

Research Article

# Revitalization of Community Parks Based on the Concept of Islamic Gardens (Case Study: Riverbank of the Deli River on Ileng Street, Rengas Pulau, Medan Marelan District)

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**Abstract:** Green Open Space (RTH) is an essential element in urban development, playing a crucial role in supporting ecological balance, providing shade, producing oxygen, and absorbing pollution. It also serves as a social and cultural space for the community. The neighborhood park located along the banks of the Deli River on Ileng Street, Medan Marelan District, represents a concrete example of this issue. The current condition of Ileng Park reflects a decline in its quality as a green open space. This study aims to identify existing problems in terms of the park's physical condition, functionality, and user activities. It employs a qualitative descriptive approach grounded in a case study framework, with data collected from both primary and secondary sources. The analysis is conducted using a rationalistic site analysis method. The findings indicate that the community perceives a need for the revitalization of the park to enhance comfort, attractiveness, and the implementation of the Islamic Garden Concept, which is considered appropriate for restoring the park's function as a green open space.

**Keywords:** Green Open Space, Islamic Garden Concept, Neighborhood Park, Revitalization

## 1. Background

Green Open Space (RTH) is a vital element in urban development, contributing to ecological balance, providing shade, generating oxygen, absorbing pollution, and serving as a social and cultural space for communities (Cahya et al., 2016). One of the most tangible forms of RTH today is the neighborhood park (*Taman Lingkungan*) (Ministry of Public Works Regulation, n.d.). Neighborhood parks are a part of urban green open space developed within residential areas, designated for public use, and regulated as urban open spaces (Hariz, 2013).

In general, Green Open Space functions as a public area that ensures safety, comfort, and inclusivity for all groups of people. However, in many areas—particularly in Medan Marelan—neighborhood parks have experienced a decline both in terms of their physical condition and their social function. As noted in a study by Karsono et al (2017), issues such as security in public spaces, overcrowding, and disruptive behaviors have emerged as major challenges even in developed countries.

In general, Green Open Space serves as a public area that provides a sense of safety, comfort, and inclusivity for all segments of society. However, in many areas—particularly in Medan Marelan—neighborhood parks have often experienced deterioration both in their physical conditions and in their social functions. As noted by Karsono et al. (2017), security issues in public spaces—such as overcrowding and disruptive behaviors—are among the main concerns in developed countries.

The neighborhood park located along the banks of the Deli River on Ileng Street, Medan Marelan District, is a concrete example of this issue. The current condition of Ileng Park shows damage to park facilities due to vandalism, lack of lighting, weak social control, misuse of public space (Jannah, 2019), and minimal community engagement in positive activities.

Received: July 09, 2025;

Revised: August 17, 2025;

Accepted: August 31, 2025;

Online Available : September 12,  
2025

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These conditions have led to a significant decline in the park's quality as a public space (Rasyid & Gandini Purbaningrum, 2024).

Furthermore, field observations reveal that the character of the park does not reflect the principles of an Islamic Garden. There is a lack of spatial order, limited space, absence of geometric or arabesque elements—hallmarks of Islamic garden design—no lighting during nighttime, and limited garden elements such as water features and flowering plants (Jannah, 2019).

Studies on neighborhood parks and Islamic gardens have been conducted in several previous works. Nurrahmah and Franjaya (2022) carried out a study aimed at developing a site plan that provides a quality place for users at the *Pondok Pesantren Tahfidz Quran Dewan Dakwah Lampung*, through the design of an Islamic garden. Safriana (2021) conducted research on the revitalization of *Sigli City Park* as a public space with an Islamic character. Komala et al. (2024) examined the design concept of a neighborhood park in the RT 06/RW 03 housing complex based on community participation. Similarly, Afandi et al. (2012) explored public environmental awareness in the maintenance of neighborhood parks, aiming to assess the level of environmental consciousness as a potential driver to improve the quality of park maintenance. Sujai et al. (2024) evaluated the historical and cultural landscape based on the Islamic garden concept in the area of *Masjid Agung Keraton Sumenep*, aiming to propose design recommendations to enhance the site's potential, quality, and visitor appeal.

A review of the aforementioned studies indicates that research focusing specifically on the revitalization of neighborhood parks using the Islamic garden concept remains limited. However, various issues concerning neighborhood parks have been addressed in these studies. Therefore, this study aims to (1) identify the problems occurring in the neighborhood park located on Ileng Street, (2) examine how the Islamic garden concept is applied to the research site, and (3) determine appropriate revitalization strategies for the park in accordance with existing regulations.

Accordingly, the following research questions arise: What is the current condition of the neighborhood park along the Deli River bank on Ileng Street, Rengas Pulau, in terms of its physical attributes, functions, and user activities? How can the Islamic Garden Concept be applied to the neighborhood park located on Ileng Street, Rengas Pulau, Medan Marelan District? And how can the park be effectively revitalized? This study is expected to contribute to the development of landscape architecture, particularly in the context of Islamic landscapes and the design of green open spaces grounded in Islamic values.

## 2. Theoretical Review

This study employs theories from Jannah (2019), Wardono et al. (2016), and Newman (1996). Jannah (2019) divides the variables of the Islamic Garden Concept into ten components: Order, Space, Form, Texture, Pattern, Light, Movement, Garden Elements, Users, and Park Management. These variables can be adapted according to contemporary needs and developments.

Furthermore, in the study by Wardono et al. (2016), revitalization activities are categorized into three main aspects: physical environment, economic, and socio-cultural. The success of a revitalization project is considered to depend on its impact across these three dimensions. In his book *Creating Defensible Space* (Newman, 1996, as cited in Nuraini, 2024), Newman develops a theory on how the design of the physical environment can influence levels of safety, social control, and user comfort within a space. He identifies four key principles for creating a safe and comfortable park: Territoriality, Natural Surveillance, Image, and Milieu.

The selected theories are considered relevant to the problems identified at the research site. This is due to the fact that the site is located in an area prone to behavioral deviations, has poor physical environmental conditions, and lacks the defining characteristics of an Islamic garden. Therefore, these theoretical frameworks are expected to serve as the foundation for this study.

## 3. Research Methodology

### 3.1. Research type

This study adopts a qualitative descriptive approach. Descriptive qualitative research is a methodology used to gain a deep understanding of a phenomenon based on the perspectives

of the research subjects (Abdiyanto, 2020; Nuraini, 2024b). Its main focus is to portray social realities, behaviors, and the underlying meanings through non-numerical data such as interviews, observations, and documentation (Moleong, 2000 in Nuraini, 2024b; Yin, 2000 in Nuraini et al., 2024; Fitri, 2018; Fitri et al., 2021). Rather than seeking generalizations, this research aims for rich and contextual comprehension (Lubis, 2023; Lubis & Siregar, 2024; Nuraini, 2016; Nuraini, 2021; Kurniawan et al., 2024).

The data collected consist of two types:

1. Primary data, gathered through site observation (Alaslan, 2022) and interviews with local residents and neighborhood leaders.
2. Secondary data, obtained from literature studies including journal articles, books, and relevant regulations accessed through official websites of institutions related to this research.

### 3.2. Data Analysis Method

The analysis employed in this study is site analysis, which is considered a rationalistic approach (Setyabudi, 2016). The site analysis is conducted based on descriptive data obtained from observations and field studies. This analysis is expected to identify existing problems in order to provide appropriate solutions, thereby facilitating the application of the Islamic Garden Concept in the revitalization of the neighborhood park.

## 4. Results and Discussion

### 4.1. Regulations Related to Revitalization

Revitalization refers to activities aimed at enhancing the value of land or areas in order to improve their previous functions (Regulation of the Minister of Public Works and Housing No. 18/PRT/M/2010 on Guidelines for Area Revitalization, 2010).

### 4.2. Regulations Related to Green Open Space

Green Open Space refers to elongated areas designated for open use, planted either naturally or through cultivation. A neighborhood park within a community unit (Rukun Warga) must be provided to serve residents, with a minimum area of 1,250 m<sup>2</sup>. At least 70%–80% of the area must be planted with vegetation, while the remaining area can be paved for various public activities. The park must also contain a minimum of 10 shade trees, consisting of small or medium-sized species (Guidelines for the Provision and Utilization of Green Open Space in Urban Areas, 2008).

### 4.3. Regulations Related to Riverbanks

In urban areas, the riparian boundary for embanked rivers must be at least 3 meters from the outer edge of the embankment along the river channel. Limited use of this boundary is allowed for the construction of water resource infrastructure, bridge and pier facilities, gas and water pipelines, electric and telecommunication cables, and other activities—as long as they do not disrupt river functions—such as vegetable planting or electricity-related structures (Regulation of the Minister of Public Works and Housing No. 28/PRT/M/2015 on the Determination of River and Lake Boundary Lines, 2015).

### 4.2. General Condition of Ileng Park

Based on an interview with the Head of Neighborhood Unit II, Ileng Park has existed since 2010. The construction process was relatively short and was completed in less than a year. The development of the park was carried out by the Medan City Parks Department.

The park is located on Ileng Street, Rengas Pulau, Medan Marelán District, and was built along the banks of the Deli River. It once served as one of the planting sites for 1,000 trees during the commemoration of Indonesia Tree Planting Day (HMPI) on November 24, 2024 (BBKSDA North Sumatra, 2024).

By 2014, four years after its construction, the park was characterized by several trees, although they were not very dense. However, by 2024, a significant transformation had occurred. The site had become heavily overgrown with thick tree canopies, indicating a lack of proper tree maintenance. This change illustrates a noticeable decline in upkeep between Ileng Park in 2014 and Ileng Park in 2024 (Figure 1).

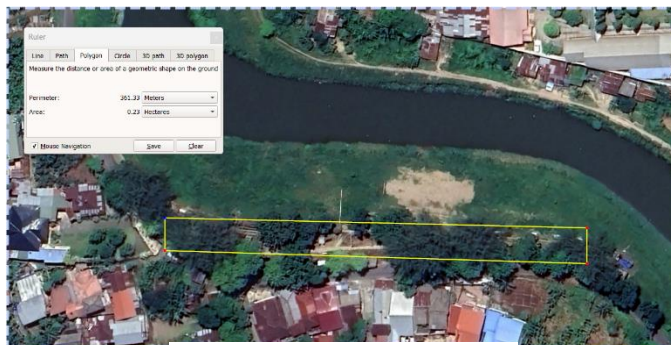


Figure 3. Site Dimensions

Source : Google Earth, 2025

The boundaries of **Ileng Park** are as follows:

- a. **North:** Directly adjacent to the **Deli River**
- b. **East:** **Ileng Street** leading toward **Marelan**
- c. **West:** **Ileng Street** heading toward **Belawan**
- d. **South:** **Residential area**

The site boundaries are illustrated in **Figure 2**.

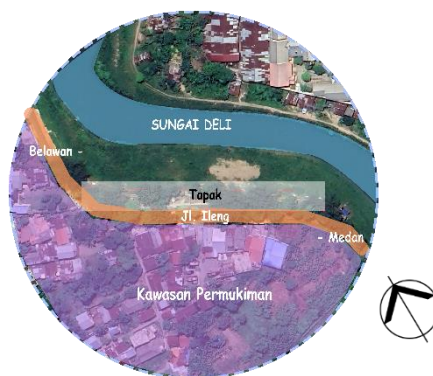


Figure 2. Site Boundary Map

(Source: Author, 2025)

The site is located within a residential area along the banks of the Deli River, on Ileng Street, Rengas Pulau. It is a park that was once actively used by the community, but is now only sparsely utilized. The park covers an area of 2,550 m<sup>2</sup> or 0.25 hectares, with a width of 15 meters and a length of 170 meters. The shape of the site follows the natural flow of the Deli River. Figure 3. Site Dimensions

A SWOT analysis is provided to systematically understand the site conditions, as presented in Table 1 below:

Tabel. 1 SWOT Analysis

Strengths (Kekuatan)	Weakness (Kelemahan)	Oppotunities (Peluang)	Threats (Ancaman)
The site is located in a residential area	Limited facilities due to vandalism and poorly maintained vegetation	Potential to serve as a green open space park adapted to the Islamic garden concept	Risk of vandalism or misuse of the park if the surveillance system is not actively supported
Close to a place of worship (Fatimah Mosque)	Minimal supervision and lack of activities in park management	Potential to improve environmental quality and reduce slum areas	Environmental pollution and household waste levels remain high
One of the designated areas for planting 1,000 trees in 2024	Absence of a drainage system and inadequate lighting	Can become a neighborhood park based on the Islamic Garden Concept supported by community participation in Medan Marelan District	-
Majority of residents (90%) are Muslim, approximately 410 households.	-	The site's position along the riverbank offers potential as a visitor attraction	-

Source: Author’s analysis, 2025

### 4.3. Site Condition Analysis

The site is experiencing serious issues related to environmental quality, physical conditions, and functionality. Ecologically, the site is in a concerning state due to a lack of community awareness regarding environmental stewardship and the sustainability of green open spaces. According to an interview with the Head of Neighborhood Unit II, communal clean-up activities (gotong royong) are only conducted once every two months, and even then, they are not guaranteed to occur regularly due to limitations in tools and funding. This situation further contributes to the degradation of Ileng Park.

Hardscape elements such as seating and playground facilities have suffered significant damage, primarily due to vandalism and a lack of proper maintenance. Another major issue is the absence of a drainage system, which results in standing water after rainfall. This condition not only reduces the park’s comfort and usability but also has the potential to alter the physical characteristics of the Deli Riverbank.

Therefore, a comprehensive revitalization effort is required, beginning with the enhancement of community participation in maintaining the cleanliness and sustainability of the park, the provision of waste management facilities, and the implementation of a drainage system. These solutions are expected to help restore the park’s function as a healthy and safe green open space. The existing condition of the site is illustrated in Figure 4.



Figure 4. Existing Site Condition (Source : Author’s, 2025)

### 4.4. Accessibility Analysis

Ileng Street serves as the main access route for local residents. The road is approximately 5 meters wide and configured for two-way traffic, which supports optimal connectivity and

accessibility to the open space (Jannah, 2019). There are six entry points to the site, with the main entrance located in the northwest section.

Field observations revealed that the main access point is frequently used by motorcyclists to enter the park area, resulting in damage to the pedestrian pathways. Ironically, there are no bollards installed to prevent motorcycles from entering the site. Therefore, the installation of bollards is necessary to deter such behavior and to protect the integrity of the site.

Of the six available access points, only three are actively used by residents, while the other three remain largely unused. This indicates a level of inefficiency in the site's circulation pattern. To establish a more effective and organized accessibility structure, it is advisable to reduce the number of access points so that user movement becomes more concentrated and orderly. The existing entrances to the site are shown in Figure 5.



Figure 5. Existing Site Entrances

Source: Author, 2025

#### 4.5. Noise Analysis

The noise level in the site area primarily originates from vehicle activity along Ileng Street. However, due to the relatively low traffic volume and the considerable spacing between vehicles, the resulting noise level does not significantly disturb community activities in the park. In addition, the presence of Mahogany and Angsana trees contributes to reducing the

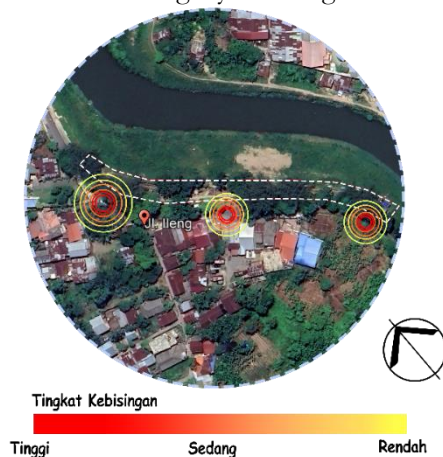


Figure 6. Noise Level

Source : Author', 2025

impact of noise generated by passing vehicles. Noise Level in Figure 6.

#### 4.6. Sun and Wind Orientation Analysis

The site's orientation, which aligns with the east–west axis, allows for even sunlight distribution across the area. However, the presence of existing trees on the eastern side with

dense foliage obstructs natural sunlight from entering the site. Therefore, maintenance of these trees is necessary to improve natural lighting within the park.

The prevailing winds come from the northeast, east, and south, with varying movement patterns depending on the time of day. From 07:00 to 09:00 WIB, the wind blows from the south; from 10:00 to 12:00 WIB, it comes from the east; and from 13:00 to 17:00 WIB, the wind direction shifts to the northeast.

The wind intensity is relatively mild, as the site is surrounded by dense vegetation that acts as a windbreak. When wind flows through the trees, it creates soundscapes, which are considered healthy sounds that contribute to a positive sensory experience for park users (Pijanowski et al., 2011). Sun Orientation and Wind Direction on the Site – Figure 7

**4.7. Vegetation Analysis**

The site's location along the banks of the Deli River provides favorable conditions for tree growth. A variety of dense vegetation is present, including Pucuk Merah (Red Shoot Tree), Pine Trees, Angsana Trees, and Mahogany Trees. The most dominant species are Mahogany and Angsana, which function as shade trees for both the road and the park site. Due to a lack of maintenance, wild plants have grown in various corners of the park. Community involvement is needed to clear these wild plants so they do not interfere with the growth of other vegetation.

Based on the site analysis presented above, it is essential to define a design theme for the revitalization process using the Islamic Garden Concept to guide the spatial intervention. The proposed theme, derived from existing issues on the site, is: “Creating a Safe, Educational, and Islamic Social Space.” This theme aims to revive the neighborhood park's function as a space for social and recreational activities aligned with Islamic values. The park is envisioned as a family-friendly public open space, safe from crime, and supportive of productive community activities.

After establishing the theme for the revitalization, it is necessary to analyze the user groups and their activities on-site to develop a spatial program that aligns with user needs. User Activities is in table 2.

**Table 2. User Activities**

No	User Group	Age Range	Activities
1	Children	5 – 12 years	<ul style="list-style-type: none"> <li>• Playing on slides</li> <li>• Swinging</li> <li>• Gathering together</li> </ul>
2	Teenagers	13 – 18 years	<ul style="list-style-type: none"> <li>• Gathering together</li> <li>• Sitting with a partner</li> </ul>
3	Adults	19 – 50 years	<ul style="list-style-type: none"> <li>• Selling snacks and meals</li> <li>• Engaging in walking activities</li> </ul>



**Figure 7. Sun orientation and wind direction on the site**

Source : Author's, 2025

Source : Author's, 2025

Based on field observations, children and teenagers are the dominant users of the park compared to adults. This is largely because they are not yet engaged in demanding daily activities, allowing them more freedom to utilize the space.

The analysis of user activity was obtained through direct observation conducted during visits to the park. The types of activities observed were very limited, primarily due to the lack of supporting facilities within the park. Therefore, the revitalization of Ileng Park is necessary to accommodate a wider range of user activities and support a greater number of visitors. The following table presents a proposed spatial layout to meet the needs of various user activities. Space Requirement Analysis is on table 3

**Table 3.** Space Requirement Analysis

No	Area Name	Space Requirements	Activities
1	Security Area	Lighting and CCTV	<ul style="list-style-type: none"> <li>Monitoring of deviant behavior</li> </ul>
2	Play and Education Area	<ul style="list-style-type: none"> <li>Play Facilities</li> <li>Mini Qur'anic Garden Area</li> <li>Allotment Garden</li> </ul>	<ul style="list-style-type: none"> <li>Playing</li> <li>Learning about plants mentioned in the Qur'an</li> <li>Planting vegetables under a rental system</li> </ul>
3	Sports and Therapy Area	<ul style="list-style-type: none"> <li>Sports facilities</li> <li>Jogging and walking paths</li> <li>Foot reflexology path</li> </ul>	<ul style="list-style-type: none"> <li>Physical exercise using equipment</li> <li>Walking on pebbled paths for foot reflexology</li> </ul>
4	Relaxation and Gathering Area	<ul style="list-style-type: none"> <li>Community seating area</li> <li>Personal seating area</li> </ul>	<ul style="list-style-type: none"> <li>Gathering</li> <li>Relaxing and resting</li> </ul>

Source : Author's, 2025

Subsequently, a spatial program is developed based on the activities still carried out by the surrounding community, with the aim of ensuring that the park remains safe from criminal acts and behavioral deviations. Several additional facilities are proposed to optimize the park's function in accordance with the Islamic Garden Concept. The proposed Spatial Program is presented in Table 4.

**Table 4.** Spatial Program Needs

No	Spatial Element	Capacity/Unit	Area/Person/Unit	Calculation Formula	Total Area
1	Children's Play Facilities	Spinning Plate = 4 persons	1m <sup>2</sup> / person	1×4 = 4m <sup>2</sup>	71m <sup>2</sup>
		Jungkat Jungkit = 4 persons	5m <sup>2</sup> / person	5×4 = 20m <sup>2</sup>	
		Seesaw = 10 persons	3m <sup>2</sup> / person	3×10 = 30m <sup>2</sup>	
		Swing = 5 persons	2m <sup>2</sup> / person	2×5 = 10m <sup>2</sup>	
		Swing 2 = 5 persons	1,4m <sup>2</sup> / person	1,4×5 = 7m <sup>2</sup>	
2	Mini Qur'anic Garden	10 persons	2m <sup>2</sup> / person	2×10	20m <sup>2</sup>
3	Outdoor Sports Facility	1 person/unit × 5 person	3,42 m <sup>2</sup> /unit	5×3,42	17 m <sup>2</sup>
4	Community Bench	10 person /unit	2,8 m <sup>2</sup> /person	2,8 × 10	28m <sup>2</sup>
5	Personal Garden Bench	8 units	1m <sup>2</sup> / person	1×8	8m <sup>2</sup>

6	Foot Reflexology Area	10 person /unit	1m <sup>2</sup> /unit	1×10	10m <sup>2</sup>
7	Allotment Garden	11 plots	3m <sup>2</sup> /unit	11×3	33m <sup>2</sup>
8	Focal Point	5m <sup>2</sup> /unit	2,5m/ person	2,5 × 5	5m <sup>2</sup>
9	Garden Lights	21 units	1,6m <sup>2</sup> /unit	1,6 × 21	34m <sup>2</sup>
Circulation space = 226m <sup>2</sup> × 25% = 56,5m <sup>2</sup>					
Total Area Required = 226m <sup>2</sup> + 56,5m <sup>2</sup> = 282,5m <sup>2</sup>					
Total Site Area – Total Requirement = 2550m <sup>2</sup> – 282,5 m <sup>2</sup> = 2267m <sup>2</sup>					

Source : Auhtor’s, 2025

Based on the results of the spatial program, the total area required for park facilities is 282.5 m<sup>2</sup>. When this is subtracted from the total site area, the remaining land area is 2,267 m<sup>2</sup>. According to the Regulation of the Minister of Agrarian Affairs and Spatial Planning / Head of the National Land Agency of the Republic of Indonesia No. 14 of 2022 concerning the provision and utilization of green open space, the required proportion for a neighborhood park is 70%–80% green coverage, with the remainder allocated for environmentally friendly non-green surfaces. If the remaining land area of 2,267 m<sup>2</sup> is multiplied by 80%, the required green coverage amounts to 1,813 m<sup>2</sup>.

### 5. Design Concept

The design concept serves as the foundation for site development. The primary concept guiding the design process is the Islamic Garden Concept. According to Jannah (2019), an Islamic Garden is defined as a landscape designed with a clear purpose, applying values rooted in Islamic teachings and Muslim cultural traditions. More specifically, an Islamic Garden is characterized as a garden that embodies Islamic principles and identity.

#### 5.1. Development Concept

##### 5.1.1. Conceptual Zoning

The conceptual zoning for the development of the Islamic Garden Concept consists of four main zones: the Welcome Zone, the Health Zone, the Education and Recreation Zone, and the Community Zone. These zones were formulated based on the community’s desire to have a space that can serve as a platform for positive and meaningful activities.

The Welcome Zone serves as an entry area for visitors, featuring directional plantings and flowering vegetation that provide aesthetic value. The Health Zone focuses on activities related to physical well-being and includes outdoor exercise equipment and a foot reflexology path designed for adult users.

Next is the Education and Recreation Zone, which centers on children's activities aimed at expanding their knowledge through the introduction of plants mentioned in the Qur’an. This zone includes play facilities and a mini Qur’anic garden. Lastly, the Community Zone emphasizes collective activities carried out with shared goals. This zone includes community benches and an allotment garden. The conceptual zoning is illustrated in Figure 8



Figure 8. The Concept of Zoning

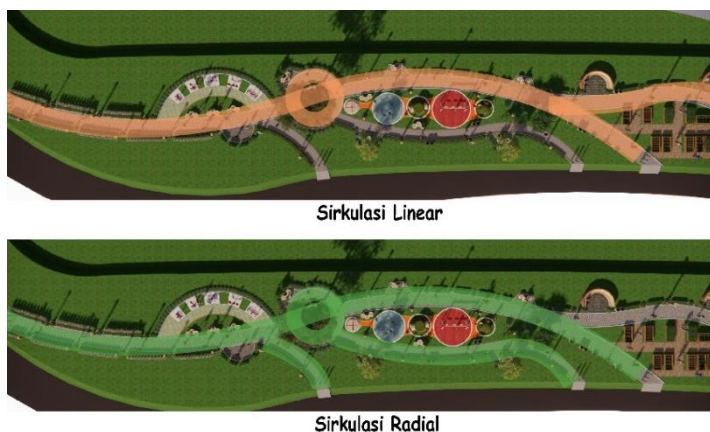
Source : Author’s, 2025

### 5.1.1. Circulation Concept

The circulation concept in landscape design is a crucial aspect that influences **user comfort, spatial structure,** and the **overall spatial experience.** In the design of Ileng Park, the circulation system combines both **linear and radial circulation patterns** (Ching, 2008), which complement each other to create well-directed movement throughout the site.

The **linear pattern** is applied as the **main pathway,** functioning as a connector between different spaces. It adopts a **curved form** to accommodate the site’s limited dimensions and to provide sufficient space for various user activities. This path also serves to **guide visual orientation** toward key landscape elements.

A **focal point** within the design consciously establishes a **radial circulation pattern,** which spreads out in multiple directions. This radial pattern supports user movement toward the designated functional zones within the park. The circulation concept is illustrated in **Figure 9**



**Figure 9. The Concepts of Circulation**

Source : Author’s, 2025

### 5.1.2. Vegetation Concept

In the vegetation concept, several existing plant species are preserved due to their continued functional value on the site—particularly trees with dense canopies that still provide effective shade.

The selection of vegetation in this concept refers to plant species mentioned in the Qur’an, harmonized with the functional needs and character of the site. Based on field observations, it was found that the site currently lacks flowering plants. Flowering plants are one of the defining elements of an Islamic Garden, serving not only an aesthetic purpose but also functioning as natural deodorizers, especially to neutralize unpleasant odors from the evaporating water of the Deli River during the daytime.

The types of existing and proposed vegetation are selected based on their mention in the Qur’an and their functional roles. The list of plant species is presented in Table 5.

**Tabel 5. Plant Species**

No	Plant Name	Function
1	Mahogany Tree ( <i>Swietenia mahagoni</i> ) (Eksisting) (QS. Ar – Rahman : 6)	Reduces air pollution by approximately 47%–69%(Dinas Lingkungan Hidup dan Kebersihan, 2023)
2	Angsana Tree ( <i>Pterocarpus indicus</i> ) (Eksisting) (QS. Ar – Rahman : 6)	Acts as a road and site shade tree (Yudha dkk., 2013)
3	Pucuk Merah Tree ( <i>Syzygium myrtifolium</i> ) (Eksisting) (QS. Ar – Rahman : 6)	Prevents erosion (Surya dkk., 2022)
4	Pohon Pinus (Eksisting) (QS. Ar – Rahman : 6)	Protects soil surfaces from rainwater runoff (Sallata, 2023)
5	Ketapang Kencana Tree ( <i>Terminalia catappa</i> ) (QS. Ar – Rahman : 6)	Maintains ecosystem balance (Argotani, 2024)
6	Pohon Bidara ( <i>Ziziphus mauritiana</i> ) (QS. Al – Waq’ah : 28)	Shade provider (Sudirman, 2025)

Ground Cover, Shrubs, and Vegetables		
1	Lavender ( <i>Lavandula</i> ) (QS. Ar – Rahman : 12)	Insect repellent (Lola Andreani dkk., 2022)
2	Shallot/Bawang Merah ( <i>Allium cepa</i> ) (QS. Al – Baqarah : 61)	Improves soil fertility
3	Ginger/Jahe ( <i>Zingiber officinale</i> ) (QS. Al – Insan : 17)	Improves soil fertility
4	Carrot/Wortel ( <i>Daucus carota</i> ) (QS. Abasa : 28)	Absorbs carbon dioxide (Editor, 2023)
5	Teh – Tehan ( <i>Theaceae</i> ) (QS. Ar – Rahman : 6)	Serves as visual guide path (Lestari, 2015)
6	Creeping Daisy Seruni rambat ( <i>Wedelia biflora</i> ) (QS. Ar – Rahman : 12)	Ground cover plant (Lestari, 2015)
7	Mustard Greens ( <i>Brassica juncea</i> ) (QS. Al – Anbiya : 47)	Supports biodiversity
8	Ruellia/Bunga Kencana ( <i>Ruellia</i> ) (QS. Ar – Rahman : 12)	Serves as aesthetic and directional planting
9	Taiwan Beauty /Bunga Taiwan Beauty ( <i>Cuphea lysopifolia</i> ) (QS. Ar – Rahman : 12)	Serves as aesthetic and directional planting

Sumber : Penulis, 2025

### 5.1.3. Waste Management Concept

As part of a sustainable and environmentally-based park revitalization effort (Nuraini, 2016), an organic waste management system using biopores is proposed. This system enhances groundwater absorption and enriches soil nutrients around the park.

A biopore hole is a vertical channel dug into the ground, typically 10–15 cm in diameter and 100 cm deep, filled with organic waste. The organic material decomposes naturally through microbial activity, producing compost that can be used as a natural fertilizer for plants. Organic waste such as dry leaves, small twigs, grass clippings, and food scraps left by visitors can be collected and placed into the biopores. Local residents can actively participate in contributing organic waste through community-based activities.

The implementation of the biopore-based waste management concept is expected to:

- Reduce organic waste volume,
- Prevent waste accumulation,
- Improve groundwater infiltration,
- Enhance soil quality (Yohana et al., 2017), and at the same time reflect the principles of *Hablumminallah* (relationship with God), *Hablumminannas* (relationship with others), and *Hablumminal'alam* (relationship with nature). The Waste Management Concept is illustrated in Figure 10.



Figure 10 The Waste Management Concept  
Source : Author's, 2025

## 6. Implementation of the Islamic Garden Concept

### 6.1. Welcome Zone

Lighting elements at night are essential for any park. Lighting not only provides illumination, but also enhances aesthetic value and contributes to a sense of safety for visitors (Jannah, 2019), especially with the addition of CCTV surveillance systems

In the Islamic Garden Concept, lighting is designed using garden lamps adorned with Arabesque ornaments, which are a distinctive form of artistic expression in Islamic culture. Arabesque ornamentation features continuous, infinite patterns (Kamal et al., 2020). The addition of such decorative elements to the lamp design will create a patterned illumination effect. The Welcome Zone is illustrated in Figure 11.

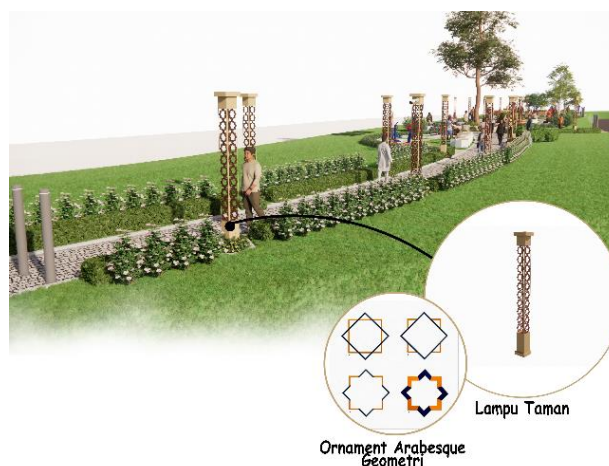


Figure 11. The Welcome Zona

Source : Author's, 2025

### 6.2. Health Zone

Within this concept, a sports area is provided to support physical activities. The inclusion of this facility is based on the fact that residents of Neighborhood Unit II regularly engage in sports activities on weekends at a park in Rengas Pulau, which is located at a considerable



Figure 12. The Health Zone (Exercise and Foot Reflexology)

Source : Author's, 2025

distance. Therefore, the addition of sports facilities within the park is expected to facilitate easier access for the community to engage in exercise and recreational activities. The Health Zone is illustrated in Figure 12.

### 6.3. Focal Point

The Chahar Bagh pattern has existed since before the arrival of Islam in the Persian region (Jannah, 2019). *Chahar Bagh*, which translates to "four gardens," is the foundational layout in classical Islamic garden design. It reflects a balance between spatial order, physical comfort, and serves as a key spatial divider within garden landscapes.

The focal point emerges through the division of space, designed to help park users easily navigate the area while offering a distinctive visual and spatial attraction within the green open space. In this concept, the focal point applies Arabesque patterns as a form of Islamic art expressed through geometric forms. The Focal Point is illustrated in Figure 13



**Figure 13. The Focal Point**

Source : Author's, 2025

#### 6.4. Education and Recreation Zone

The education zone is designed by planting species of vegetation mentioned in the Qur'an, with the aim of providing new knowledge about plants referenced in the Holy Scripture.

The recreation zone includes play facilities. Bright colors are applied in this area to create a joyful and welcoming atmosphere. The use of vibrant colors serves as an attraction for children to engage in play. The spatial layout of the children's play area is intended to create a sense of openness, allowing freedom of movement. Play Facilities and Qur'anic Garden are illustrated in Figure 14.



**Figure 14. Play Facilities and Qur'anic Garden**

Source : Author's, 2025

#### 6.4. Community Zone

The Community Zone serves as a space to support social interaction and collective activities. Within the Islamic Garden Concept, this zone functions as a space for silaturahmi (social bonding), deliberation, and the strengthening of community ties.

Community seating facilities are placed in shaded and easily accessible areas. The benches are made of wooden materials to ensure they do not negatively impact the river ecosystem

The Allotment Garden refers to a small plot of land designated for gardening purposes. This garden can be managed by anyone, particularly residents of Neighborhood Unit II. However, to utilize the garden, residents are required to pay a rental fee for the land. The rental income can be allocated toward the maintenance and management of the park environment. In addition, the garden yields can support community food self-sufficiency and may also hold economic value through local sales. The Allotment Garden and Community Bench are illustrated in Figure 15.



Figure 15. The Allotment Garden and Community Bench

Source : Author's, 2025

## 6. Conclusion and Recommendations

### Conclusion:

Revitalization efforts are urgently needed to address the problems affecting the park in terms of functionality, physical condition, and user engagement. The application of the Islamic Garden Concept offers significant potential to transform the park into a safe, comfortable, educational green open space that aligns with Islamic values. Community participation in the management of the park is essential to ensure the sustainability and quality of the green open space.

### Recommendations:

The success of the revitalization process must involve active community participation, particularly in the planning and management of park facilities. To maintain cleanliness and environmental quality, it is recommended to establish educational programs for the community on the importance of cleanliness and the long-term sustainability of the park. Furthermore, the provision of adequate park facilities is a crucial component of the revitalization process to enhance community use and engagement with the space.

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