

The Development of Flora and Fauna Conservation Area Through Signage and Digital Map (Study on Srengseng Urban Forest, West Jakarta)

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ABSTRACT

This research aims to identify and analyze the development of flora and fauna conservation areas through signage and digital maps in Srengseng Urban Forest, West Jakarta. The research method used is a qualitative method described by descriptive analysis conducted through in-depth interviews and documentation. This research concludes that Srengseng Urban Forest has proven unable to develop thoroughly in terms of signposting facilities. The obstacles, such as the lack of directions and the absence of a map of the location, affect the comfort of visitors and safety and hygiene issues. Suggestions that can be given to improve the development of conservation areas in Srengseng Urban Forest are that Srengseng Urban Forest should have multifunctional signage, such as directional signs that include several directions from facilities and attractions in the urban forest with signage placement in strategic locations, such as at the roundabout around the main entrance of the Srengseng Urban Forest. In addition to creating multifunctional signage, Srengseng Urban Forest also needs to have a digital map type map that visitors can access by scanning a QR Code to show an overall picture of the Srengseng Urban Forest area.

Keywords: Ecotourism; Conservation Area; Urban Forest; Signage; Digital Map.

INTRODUCTION

Indonesia has been referred to as the world's lungs. According to the World Resources Institute (WRI), Indonesia has some of the world's most extensive tropical forests. Forests play a critical role in preventing climate change. (Barber et al., 2002/2014). Forests are classified into three types based on their function according to Constitution Law No. 41 of the year 1999, which are production forests, conservation forests, and protected forests. Srengseng Urban Forest is one of Jakarta's protected forests and a conservation and research area. Srengseng Urban Forest is the city's lungs, absorbing carbon dioxide and serving as a water catchment region. With numerous advantages, this wooded area encourages travelers to participate in various activities, one of which is a tourist attraction.

Tourism, according to Constitution Law No. 10 of the year 2009, is a variety of tourist activities supported by various facilities and services offered by the community, enterprises, government, and local governments. Tourism aims to enhance economic growth, improve people's well-being, eliminate poverty, eliminate unemployment, and protect nature, the environment, and resources, among other things. According to Rahma (2020, as cited in Antonio & Uula, 2022), tourism is an industry that may be exploited to enhance foreign

exchange because the human resources needed to improve the tourism business are available in the country. Tourism is an action or activity in which a person moves for some time outside their place of origin for a specific reason other than to seek money or wages. Due to the tourism business having an impact on all sectors, or what is generally referred to as the multiplier effect, it must be able to have a long-term impact economically, socially, culturally, and environmentally. The concept of sustainable tourism arose as a result of this phenomenon.

According to the Federation of Nature and National Parks, sustainable tourism encompasses all aspects of development, management, and tourism activities that must consider the environmental, economic, social, and economic integrity and the well-being of available natural and cultural resources over time (Sunarta & Arida, 2017). Then, according to the UNWTO (United Nations World Tourism Organization), sustainable tourism is a type of tourism that considers all the environmental, social, and economic effects, both now and in the future (Rauf, 2017). This tourism industry is responsive to visitors' needs, maintains environmental balance, and supports the welfare of host communities. The concept of sustainable tourism aligns with the Sustainable Development Goals (SDGs) that have been agreed upon by all countries in the world. Srengseng Urban Forest, located in Kembangan, West Jakarta, has significant linkages with various points in the Sustainable Development Goals (SDGs), especially in Good Health and Well-Being (3), Life on Land (15), Affordable and Clean Energy (7), and Sustainable Cities and Communities (11).

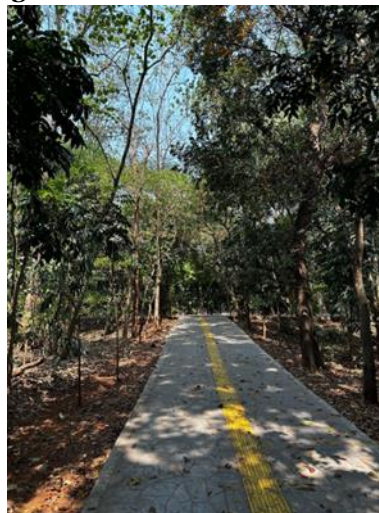
Srengseng Urban Forest is critical in supporting the SDG's Good Health and Well-being goal. Forests help reduce mortality and morbidity by combating common causes of public health problems, such as air, water, and soil pollution. Through photosynthesis, the forest's trees produce oxygen, resulting in better air quality for the surrounding population. In addition, Life on Land point emphasizes the importance of maintaining and supporting biodiversity and terrestrial ecosystems. Srengseng Urban Forest is one such crucial terrestrial ecosystem. Forest and soil conservation plays a role in maintaining biodiversity and safeguarding local flora and fauna. Furthermore, Affordable and Clean Energy target point focuses not only on access to affordable energy but also on clean energy. Although this link is indirect, maintaining Srengseng Urban Forest helps maintain air quality and prevent pollution. This leads to a cleaner environment and reduces negative impacts on human health. Rather than that, Srengseng Urban Forest contributes to achieving Sustainable Cities and Communities point goal. It creates green spaces in densely populated urban environments, giving citizens access to a healthy natural environment and a place for recreation and relaxation. It helps build more sustainable communities by reducing air pollution and providing open spaces that benefit social well-being. Through the role of Srengseng Urban Forest in protecting the environment and performing its ecological functions, the area supports various SDGs covering health, environment, clean energy, and sustainability of cities and communities.

Butarbutar (2021), in her book, explained about the concept of tourism development which can be seen from the uniqueness and conditions of an area that can be developed with sustainable tourism development in the form of ecotourism. Ecotourism is a form of tourism closely related to the principle of conservation, which can be interpreted as a form of tourism that encourages conservation efforts and sustainable development. According to The International Ecotourism Society (2019) or TIES, ecotourism is a tourist trip to natural areas to convert or save the environment and provide livelihoods to residents. The concept of ecotourism is a thought that aims to preserve resources and utilize them for the benefit of

sustainable tourism. Ecotourism is one of the destination options to introduce a naturally preserved environment as a tourist visit area. Several studies related to ecotourism explained that a tourist destination can be called an ecotourism destination that needs to fulfill several conditions, namely, the presence of biodiversity, focusing on environmental conservation to pay attention to the preservation of nature and maintaining sustainability, involving local communities in its management, and providing environmental education facilities for tourists. (Andari, 2023; Kiswantoro et al., 2022)

Based on The Government Regulation No. 63 of the year 2002 concerning Urban Forests, Article 1, mentions that an urban forest is an area overgrown with dense trees in urban areas, both state-owned and privately-owned, which is designated as an urban forest by an authorized official. The purpose of urban forest management is mentioned in Article 2 which is to preserve, harmonize, and balance the urban ecosystem, including its ecological, social, and cultural components. The International Union for Conservation of Nature (IUCN) says that forests are the source and savior of the world's carbon emission problem (Rizvi et al., 2015). Looking at the type, Srengseng Urban Forest is included in forest ecotourism by utilizing forest area resources that have functions as environmentally based tourism areas, such as nature conservation areas (National Parks, Botanical Forest Parks, Nature Tourism Parks), Nature Reserve areas, and Protected Forests. The urban forest can be utilized as a research object, a conservation area, and a public activity space for the community. Conservation areas mean preserving or preserving the carrying capacity, quality, function, and ability of the environment in a balanced manner (Wahyudi & Sugiharto, 2010; Rachman, 2012). Srengseng Urban Forest has flora and fauna that need to be preserved, so it is used as a conservation area with a vital role in the surrounding environmental ecosystem.

Figure 1. The Road in urban forest



Source: Photographed by the research team (2023)

When the research team visited Srengseng Urban Forest, they found several problems in Srengseng Urban Forest. The main problem of Srengseng Urban Forest is the need for signage and digital maps. The absence of signage causes visitors to be confused when visiting Srengseng Urban Forest. Visitors need help finding the location or directions for the facilities and attractions. Even visitors also have difficulty finding their way out because of the absence of signage and because of the tall trees.

It can be seen from the problems described earlier that signage and digital maps have an essential role for visitors who come to Srengseng Urban Forest, helping them have a satisfying visiting experience. Signage at several points in Srengseng Urban Forest is needed to facilitate visitors. According to Kusrianto (2010, as cited in Mukadar, 2016), signage is a large-scale visual image designed to provide information to a specific audience. Calori & Vanden-Eynden (2015) say that the purpose of signage is to convey information about the environment to visitors through visual representations of objects or hardware in physical form. There are also several types of signage based on Gibson's theory (2009, p. 13), such as identification signs, directional signs, orientational signs, informational signs, statutory regulatory signs, and ornamental signs (Piippo, 2024). This signage as a direction can minimize the risk of visitors getting lost, which can give the Srengseng Urban Forest manager a wrong impression.

Digital maps are also needed to make it easier for visitors to know where the attractions are and what facilities are available in Srengseng Urban Forest. Visitors also need to find the distance to travel to tourist attractions due to the lack of information about directions and the absence of a map of the Srengseng Urban Forest location. This is supported by the results of an interview with the Department of Parks and Urban Forests responsible for Srengseng Urban Forest, where the interviewee said that Srengseng Urban Forest still needs a conventional map or digital map as well as no direction boards. In addition, the researcher also found other problems, such as electrical cables that are not neatly arranged so that they disturb visitors. These walls need to be neat enough to limit the Srengseng Urban Forest from residential areas, lack trash bins, lack of seating around the urban forest, and lakes in the urban forest that are filled with garbage.

Zhang (2009, in Murthado & Shihab, 2012; Amanda et al., 2020) explains that digital tourism, often called e-tourism, utilizes many features from the field of information technology and multimedia support, such as images, videos via the internet, such as user databases, and tourism information data using computer networks as media. According to the Ministry of Education, Culture, Research, and Technology (Kemdikbud), Map is a conventional picture of the earth's surface on a flat plane that is reduced to its appearance when viewed from above with added writings as an identifying mark (Putrawan, 2019). Certain symbols symbolize this conventional picture of the earth's surface. Following the concept of digital tourism, people currently prefer something more minimalist and practical, so paper-based maps are considered less efficient, so researchers choose to use digital maps.

Literature Review

Tourism is one of the businesses that can boost foreign exchange because the human resources required to grow the industry are available in the country (Rahma, 2020). Tourism is the activity or activity of a person who temporarily relocates outside of his home for a specific purpose (Januarman et al., 2019). According to the UNWTO, sustainable tourism considers current and future economic, social, and environmental implications while serving the requirements of visitors, industry, the environment, and host communities (Coghlan, 2019). Management rules and practices for sustainable tourism development apply to all sorts of tourism in all places, including mass tourism and other specialized tourism segments.

The United Nations (UN) Sustainable Development Goals (SDGs) are international programs developed by the UN for the well-being of people worldwide that are anticipated to be completed by 2030. The SDGs include 17 targets employed by different industries, including

tourism. According to the President's Council on Sustainable Development in the United States (United States Environmental Protection Agency, 2023), sustainability is a process and stage of development that aims to improve the economy so that it is more equitable, to maintain environmental sustainability, and to create social conditions that benefit future generations. Meanwhile, according to the UNWTO, sustainable tourism is a tourism activity that thoroughly considers the economic, social, and cultural implications and the current and future environment (Rauf, 2017). According to Bricker et al. (2013), ecotourism is a type of tourist travel to natural places to convert the environment while protecting local populations' lives and well-being. According to The International Ecotourism Society, ecotourism is a tourist vacation to natural regions to protect the environment and provide livelihoods for local inhabitants (Mudasir et al., 2020). According to Buckley (2009), the significant components of ecotourism include nature-based products, low-impact management, environmental education, and conservation contributions.

The term conservation area refers to the maintenance of the environment's carrying capacity, quality, function, and ability in a balanced manner (Wahyudi & Sugiharto, 2010; Rachman, 2012). Conservation goals include (1) preserving biological natural resources and the balance of their ecosystems so that they can better support efforts to improve human welfare and quality of life and (2) preserving the ability and utilization of biological natural resources and their ecosystems in harmony and balance. Conservation is also an action taken to ensure the survival of animals and plants. Without conservation, animals' natural habitats will be destroyed (Siregar, 2009, as cited in Butarbutar, 2021). According to Government Regulation No. 63 of the year 2002, an urban forest is a densely planted patch of trees in an urban area, either on state- or privately-owned land, that an authorized official designates.

Kusrianto (2010, as cited in Mukadar, 2016) defines signage as a substantial graphic image to transmit information to a specified audience. Previously, signage took the form of signs or characters, such as directions, a place's name, and others. According to Calori & Vanden-Eynden (2015), signage conveys information about the environment to visitors through visual representations of physical items or hardware. According to Gibson's thesis (2009, in Piippo, 2024), there are numerous sorts of signage which include (1) identification signs: designate a specific location, place, or area, and indicate the name and function of each zone which can aid in differentiating one region from another; (2) directional signs: direct visitors in the right direction or location, with a straightforward message to be easy to find out, which includes fonts, symbols, and arrows to aid visitors' navigation; (3) orientational signs: display maps and directories to show visitors where they are in the area and indicate the visitor's location in that area; (4) informational signs: is helpful to tell visitors about a location's function and running hours; (5) statutory regulatory signs: which are frequently made by local authorities as a tool for informing the rules of activities not permitted in the area and generally helps protect the safety of its users and rights of its owners; and (6) ornamental signs: serve to enhance or improve the appearance of a building in general or in particular.

Moreover, according to the Ministry of Tourism and Creative Economy's website, digital tourism is an efficient technique for promoting various Indonesian tourism destinations and potential through many platforms (Kemenparekraf/Baparekraf RI, 2021). In other words, digital tourism not only introduces but also promotes the beauty of tourism to increase the number of foreign tourists visiting Indonesia. The digital tourism trend is a significant step forward for Indonesia's tourism industry and creative economy. Digital tourism indirectly

raises public awareness and responds to technological advancements. Of course, this is a relatively easy task because people's lifestyles are often fast-paced and include constant touch with the internet. Nuryadin (2005, in Marsudi et al., 2020) defines digital maps as photographs of geographic events that computer equipment saves and evaluates. A set of coordinates represents each element in a digital map. For example, an object in the form of a point location will be saved as a coordinate, whereas a collection of coordinates will represent the region. When comparing digital maps to analog maps (which are made on paper or other printed mediums), we find that digital maps have various advantages, including: (1) digital maps have a set quality, unlike paper, which can be torn folded or otherwise damaged, digital maps can be returned to its original state without sacrificing quality; (2) digital maps are simple to keep and transfer from one format to another, which can be saved on hard disk, CD-ROM, or DVD-ROM, unlike analog maps which can take up more space; and (3) digital maps are more straightforward to maintain as the specific software makes it easier to edit or update the data or change the coordinate system.

METHOD

Method is the way taken to solve the problem of an object under study. According to Sugiyono (2019) qualitative research methods are also called naturalistic research methods because the research is conducted in natural conditions (natural settings). The research method or approach used in this research is a qualitative method described by descriptive analysis in which the results of this study will present data in the form of written and oral data to find out more about the research title on the Development of Flora and Fauna Conservation Areas Through Signage and Digital Map in Srengseng Urban Forest, West Jakarta.

Data sources in this study were obtained through interviews with resource persons, namely those from the DKI Jakarta Provincial Parks and Urban Forests Office. In addition to oral interviews, data sources in this study are also in the form of written sources, namely data in the form of writing obtained from journals related to the development of facility areas. The next data source is obtained from documentation in the form of photos and videos about the Srengseng Urban Forest, West Jakarta.

RESULT AND ANALYSIS

Srengseng Urban Forest is one of 10 green open spaces serving ecotourism sites. Located in Srengseng, West Jakarta, Srengseng Urban Forest is one of the oxygen-producing places in Jakarta that can reduce pollution. This 15-hectare forest is a natural tourist attraction in the city. Home to a variety of flora and fauna, Srengseng Urban Forest is a popular place for sports, education, recreation, and more. As a place that is in demand and crowded, Srengseng Urban Forest has several areas for improvement, such as the lack of directions and the absence of a map of the location, which affects visitors' convenience. Researchers collected data through interviews as a way to strengthen the problems that have been found and compiled by researchers in Srengseng Urban Forest. Based on observations by researchers and interviews with Srengseng Urban Forest managers, the results obtained are as follows.

A tourist spot is essential to provide a sense of comfort to its visitors and to provide a pleasant experience while in that place. Some things that can provide visitors comfort are cleanliness, friendliness of the officers, adequate facilities, and guaranteed safety. One of the ecotourism destinations located in West Jakarta is Srengseng Urban Forest. The researchers observed that Srengseng Urban Forest has facilities that provide visitor comfort, including neatly arranged roads with guiding blocks for people with disabilities. Then, each type of tree was equipped with an information board in the form of a QR Code. In addition, the Srengseng Urban Forest has an information board facility with a barcode to access free digital books for Jakarta residents located next to the security post.

Figure 2. Utilization of QR Codes for Plant Information Boards



Source: Photographed by the research team (2023)

Figure 3. Free Digital Book Information Board



Source: Photographed by the research team (2023)

Figure 4. QR Code Usage for Guest Book Filling

Source: Photographed by the research team (2023)

However, Srengseng Urban Forest has several shortcomings found by researchers, including inadequate trash bins and less strict security, so many violate the regulations Srengseng Urban Forest owns. Through interviews with Mr. Tambok, the Forestry Instructor and Manager of Srengseng Urban Forest, the efforts made are through security activities with patrol actions by security guards to prevent visitors or unscrupulous people from violating or disturbing the ecosystem of living things in Srengseng Urban Forest. In addition, curbing is also carried out by applicable regulations. This cannot be done optimally due to the number of human resources (HR) and a limited budget in the APBD (Regional Revenue and Expenditure Budget). In addition to interviewing managers, researchers also interviewed several visitors to Srengseng Urban Forest to get validation of the problems found.

There were 80% from the visitors interviewed were first-time visitors to Srengseng Urban Forest. In the interview session, it was found that visitors needed help finding several spots in Srengseng Urban Forest, such as lakes, amphitheatres, trigona bee breeding, and others. This is due to the need for more information regarding directions to facilities and attractions in Srengseng Urban Forest, which has a land area of around 15 hectares. One form of direction that is widely used is signage. Signage has a function, namely as a means of notifying information in an environment to users or visitors delivered by visual representation on objects or hardware in physical form.

Calori & Vanden-Eynden (2015) and Gibson (2009, in Piippo, 2024) explains the signage theory referring to the six types of content or information with dimensions including identification sign, directional sign, orientational sign, informational sign, statutory regulatory sign, and ornamental sign. After observations by researchers, the following is an explanation of the signage owned and not owned by Srengseng Urban Forest.

Identification Sign

This signage is used to identify a location, place, or area around it. The name and function of each area are indicated by this mark, which can help distinguish one area from another. An example of this sign is a picture of cutlery to signify a restaurant. Regarding this definition, Srengseng Urban Forest does not have signage depicting trees to suggest that the area is an urban forest area. As for conservation areas like the urban forests, there should be signs indicating that the area is a forest area so that both the surrounding community and people outside the Srengseng area, West Jakarta, know the existence of a forest area in the middle of

Jakarta. Identification signs are generally installed around the entrance gate of the urban forest or 30 to 50 meters before the entrance gate.

Figure 5. Surrounding Area of Srengseng Urban Forest Entrance Gate



Source: Photographed by the research team (2023)

Directional Sign

This sign helps visitors find the direction or place they want to go. It should be easy to find and stand out with content that has a simple message. The sign is equipped with typography, symbols, and arrows to make navigation easier for visitors. In Srengseng Urban Forest, there is a directional sign indicating the direction to the toilet and prayer room, which are located next to the management office and not far before the entrance to the forest area.

Figure 6. Toilet and Prayer Room Signage



Source: Photographed by the research team (2023)

Oriental Sign

Signs that show maps and directories to show the environment where visitors are located, such as the "you are here" sign or a map that shows an overall picture of the urban forest, are not yet available in Srengseng Urban Forest. A sign that informs visitors of their location in a tourist attraction is fundamental and should be owned by every tourist attraction. The sign can be installed along with an overall urban forest map to make it easier for visitors to know where they are. Oriental signs can be placed strategically, such as in front of or next to the gate that reads "Welcome to Srengseng Urban Forest" before entering the jogging track in Srengseng Urban Forest.

Figure 7. "Welcome to Srengseng Urban Forest" Sign at The Gate



Source: Photographed by the research team (2023)

Informational Sign

This sign is used to provide visitors with information regarding the function and operating hours of a place. Referring to the informational sign, a sign explaining operating hours has yet to be available in Srengseng Urban Forest. This sign is an essential and fundamental aspect to be considered because it provides information for visitors regarding the functions and operating hours of a tourist spot. This signage should be located close to the entrance gate of the urban forest or around the entrance ticket purchase counter. However, this sign can be placed around the Srengseng Urban Forest management office due to the absence of an official entrance ticket counter.

Figure 8. Management Office



Source: Photographed by the research team (2023)

Statutory Regulatory Sign

This sign is a tool to inform you of the rules regarding activities that are allowed and not allowed in the area. The authorities often make it in the area. The sign generally serves to maintain the safety of its users and the rights of its owners. Srengseng Urban Forest has a regulation board that contains information such as visitors who come cannot wear school

uniforms. The maximum limit for being in the urban forest is 17.00 WIB, next to the manager's office. Then, there is also signage containing information on what activities can and cannot be done in Srengseng Urban Forest. In addition, around the lake area, there are information boards about prohibited activities and information banners prohibiting bathing or swimming.

Figure 9. Information Board on Prohibition located next to the Management Office



Source: Photographed by the research team (2023)

Figure 10. Signage about Do's & Don'ts



Source: Photographed by the research team (2023)

Figure 11. Signage on Prohibition, located around the Lake



Source: Photographed by the research team (2023)

Figure 12. Information Board on Prohibition of Activities in Srengseng Urban Forest



Source: Photographed by the research team (2023)

Ornamental Sign

This sign has a function to beautify or beautify the appearance of a building, either in general or specifically, such as flags, banners, plaques, and others. Referring to this understanding, Srengseng Urban Forest already has at least one sign that beautifies the forest area, such as a sign indicating a photo spot that reads "Srengseng Urban Forest" for visitors.

Technological developments nowadays are proliferating, which also influence the tourism industry, as previously conventional methods were used and is now innovating with the use of digital. One of the innovations from technological developments is the use of digital maps. Referring to Nuryadin's (2005, in Marsudi et al., 2020) theory on digital maps, the advantages

of digital maps are related to the fixed quality of maps, ease of storage and transfer, and ease of update, all of which facilitate the use of maps in various contexts, which makes researchers prefer to use digital maps as a navigation tool for Srengseng Urban Forest. This digital map aims to clarify the direction of facilities and attractions listed on signage in Srengseng Urban Forest. This statement is reinforced by the results of interviews with visitors conducted by researchers who show an urgent need for better accessibility of navigation information. The visitors stated that a digital map would greatly assist them when traveling efficiently around Srengseng Urban Forest. Therefore, implementing digital maps is considered a strategic step to fulfil the needs and expectations of visitors.

In Srengseng Urban Forest, researchers found that no conventional or digital maps are available to guide visitors. In addition to providing basic information such as trails, facilities, and points of interest, digital maps can be integrated with other features such as images. This will increase the accuracy and availability of information and allow visitors to share their experiences with their neighbors. By using digital maps, visitors can also more easily access electronically stored digital maps through their smartphones. This provides visitors with the convenience of carrying navigation information and reduces the need for paper usage, which can threaten outdoor environments such as urban forests.

Urban forests such as Srengseng Urban Forest often change the form of new trails, facilities, or even points of interest. Using digital maps, this information can be updated in real-time, ensuring that visitors are always provided with the latest relevant information to support their experience in the conservation area. This technology is recognized as an effective means of making it easier for visitors to navigate the urban forest's complexity, helping visitors find the facilities and attractions they want to visit that suit their preferences.

CONCLUSION

As one of the green open spaces in West Jakarta, Srengseng Urban Forest is a vital ecotourism site and oxygen producer. Although it provides comfort facilities, such as well-organized roads and tree information available through QR codes, there are also areas for improvement in Srengseng Urban Forest, such as the need for more directions and maps and safety and hygiene issues. Based on the results of observations and interviews with Srengseng Urban Forest managers, they show efforts in maintaining security and enforcing regulations, although limited by the number of human resources and limited budgets. Visitors, especially those who come to Srengseng Urban Forest for the first time, need help finding some of the facilities and attractions in the urban forest due to the need for signage information.

According to the signage theory quoted from Calori & Vanden-Eynden (2015) and Gibson (2009, in Piippo, 2024), there are six types of signage: identificational sign, directional sign, orientational sign, informational sign, statutory regulatory sign, and ornamental sign. Srengseng Urban Forest already has three types of signage installed, namely directional signs, statutory regulatory signs, and ornamental signs. Despite having three types of signage, Srengseng Urban Forest still needs adequate digital or conventional maps to guide visitors. Prohibitory information boards, such as the prohibition of bathing in the lake, are already in place. However, there are still areas for improvement in marking the identity of the urban

forest area. Digital maps are also a solution for visitors who have helped find directions to existing facilities and attractions by providing more accurate, up-to-date, and environmentally friendly information.

Based on the shortcomings of Srengseng Urban Forest, such as the limited number of signage and maps that are essential facilities for visitors who come to the urban forest. Therefore, Srengseng Urban Forest should have a multifunctional signage board according to the explanation by Calori & Vanden-Eynden (2015) and Gibson (2009, in Piippo, 2024), namely directional signs. As described in the results and discussion section, Srengseng Urban Forest already has directional signs such as direction boards to prayer rooms and toilets, but if Srengseng Urban Forest has multifunctional signage that can cover several directions from facilities and attractions in the urban forest by placing signage in strategic locations such as at the roundabout around the main entrance of the Srengseng Urban Forest. This will be much more efficient because, in one sign, there are already several direction boards to facilities such as directions to the lake and amphitheater, playground, toilets, prayer rooms, parking lots for beekeeping, and compost making.

In addition to the need for multifunctional signage, Srengseng Urban Forest needs to have a map that can show an overall picture of the Srengseng Urban Forest area. Based on the results of interviews with visitors in Srengseng Urban Forest, visitors stated that a digital map type that visitors can access by scanning the QR Code is needed. Digital maps are considered more efficient than conventional maps. With a digital map, visitors can always access the Srengseng Urban Forest location plan through an image by scanning the QR Code without photographing the map manually.

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