botanical garden. This research is also to understand more deeply how the 4A concept can be optimized to increase the attractiveness, comfort, affordability, and activities offered to tourists. The results of the 4A concept analysis will be integrated to plan strategies that focus on improving the tourist experience, sustainable development, and increasing contributions to the local economy.

2. LITERATURE REVIEW

2.1 Tourist Attractions

According to Law of the Republic of Indonesia Number 10 of 2009, tourist attraction is a place or everything that is targeted and visited by tourists because of its uniqueness, ease of access and facilities, as well as more value than the place itself which has biodiversity and culture in it [9]. The tourist attraction is divided into three [10] that is:

a) Natural attractions, namely tours that have unique natural attractions to visit such as beaches, mountains, waterfalls, valleys, springs, and so on.

b) Cultural attraction, namely tourism that offers human creation and the uniqueness of its cultural attraction to be explored and visited, for example historical places and relics, art, and tourism that uphold the local wisdom of the region.

c) Special interest attraction, namely tourism that has an attraction to visit that suits the interests and needs of tourists such as sports, spiritual tourism, culinary tourism, shopping tours, and other interests.

2.2 Sustainable Tourism

The concept of sustainable tourism according to UNWTO, considers the fulfillment of current and future tourist needs (Fennel in [11]). Sustainable tourism development, as mentioned in the Sustainable Tourism Charter (1995) is development that can be supported ecologically as well as economically feasible, as well as ethically and socially just (including culturally) to society [12]. According to Mowforth and Munt in [13] The concept of
sustainable development includes three interconnected components, including:

a) Ecological Sustainability
   Tourism development is not caused by irreversible changes in an existing ecosystem and has become a generally accepted dimension since there is a need to protect natural resources from the negative impacts of tourism activities.

b) Social Adaptability
   In accordance with the group's ability to absorb tourists without causing disharmony in social relations, either between community members and tourists or between fellow community members.

c) Cultural Sustainability
   The impact of the presence of tourists does not have a negative impact on the development of local culture, but must be maintained for future generations.

2.3 4A Concept
1. Attractions
   According to [14] Attractions are components that can attract tourist arrivals. Things that can be developed into tourist attractions are called capital or tourism resources. There are three tourist attractions that can attract visitors, namely natural attractions such as mountains, lakes, beaches and hills; cultural tourism attractions such as traditional house architecture in the village, archaeological sites, history, arts and crafts, daily community life, and others; and artificial attractions such as sporting events, shopping, exhibitions, conferences and others.

2. Accessibility
   Accessibility is Ease for tourists to reach and enjoy tourist destinations. This accessibility includes the availability of public transportation, road conditions, distance traveled, time traveled, and travel costs [15].

3. Amenities
   According to Rusvitasari and Solihin (2014) in [16], amenities are all forms of supporting facilities that can be used by tourists to meet their needs while visiting the destination. Amenities are related to accommodation facilities, restaurants, public toilets, rest areas, souvenir shops, parking lots, places of worship and others that should be in a tourist destination. Amenities refer to various facilities that can provide comfort and satisfaction for tourists during their travel in a tourist destination.

4. Ancillary Service
   According to [17], ancillary service is the existence of an official tourism institution that regulates it and also that can impact tourists feeling safe and protected. Ancillary in the tourism industry usually refers to ancillary services or facilities that support the tourist experience. For example, tour guides, tourist information centers, security guards, ATMs, money changers, and many more.

3. METHODS
   The research location is Bogor Botanical Garden located in Jl. Ir. H. Juanda No.13, Paledang, Central Bogor District, Bogor City, West Javalndonesian. Data collection was conducted through interviews with managers, field observations, and literature studies. This research uses qualitative methods, namely research used to examine problems of human and social phenomena [18]. The approach to this study uses qualitative descriptive analysis and
SWOT analysis. Descriptive qualitative is the process of analyzing the data that has been collected by providing a clear and detailed picture of the phenomenon under study [19]. SWOT analysis is used to identify the strengths and weaknesses of an organization's internals, as well as opportunities and challenges from the external of an organization, which will then determine the appropriate strategy to mitigate the weaknesses and challenges facing an organization [20].

4. RESULTS AND DISCUSSION

The components that need to be considered in tourism development are Attractions, Amenities, Accessibility and Ancillary or also called the 4A concept. These components must be sustainable so that tourist attractions can have high competitiveness.

4.1 Concept 4A Bogor Botanical Garden

1. Attractions

Bogor Botanical Garden, as one of the oldest and largest botanical gardens in Indonesia, offers a variety of interesting attractions for tourists. With a diverse collection of plants, historical buildings, and environmental education activities, Bogor Botanical Garden has become a popular tourist destination. However, improvement and diversification of attractions can be done to attract more tourists. For example, the introduction of thematic tours or special events can add to the appeal of Bogor Botanical Garden.

Bogor Botanical Garden offers a variety of interesting attractions for tourists. Here are some of the main attractions

a. Plant Collection

Bogor Botanical Garden has a collection of 15,000 species of plants that can be found on the main roadside and in its thematic parks. There is a lot of diversity of plants and plant collections in it.

b. Thematic Parks

There are various thematic parks such as the Mexican Garden (collection of cactus plants), the Bamboo Garden, the Araceae Garden (Indonesian flora of the Araceae tribe or taro-taro), and the Aquatic Garden (habitat of aquatic plants). The garden garden there has its own charm, such as the Mexican garden, the attraction of various types of cactus plants as well as other garden gardens.

c. Bogor Palace

Bogor Palace, where President Joko Widodo lives, is also within the Bogor Botanical Garden complex. The attraction of the palace itself is the history and architecture of Bogor Palace.

d. Picnic

Bogor Botanical Garden has many green areas that allow tourists to picnic. In Bogor Botanical Garden tourists can sit anywhere they want, because there are many places that can be sat to relax, and also the Bogor Botanical Garden area is very clean.

e. Cycling

Tourists can cycle in Bogor Botanical Garden. The bicycle used by tourists is a bicycle provided by the botanical garden, but to use the bicycle tourists must register, pay rent according to how long tourists use the bicycle first to the officer.

2. Accessibility

Access to Bogor Botanical Garden is quite easy, both by private vehicle and public transportation. However, improved signals and directions can help travelers navigate the area more easily. For example, improved street signals or the introduction of mobile apps for navigation can make it easier for travelers to find specific attractions or amenities.
Here are some aspects of accessibility in Bogor Botanical Garden:

a. Location

Bogor Botanical Garden is located in the middle of Bogor, which is easily accessible from various points in the city. The distance of Bogor Botanical Garden from the station is not too far so it does not waste much money to get there.

b. Public Transportation

Bogor Botanical Garden can be accessed through various modes of public transportation, such as trains and city transportation.

How to get to Bogor Botanical Garden:

a. Using KRL

You can take the KRL from Jakarta Kota Station, Bekasi Station, or Tangerang Station to Bogor Station. After arriving at Bogor Station, you can take online motorbike transportation or public transportation. The distance traveled is approximately 3.3 km with a travel time of approximately 16 minutes.

b. Using Angkot

You can take Angkot 03 with blue strip and 02 with orange strip. Both types of public transportation will circle the Bogor Palace and Bogor Botanical Garden areas, you only need to get off at Gate 1 or Gate 3.

c. Using Private Vehicles

From Jakarta, drive to Jagorawi toll road and exit at KM 40 towards Bogor. Then turn right through Pajajaran until the intersection of three Kujang monuments. Direct the vehicle by turning left towards Otto Iskandardinata. About 700 meters, tourists will meet intersection three.

Meanwhile, there are supporting infrastructure such as telecommunication and electricity networks, drinking water, and toilets in the Bogor Botanical Garden. Furthermore, rental facilities such as bicycles, electric scooters, and shuttle buses are also provided, which can make it easier for tourists to explore the Bogor Botanical Garden. The rental facilities provided have been well prepared and have been ensured to be safe and comfortable when used. There are also walking signs to help travellers navigate the area more easily. Clarity and availability of signals and road directions are very adequate so that tourists are not misdirected, when they want to go to the destination or intended place.

3. Amenities

Facilities and services at Bogor Botanical Garden are adequate to meet the needs of tourists. Picnic areas, restaurants and toilets are available for the convenience of tourists. However, improving the quality and number of amenities can be done to increase the comfort of tourists. For example, the addition of rest areas or the improvement of dining facilities can make tourists feel more comfortable during their visit.

Here are some amenities available at Bogor Botanical Garden:

a. Picnic Facilities: Bogor Botanical Garden has many green areas that allow tourists to picnic.

b. Restaurant: There is a restaurant inside the Bogor Botanical Garden area. In the restaurant provided many menus, the quality of the food is maintained and the taste is also good.

c. Toilets: Toilets are available for the convenience of tourists. There are about 12 toilets in Bogor Botanical Garden, there are some toilets that are clean but have an unpleasant smell.
d. Electric Bicycle and Scooter Rental: Rental facilities such as bicycles and electric scooters are available, which can make it easier for tourists to explore Bogor Botanical Garden.

e. Shuttle Bus: Shuttle buses are also provided to make it easier for tourists to get around Bogor Botanical Garden. The existence of a Shuttle Bus there makes it easier for tourists who want to get around but don't want to be tired.

f. Orchid Greenhouse and Zoological Museum: Bogor Botanical Garden offers various interesting attractions and photo spots in every corner, such as the Orchid Greenhouse and Zoological Museum. The orchids that are there are very beautiful, and varied.

4. Ancillary Service
Ancillary services such as souvenir sales and tour packages can be enhanced to increase the tourist experience and revenue of Bogor Botanical Garden. For example, the introduction of tour packages that include admission, food, and souvenirs can attract more tourists and increase revenue.

Here are some ancillary services available at Bogor Botanical Garden

a. Night Tour

Bogor Botanical Garden offers night tours with the game of lights or ‘Glow’ that illuminates the trees and video animations with the trees as screens. This program provides a unique experience for tourists to explore the Botanical Garden area at night with a sparkling atmosphere of light installations and visual projections.

b. Variations of light games and video animations:
1) Tourists are entertained by the play of lights that illuminate the trees. Its quality, clarity, brightness of the lamps and color variations are very satisfying and pleasant

2) Video animations are projected on the trees, making them as screens. The quality is very good, because the animation displayed with good video resolution so that the video is very clear.

3) Fictional Stories about Flora and Fauna, where this animation packs a fictional story about the interaction of flora and fauna at night with a sparkling atmosphere.

4) History and Preservation of Plants and the Environment: This animation provides educational value to tourists to participate in appreciating history, and preserving plants and the environment.

5) The Biggest Tree Projection Mapping: One of the series of activities prepared is the display of story narratives packaged in the form of animated videos. The video projection will be broadcast on an unusual field, which is one of the largest trees in the Bogor Botanical Garden.

c. Souvenir Sales

There are souvenir sales that can increase the tourist experience and income of Bogor Botanical Garden.

1) Bogor Batik: Batik with corpse flower motifs and rafflesia Arnoldi flowers.

2) KRB Flora Themed T-shirt: T-shirts with various
designs themed on the flora of Bogor Botanical Garden.
3) Handicrafts: Includes pots depicting rafflesia flowers, horta dolls, tissue holder crafts and bark drawers.
4) Products from OLIVE Botanical Garden: OLIVE Store is the Official Merchandise of Bogor Botanical Garden that offers various products such as planting media, bags, reusable masks, tumblers, bucket hats, and others.

d. Tour Packages
Tour packages that include admission, food, and souvenirs can attract more tourists and increase revenue. In addition, Bogor Botanical Garden also offers programs such as Study Tour, Tour De Botanical Garden, and Virtual Tour.

e. Educational Facilities
Bogor Botanical Garden also offers educational facilities such as scientific tourism and environmental services. Bogor Botanical Garden offers a variety of interesting and informative educational programs for tourists of all ages.

Here are some of the educational programs offered:
1) Orchid Classes: This program provides knowledge on how to grow, maintain, and care for orchids.
2) Class Araceae: This program provides knowledge about plants of the tribe Araceae or taro taro.
3) Propagation Classes: This program teaches about plant propagation or breeding techniques.
4) Terrarium Class: This program teaches how to make a terrarium, which is a miniature ecosystem in a glass container.
5) Kokedama Class: This program teaches how to make kokedama, which is a Japanese planting technique that involves wrapping plant roots in an earthen ball.
6) Medicinal Plant Class: This program provides knowledge about medicinal plants and their benefits.
7) Compost Class: This program teaches how to make compost from organic waste.
8) Nepenthes Class: This program provides knowledge about pitcher plants (Nepenthes) and how to care for them.
9) Tabulampot Class: This program teaches how to grow fruit plants in pots or tabulampot.
10) Seed Planting Class: This program teaches how to plant seeds.

f. Griya Anggrek
Griya Anggrek is a new vehicle in Bogor Botanical Garden for conservation and tourism. Many variations of orchids are displayed, such as Dendrobium Ratri Ayu, Dendrobium tosons, Dendrobium violaceoflavens, Dendrobium strepsiceros, Cattleya, Cymbidium, Grammatophyllum

Griya Anggrek is one of the facilities specifically to store orchid collections, especially native species as well as crosses and hybrids. Overall, Griya Anggrek can accommodate
around 800 tribes and 4,000 clans with as many as 10,000 plants.

Overall, Bogor Botanical Garden has implemented the 4A concept well in its development as a tourist destination. However, there is room for improvement in every aspect to ensure a better experience for tourists and the long-term sustainability of Bogor Botanical Garden.

### 4.2 SWOT Analysis of Concept 4A of Bogor Botanical Garden

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Strength</th>
<th>Weakness</th>
<th>Opportunity</th>
<th>Threat</th>
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<tbody>
<tr>
<td>Attraction</td>
<td>“Varieties of Attractions” Bogor Botanical Garden offers a variety of attractions, ranging from plant collections, historical buildings, to environmental education activities.</td>
<td>Lack of Maintenance of Some Plants</td>
<td>Bogor Botanical Garden can cooperate with schools or educational institutions to conduct educational visits.</td>
<td>Climate change and other natural factors can affect the state of the garden and plants, threatening the attraction of attractions.</td>
</tr>
<tr>
<td>Accessibility</td>
<td>&quot;Strategic Location” Bogor Botanical Garden is located in the middle of Bogor city, which is easily accessible from various points in the city</td>
<td>Parking limitations. Although there is a parking area, the capacity is not enough during peak visits, especially on weekends and holidays.</td>
<td>Improved supporting infrastructure</td>
<td>Physical Limitations, some areas in Bogor Botanical Garden are difficult to access by tourists with limited mobility.</td>
</tr>
<tr>
<td>Amenites</td>
<td>“Complete Facilities” Bogor Botanical Garden is equipped with facilities such as picnic area, restaurant, toilet, and bicycle rental</td>
<td>Limited Amenity Capacity when it is crowded with tourists</td>
<td>Opportunities to improve the quality and number of amenities to increase the comfort of tourists.</td>
<td>Competition with Other Tourist Destinations, Bogor Botanical Garden will face competition with other tourist destinations in Bogor or its surroundings that offer better or more amenities.</td>
</tr>
<tr>
<td>Ancillary Service</td>
<td>Varieties of Ancillary Services, Bogor Botanical Garden offers various ancillary services such as souvenir sales, tour packages, and night tours.</td>
<td>Lack of Souvenir Quality, the quality and variety of souvenirs need to be improved to meet the expectations of tourists</td>
<td>Offering souvenir products or food that are sustainable and environmentally friendly, in order to attract environmentally conscious tourists.</td>
<td>Changes in Traveller Preferences, Traveller preferences may change over time, which may affect demand for certain ancillary services.</td>
</tr>
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To optimize the experience at Bogor Botanical Garden, several steps can be taken. First, the promotion of attractions such as plant collections, historical buildings, and
environmental education activities, as well as the provision of tour guides need to be improved. Secondly, it is important to improve the cleanliness of public toilets and offer food options at more affordable prices. Third, the condition of the road to the location needs to be improved to facilitate access. With these measures, Bogor Botanical Garden can increase its attractiveness and provide a better experience for tourists.

5. CONCLUSION

Based on the SWOT analysis of the Bogor Botanical Garden and the 4A concept (Attraction, Accessibility, Amenities, and Ancillary services), a number of important aspects can be identified that affect the success of the development of this tourist destination. Bogor Botanical Garden stands out in its strengths, such as a very diverse collection of plants, the existence of Bogor Palace as an ancillary attraction, as well as a strategic location in the middle of Bogor that facilitates accessibility. Supporting facilities such as picnic areas, restaurants, and toilets are also available to increase the comfort of tourists. However, there are some disadvantages that need to be considered. Some toilet areas may require further revamping to improve hygiene and comfort. In addition, some plants in the garden may not get optimal care, so better maintenance needs to be a major concern. The lack of effective promotion and marketing can also limit the number of tourists, signaling that further efforts in this regard can support the growth of visits. Overall, Bogor Botanical Garden has a strong foundation as a tourist destination with a good 4A concept. However, there is a need for a sustainable development strategy that includes plant maintenance, attraction improvement, amenity quality, and technology utilization in order to continue to provide an enthralling and memorable experience for tourists.

There are several things or suggestions that need to be improved so that Bogor Botanical Garden has more tourists:

1) Attraction Improvement and Diversification
   Developing more unique and interesting attractions can help attract more tourists. For example, adding more thematic parks or holding special events such as flower fairs or music festivals.

2) Improved Quality and Number of Amenities
   Improving the quality and number of amenities such as picnic areas, restaurants, and toilets can increase the comfort of tourists. For example, the addition of rest areas or the improvement of dining facilities.

3) Accessibility Improvements
   Improving signals and directions can help travelers navigate the area more easily. For example, increased street signals or the introduction of mobile applications for navigation.

4) Improved Education Programs
   Developing more interesting and informative educational programs can help increase the educational value of Bogor Botanical Garden. For example, adding more classes or workshops on various topics related to plants and the environment.

5) Use of Technology
   Using technology such as mobile apps or virtual reality can help improve the traveler experience. For example, mobile apps can be used to provide information about attractions or facilities, while virtual reality can be used to provide virtual tours of the Bogor Botanical Garden.

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REFERENCES


