The successful key management of implementation the sustainable city park construction in Jakarta

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Abstract Development of City Parks is one of the targets of the Green City Action Plan in Indonesia to realize the strategy towards 30% Green Open Space. City Parks are also needed by the community for outdoor activities without paying. Its existence can improve the quality of life and the environment. Currently the City Park in Jakarta has not fulfilled this function optimally (less quality). This study aims to reveal the management of the implementation of the City Park development project in Jakarta and find out the root causes of the implementation failure. This study uses a qualitative method with a case study approach, supported by observations and structured interviews. The study results show that the root cause is the unavailability of definitions and targets that refer to the application of sustainable principles in green planning and design; there is no clear regulation on the application of sustainable green open spaces and the lack of optimal involvement of stakeholders in green communities as attributes of the Green City Action Plan. It cause the pre-construction stage did not go well. City Park becomes ineligible. This is the basis for corrective measures for the successful management of the City Park development project.

Keywords: City Park; construction projects; management of the implementation project.

DOI:https://doi.org/xxxxxx

Introduction

The introduction The City Park is a public green open space that is very much needed by an urban environment and its community. As a public good, City Parks are used for the public interest [1], free of charge. City Parks provide services for improving the quality of the environment and public health and welfare [2]. City parks can also improve environmental quality and public health [3]. As an urban area, Jakarta also requires the existence of a City Park. However, the existence of City Parks has not played a role according to the functions listed in the Regulation of the Minister of Public Works No. 5/PRT/M/2008, namely ecological, socio-cultural, economic, aesthetic, and mitigation functions [4]. The city park has not fully accommodated the community’s need for outdoor activities. The number of damaged facilities, such as damaged play facilities and lack of shelter at Kalijodo Park [5], damage to pedestrian paths and vandalism in several parks, and the discovery of condom waste as an abuse of parks as a dirty place [6], are examples of the cause. In the end, they were causing people to be lazy to visit the park. The amount of damage that occurred, probably caused by the wrong materials selection. Vandalism, and park abuse, are caused by a lack of care and a sense of belonging from the surrounding community. This situation causes the City Park to be unsustainable.

The problem of this research is what causes the City Park to be unsustainable. This research will examine the management of the implementation of a sustainable City Park construction project in Jakarta to find out the causes of the current state of the City Park. The goal is to find the root cause that must be improved/improved for the key to the successful implementation of the City Park construction project, which makes the City Park a Sustainable City.

The implementation of the City Park construction project in Jakarta refers to the Regulation of the Minister of Public Works No. 5/PRT/M/2008 concerning Guidelines for Provision and Utilization of Urban Green Open Space. According to the regulation, the stages of organizing a city park include planning, land acquisition, engineering design, implementation of green open space development, utilization, and maintenance. In its implementation, it also involves stakeholders, including the community and developers. The Ministry of Public Works also supports it through the Green City Development Program launched in 2011. A green city is an environmentally friendly city with urban planning and design referring to the principles of sustainable development through the effective and efficient use of water and energy resources, waste reduction, system implementation, Integrated transportation, environmental health insurance, the synergies of natural and artificial environments [7]. This program states that the focus of the Green City Action Plan consists of Green Planning and Design, Green Open Space, and Green Community. It is hoped that the
management of the City Park construction project will also focus on these three things. The implementation procedure often creates a gap between the City Park design and the available budget. In the end, it is necessary to simplify the design. As a result, the essence of the design is not achieved. Furthermore, it impacts the user’s lack of concern for the existence of city parks. This threatens the sustainability of the City Park. In 2019, the Jakarta City Parks and Forest Service issued Guidelines for the Construction and Development of Green Open Spaces [4], containing design criteria for green open spaces, including city parks. With this guideline, it is hoped that city parks can become more qualified, functional, and sustainable. However, this requires further elaboration supported by effective management that is highly dependent on government [8].

<table>
<thead>
<tr>
<th>The Research Title</th>
<th>The Research Result</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Synergistic Model of Quality Service Design of Green Open Space Asset Through QFD</td>
<td>Quality of public green open space services in accordance with community expectations, including city identity, improving city climate, preventing air pollution, preserving living things, limited production, reducing mental stress (stress), waste management, groundwater absorption, and the beauty of the environment.</td>
<td>Sustainable Competitive Advantage, SCA, 2: 1 [9]</td>
</tr>
<tr>
<td>A Set of Sustainable Urban Landscape Indicators and Parameters to Evaluate Urban Green Open Space in Bandung City</td>
<td>Sustainable urban landscape indicators and parameters related to ecological indicators, health indicators, economic indicators, and socio-cultural indicators are needed to evaluate the existence of green open spaces.</td>
<td>IOP Conf. Series: Earth and Environmental Science, 179 [2]</td>
</tr>
<tr>
<td>Sustainable Development and Sustainability Landscape Approach as a Practical Interpretation of Principles and Implementation Concepts</td>
<td>The combination of Sustainable Development (SD) and sustainable landscape approaches as a practice of interpretation in principle and covering (1) areas that provide services and desired values according to management requirements and challenges, (2) stakeholder collaboration, (3) understanding and commitment to sustainability, (4) development of local knowledge, and (5) production of integrated knowledge</td>
<td>Journal of Landscape Ecology, 4: 3 (10)</td>
</tr>
<tr>
<td>Sustainable Design on Urban Landscape</td>
<td>Management practices that translate the concept of sustainability into action plans for the availability of urban green spaces by considering ecological, economic, socio-cultural factors and planning that start in the area urban.</td>
<td>International Malaysia-Indonesia-Thailand, Symposium on Innovation and Creativity (iMIT-SIC), 2 [11]</td>
</tr>
</tbody>
</table>

The discussions that have been carried out by previous studies (Table 1), namely; 1) measuring the success of sustainable green open spaces; 2) the elaboration of sustainable concepts in the management of green open spaces; 3) stakeholder involvement in sustainable green open space management. The visible gap is that no research discusses the causes of unsustainable City Parks from the management point of view of implementing the City Park construction project. The novelty of this research is to provide the root cause in the management of the City Park construction project, which causes the City Park to be unsustainable.

**Materials and methods**

**Theoretical Review**

A project is a set of activities that require the allocation of specific resources and are interconnected within a limited period to achieve specific goals according to the agreement results. Project management combines knowledge, skills, tools, and techniques applied to management functions, namely planning, organizing, directing, and controlling resources, time, and costs in project activities to achieve the agreed objectives. Each project has a specific pattern as the project’s main characteristic, which is known as the Project life cycle. This cycle is a grouping of project activities into project activity stages, starting from the initial idea until the project is completed so that reasonable control can be carried out [12]. All of these things must be described in stages in the project cycle, which is grouped into four stages: The Conception stage, Planning stage, Execution stage, and Operation stage. The Conception/Initiation Stage is a feasibility study stage carried out to find alternative solutions and the number of costs by considering what is needed when it is carried out and who is involved. The goal is to provide an overview of stakeholders’ expectations in the scope and objectives project [12]. There are two essential documents. The Project Charter, contains an agreement from the stakeholders that underlies the project needs and the Goal Project [13] and Stakeholder List, contains the identification of the stakeholders involved in the project [14] to get the project’s character. At this stage, it is necessary to have clear definitions and targets to understand the framework and scope for the planning and development stages, which are require management actions, project procedures, stakeholder competencies, project internals, and project externals [15] at the next stage.
The planning stage contains the Project Scope and description of activities to complete a project in a Project Management Plan. Its activities include the preparation of the Term of Reference (TOR) as a guide for the success of a design [16]; details of work units, work sequences, resource estimates, duration estimates, and finalization of the project schedule for determining the estimated cost of each activity; preparation of quality management plans with compliance checks with General and Technical Specifications [12]. Given that construction activities have a significant impact on the three pillars of sustainability, namely environmental, economic, and socio-cultural [17], urban park construction projects require design guidelines and operational principles that designers understand, can be applied in the design process and can be implemented in the context of the site at the level of each scale [18], especially regarding the elaboration of the concept of sustainability [10, 11]. In addition, it is also necessary to pay attention to natural factors, social factors, design considerations, and maintenance [19]. Maintenance costs are continuous, causing them to be considered. Design considerations, selection of landscape materials, and community involvement are required from the planning stage [20, 21]. This effort is made to provide acceptable solutions and instil a strong sense of ownership in the community [22, 23].

The project execution/implementation stage is the main task of controlling the schedule, budget, and quality control. This means that the project implementation can run and be completed according to the planning document. The success of city parks in playing ecological functions, economic functions, socio-cultural functions, aesthetic functions, and mitigation functions [4] is a manifestation of the achievement of the quality of City Parks. Furthermore, the last is the operation stage, where project operational activities and product maintenance are project results.

In Act No. 22 of 2020 concerning Implementing Regulations of Law no. 2 of 2017 concerning Construction Services, the implementation service business manages a series of activities to realize a strong, reliable, highly competitive, quality, and sustainable construction building. Construction work is the whole or part of activities, including the construction, operation, maintenance, demolition, and rebuilding of a building. Based on this understanding, if its implementation is related to a construction project, then it is understood that the implementation of a City Park construction project is an effort to manage a series of activities, including development/implementation (including planning and utilization); operation; maintenance; demolition; and the redevelopment of City Parks, with time limits to produce unique products, services, and outcomes. Thus, the City Park construction project management manages a series of processes, consisting of planning, organizing, mobilizing/ implementing, and supervising each stage of the City Park construction project implementation, including the development/stage planning and implementation. The City Parks utilization; operation; maintenance; demolition; and rebuilding a City Park, using science and art to achieve the stated goals.

**Figure 1.** The integration of the elaboration of green planning and design, green open spaces, and green community in the City Park construction project management.

The implementation of the City Park construction project is included in one of the targets of the Green City Action Plan, which focuses on three attributes of the 8 Green City attributes. The three attributes are green planning and design, green open space, and green community [24]. Management of the implementation of the City Park construction project should consider the integration of these three attributes (Figure 1). Based on the attributes of green planning and design, the planning and design of City Parks are
expected to be adapted to the needs of a green city. Based on the attributes of green open space, the realization of City Parks in quantity and quality can improve environmental quality and public health in green cities. Moreover, based on the attributes of the green community, the activeness, concern, and sensitivity of community participation can be increased in the development of other green city attributes. The integration of the three attributes of a green city in the management of the implementation of the City Park construction project is expected to produce a quality and sustainable City Park.

**Methodology**

The research uses qualitative research methods to holistically understand the phenomena experienced by research subjects [25]. This study will examine the management of urban park construction project management in Jakarta with a case study of city parks located in five administrative city areas of Jakarta. Then observations were made in case studies to examine City Parks as a form of construction project products. Observations are carried out with a checklist that refers to the provisions of the function that City Parks must play in the Regulation of the Minister of Public Works no. 5/PRT/M in 2008 and the design criteria in the 2019 Green Open Space Development and Development Guidelines [4]. The study on the management of the City Park construction project was carried out through structured interviews with a team of experts who had been involved in the City Park construction project, which became the case study. The expert team consists of one representative of consultant experts and one representative of a contractor with experience in the field of landscape architecture for more than ten years with three City Park construction projects that have been handled; as well as one representative from an academician with a doctoral education with a minimum of 10 years experience in the field. Interviews were conducted to examine the process of implementing construction projects in the field and the involvement of stakeholders in the process by referring to the process contained in the Regulation of the Minister of Public Works No. 5/PRT/M in 2008 and the results of the literature review.

**Case Study**

For the sample that will be used as a case study, it is determined by purposive sampling, based on the criteria that the city park has an area of 0.5 – 10 Ha; have easy accessibility; managed by the government, and represents each administrative city area in the city of Jakarta. Based on these criteria, five city parks were determined to represent each administrative city area in Jakarta with the largest or second-largest area. Parks can be seen in Table 2.

<table>
<thead>
<tr>
<th>No</th>
<th>Name of City Park</th>
<th>Location of City Park</th>
<th>Size (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Taman Piknik</td>
<td>Jakarta Timur</td>
<td>10.078</td>
</tr>
<tr>
<td>2.</td>
<td>Taman Situ Lembang</td>
<td>Jakarta Pusat</td>
<td>14.700</td>
</tr>
<tr>
<td>3.</td>
<td>Taman Langsat</td>
<td>Jakarta Selatan</td>
<td>36.000</td>
</tr>
<tr>
<td>4.</td>
<td>Taman Kalijodo</td>
<td>Jakarta Utara</td>
<td>36.878</td>
</tr>
<tr>
<td>5.</td>
<td>Taman Wijaya Kusuma</td>
<td>Jakarta Barat</td>
<td>13.826</td>
</tr>
</tbody>
</table>

**Techniques of Data Collection**

The Data collection is carried out through observation to see the quality of City Parks, through observations of user comfort, and the achievement of City Park functions which refer to the function of green open spaces in the Regulation of the Minister of Public Works no. 5/PRT/M in 2008. Observations are complemented by a checklist containing factors, variables, and indicators related to the quality factors of construction project results (Table 3), which was compiled based on the provisions of the facilities of a City Park Guidelines for the Construction and Development of Green Open Spaces.

<table>
<thead>
<tr>
<th>Factor (F)</th>
<th>Variable (V)</th>
<th>Indicator (I)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of City Park Construction Project Results</td>
<td>V.1: User Convenience of City Parks</td>
<td>1.1: Technical specifications related to resilience/ Strength and safety of landscaping materials and garden furniture</td>
<td>[15, 4]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.2: Design results reflect safety and security of work products</td>
<td>[15]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3: Comfortable microclimate for activities</td>
<td>[9, 4, 24]</td>
</tr>
<tr>
<td></td>
<td>V.2: Achievement of Quality (City Park)</td>
<td>2.1: Proportion of area/land cover</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.2: Waste management and utilization organic</td>
<td></td>
</tr>
</tbody>
</table>
For data related to the management process for the implementation of the City Park construction project, it was obtained through structured interviews with a list of questions referring to the Regulation of the Minister of Public Works no. 5/PRT/M in 2008. These three attributes are the focus of the Green City Action Plan and the literature review results (Figure 2). Interviews were conducted to see to what extent the activities/steps and planning documents that must be available in the management process of implementing the City Park construction project have been carried out and prepared properly. The interview material is described in Figure 2. Interviews were conducted on a team of 5 experts. The expert team includes two consultant expert representatives and two contractor representatives who have more than ten years of experience in landscape architecture and have worked on at least three urban park construction projects; and one academic representative with doctoral education and at least ten years of experience in their field.

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Data Analysis

The analysis of analytical descriptive data on the results of observations conducted on the quality of the Park City is the result of the product of a construction project City Park. Data analysis is also carried out through three activities that coincide: data reduction, data presentation, and concluding/verification. The data analysis of the interviews conducted in this study includes a list of interview results, data reduction, analysis, data interpretation, and triangulation. From the results of the data analysis, conclusions are drawn. Data reduction is made to sharpen, classify, direct, discard unnecessary, and organize data to conclude. Then triangulation is carried out to check the validity of the data by utilizing something else in comparing the results of interviews with the object of research [25]. Triangulation was carried out in this study using different techniques, namely interviews, observations, and documents [26]. In this study, triangulation was carried out to identify the quality condition of the City Park construction project which was then linked to the management process of the City Park construction project implementation and stakeholder
involvement that had been carried out in Jakarta. This identification is carried out to find the root cause of the unsuccessful management of the implementation.

Results and discussion

Observation Results from the City Park Case Study

Based on the observations, it can be seen that as a product of construction project management, the existence of City Parks located throughout the administrative city of Jakarta has attempted to fulfill the function of City Parks as stated in the Minister of Public Works Regulation no. 05/PRT/M/2008 concerning Provision and Utilization of Green Open Space. Based on the results of the check-list used at the time of observation, the results of the observations will be grouped based on the availability and presence of facilities that facilitate community needs, area dominance (related to the proportion of land cover), the existence of facilities and infrastructure (the presence of pedestrian paths, garden furniture/elements, playground equipment), visitor-friendly facilities, and drainage networks), the availability of environmentally friendly facilities, as well as considerations for user safety and comfort. Even though in reality, the City Park, which is the case study, has not been able to fulfill it optimally. The results of the observation are shown in Table 4.

Table 4. The Observation Results Explanation (Research Document Authors, 2021)

<table>
<thead>
<tr>
<th>No</th>
<th>Name and Location</th>
<th>The Visual Conditions of the City Park</th>
<th>Observation Result</th>
</tr>
</thead>
</table>
| 1. | Taman Piknik East Jakarta | ![Image 1](image1.jpg) ![Image 2](image2.jpg) ![Image 3](image3.jpg) ![Image 4](image4.jpg) ![Image 5](image5.jpg) | ➢ Facilities are incomplete (only for interaction) and damaged (Ft. 2, 4, & 5)  
➤ Facilities and Infrastructure: damaged pedestrian paths, lack of security in the drainage network (Ft. 3), and not friendly to visitors  
➤ Area dominance: green area > 60%, but inundated when it rains and land available for mitigation (Ft. 2 & 4)  
➤ There are no environmentally friendly facilities (waste processing and rainwater harvesting); there is a water storage area but it is not functioning optimally (Ft. 1); and less attention to user safety and comfort |
| 2. | Taman Situ Lembang Centre Jakarta | ![Image 1](image1.jpg) ![Image 2](image2.jpg) ![Image 3](image3.jpg) ![Image 4](image4.jpg) ![Image 5](image5.jpg) | ➢ The facilities are quite complete, preferably for the fishing community (pretty beautiful but getting old) (Ft. 5)  
➤ Facilities and Infrastructure: many garden furniture is damaged; poorly maintained plants; and not visitor friendly (Ft. 1, 2, & 6); there is plant name signage (Ft. 3); however no land available for mitigation (Ft. 4 & 5)  
➤ Dominate area: dominated by poorly maintained lakes  
➤ There are no environmentally friendly facilities (waste processing and rainwater harvesting) and less attention to user safety and comfort and not visitor friendly |
| 3. | Taman Langsat South Jakarta | ![Image 1](image1.jpg) ![Image 2](image2.jpg) ![Image 3](image3.jpg) ![Image 4](image4.jpg) ![Image 5](image5.jpg) | ➢ Facilities are quite complete but look dingy (abandoned) (Ft. 1, 3, & 4); scheduled park will be repaired  
➤ Facilities and Infrastructure: Pedestrian paths, drainage network and damaged garden furniture (Ft. 2, 4, 5 & 6); not visitor friendly  
➤ Area dominance: green area > 60%, but poorly maintained, looks dark, and available land for mitigation (Ft. 1, 3, & 4)  
➤ There are no environmentally friendly facilities (waste processing and rainwater harvesting), and less attention to user safety and comfort. |
| 4. | Taman Kalijodo North Jakarta | ![Image 1](image1.jpg) ![Image 2](image2.jpg) ![Image 3](image3.jpg) ![Image 4](image4.jpg) ![Image 5](image5.jpg) | ➢ Park facilities have been converted into “Pujasera” (snack gardens) (Ft. 3 & 4)  
➤ Facilities and Infrastructure: skatepark facilities need improvement (< 4 years old) (Ft. 2); non-permanent playground equipment (Ft. 1); and not visitor friendly  
➤ Area dominance: green area < 60%, park is dominated by pavement (Ft. 3, 5, & 6), but there is not enough land area for mitigation  
➤ There are no environmentally friendly facilities (waste processing and rainwater harvesting) and no safety in the park area bordering the inspection road and river bank (Ft. 3) |
The Visual Conditions of the City Park

<table>
<thead>
<tr>
<th>No</th>
<th>Name and Location</th>
<th>Observation Result</th>
</tr>
</thead>
</table>
| 5. | Taman Wijaya Kusuma West Jakarta | ➢ Complete facilities, but neglected (Fl. 2, 3, 4, & 5)  
➢ Facilities and infrastructure: Pedestrian paths, sports fields, and playground equipment are damaged (Fl. 2, 3, 4, & 5) and are not friendly to visitors  
➢ Area dominance: green area > 60%, poorly maintained and prone to flooding (puddles when it rains) and available land for mitigation (Fl.2 & 3)  
➢ There are no environmentally friendly facilities (waste processing and rainwater harvesting) and no safety in the riverside area (Fl. 1) |

The summary of the results of these observations is shown in Table 5. Based on this summary, it can be seen that almost 100% of City Parks provide a place for people to do activities. However, the existence of facilities, facilities, and infrastructure is still not fully anticipated the needs of the community and many damaged conditions. Parks also pay less attention to user safety and comfort.

<table>
<thead>
<tr>
<th>Variable (V)</th>
<th>Indicator (I)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>V.1: User Convenience of City Parks</td>
<td>1.1: Convenience: The technical specifications related to the resistance/strength and material security landscape and garden furniture</td>
<td>100% of study cases do not meet these specifications</td>
</tr>
<tr>
<td></td>
<td>1.2: The design results reflect the safety and security of work products</td>
<td>100% of the case studies do not meet these specifications</td>
</tr>
<tr>
<td></td>
<td>1.3: A comfortable microclimate for activities</td>
<td>80% of the case studies have provided a fairly comfortable microclimate</td>
</tr>
<tr>
<td>V.2: Achievement of Quality (City Park Function)</td>
<td>2.1: Proportion of area/land cover</td>
<td>80% of case studies have 60% green land cover</td>
</tr>
<tr>
<td></td>
<td>2.2: Processing and utilization of organic waste</td>
<td>100% of case studies do not have facilities and systems for processing and utilizing organic waste</td>
</tr>
<tr>
<td></td>
<td>2.3: Harvesting water rain and its utilization</td>
<td>100% of the case studies do not yet have the facilities and systems for processing and utilization of rainwater harvesting</td>
</tr>
<tr>
<td></td>
<td>2.4: Use of local landscape materials</td>
<td>0% of case studies have not used specific local materials (garden materials seem uniform)</td>
</tr>
<tr>
<td></td>
<td>2.5: Multi-functional areas</td>
<td>100% of case studies have multi-functional areas</td>
</tr>
<tr>
<td></td>
<td>2.6: Areas for increasing community productivity</td>
<td>0% case studies do not yet have areas for increasing community productivity</td>
</tr>
<tr>
<td></td>
<td>2.7: Containers for the needs of community activities</td>
<td>100% of the case studies have facilities for community activities but have not optimally facilitated community needs, and there are many facilities and supporting facilities and infrastructure that are damaged</td>
</tr>
<tr>
<td></td>
<td>2.8: Educational facilities</td>
<td>Case studies have simple educational facilities (plant nameplate)</td>
</tr>
<tr>
<td></td>
<td>2.9: Regional identity</td>
<td>0% case study does not yet have regional identity</td>
</tr>
<tr>
<td></td>
<td>2.10: Visitor friendly</td>
<td>The case study does not yet have optimal visitor-friendly facilities and infrastructure</td>
</tr>
<tr>
<td></td>
<td>2.11: Area with supporting facilities and infrastructure for evacuation</td>
<td>100% case study already has an area that can be used for evacuation but does not yet have the necessary infrastructure</td>
</tr>
<tr>
<td></td>
<td>2.12: Maintenance results</td>
<td>100% case study does not yet have optimal maintenance quality (Maintenance is only carried out in certain areas)</td>
</tr>
</tbody>
</table>

The interview Results

The interview Results that have been reduced are grouped and described in Table 6, regarding the process of implementing construction projects, stakeholder involvement, and quality/results of construction projects referring to the Regulation of the Minister of Public Works no. 05/PRT/M/2008 concerning Guidelines for Provision and Utilization of Green Open Space. For the quality-related results of the City Park construction project, the description is also carried out by referring to the 2019 DKI Jakarta Green Open Space Construction and Development Guidebook.
Table 6. Grouping of Interview Results (Research Document Authors, 2021)

<table>
<thead>
<tr>
<th>No</th>
<th>Group</th>
<th>Interview Results Data</th>
</tr>
</thead>
</table>
| 1  | Conception stage             | ➢ There are no design directives (definitions and targets) regarding the determination of the renovation/development of City Parks. Renovation/construction is determined based on a field survey conducted by the personnel of the Sub Department (Sudin) or the Parks and Forest City.  
➢ The results of the survey are discussed in the internal work team of the Sub-Department or Service as the basis for proposing the renovation/development of City Parks in the Regional Revenue and Expenditure Budget Plan (RAPBD), which is then finalized in the Regional Revenue and Expenditure Budget (APBD). |
| 2  | Planning stage               | ➢ Preparation of Terms of Reference (TOR) of a general nature (without guidance related to the construction of Park City).  
➢ Difficult to determine the Budget Plan (RAB) consultant services because there is no apparent reference.  
➢ Selection of consultant services less transparent.  
➢ Not yet available guidelines and standards for the design refers to the focus of the attributes of the Green City Action Plan (green planning and design; green open space and green community) and detailed (applicative).  
➢ Design, such as guidelines, with the output concept design, design Development, and DED to tender did not have an apparent reference basis, primarily related to supporting the design criteria and standards focus attribute refers to the application of the Green City Action Plan has not been detailed.  
➢ Preparation of TOR construction (technical specifications are too general, and the unavailability of safe work procedures and effective).  
➢ Less transparent construction auctions. |
| 3  | Implementation stage         | ➢ There are no complete documents related to monitoring the implementation of the project on schedule and compliance with technical specifications Parks.  
➢ Operations are City Park not supported by optimal maintenance quality. |
| 4  | Involvement stakeholder      | ➢ The involvement of stakeholders, especially the public, is only at the stage of the FGD with the consultant.  
➢ The involvement of stakeholders, other is the appointment of local government (governor) or based on the initiative of the CSR.  
➢ Government and other stakeholder commitments are still lacking on the application of sustainability principles.  
➢ The utilization of partnership/collaboration between stakeholders has not been optimal, related to the management of the implementation of the City Park construction project. |
| 5  | Quality city park (results of construction projects) | ➢ State Parks can not function effectively, both from the aspect of ecology, economy, social, culture, beauty, and mitigation.  
➢ The quality of maintenance is still low, causing the renovation interval is not long (the sustainability of the City Park is lacking). |

Based on the results of the interviews, it can be seen that the process of implementing the City Park construction project and stakeholder involvement has been carried out. As a result, City Parks have not been able to function optimally and are not sustainable. Observations also show this in Tables 4, 5, and 6.

**Triangulation results from observations, interviews, and regulatory documents**

Based on the interviews, the management process for implementing the City Park construction project has also been carried out starting from the planning, planning, and implementation preparation stages as stated in the Minister of Public Works Regulation No. 5/PRT/M/2008. Triangulation results from the document of the Minister of Public Works Regulation No. 5/PRT/M/2008 and three attributes from the Green City Action Plan with the results of the interviews can be seen in Table 7.
Table 7. Grouping Results of Triangulation of Provisions in Regulations and Results of Interviews with Management of City Park Construction Project Implementation and Community Involvement (Research Document Authors, 2021)

<table>
<thead>
<tr>
<th>Group</th>
<th>Interview Results Data</th>
</tr>
</thead>
</table>
| Minister of Public Works Regulation No. 5/PRT/M/2008 on Implementation of Green Open Space.                                      | ➢ the provision and utilization of public green open space carried out by the government is adjusted to the provisions stipulated by the government;  
➢ the stages of providing and utilizing public green open space include planning, land acquisition, engineering design, implementation of green open space development, and utilization and maintenance  
➢ The stakeholder engagement (public, private, institutions and legal entities or individuals) in the provision and utilization of green open space both at the stage of planning, utilization, and control. |
| Conception and Planning Phase (Phase-Construction)                    | ➢ There are no directions design (definition and target) are evident in the determination of State Parks will be renovated/constructed  
➢ There is no basis for the budget-setting design for a precise cost estimate, so the availability of funds for the renovation inadequate  
➢ Preparation of TOR was too general in  
➢ Design criteria and standards that support the implementation of green planning and design; green open space and green community is the focus of the attributes of the Green City Action Plan has not been detailed  
➢ No specification describes the landscape material adaptable according to the needs and environmental design  
➢ Not available yet safe work procedures and effective  
➢ There is no accurate cost estimate |
| Implementation Phase                                                 | ➢ Yet completed accreditation forms for quality control (conformity results with the design and specification as well as the suitability of the implementation process and working procedures)  
➢ Monitoring has not been carried out for controlling project implementation so that it is in accordance with the prepared plan |
| Stakeholder engagement                                               | ➢ Lack of commitment and a clear governance framework  
➢ Lack of collaboration/partnerships are linked to the management of construction projects State Parks  
➢ There are no regulations related to governance that involve stakeholders that are quite clear |

The triangulation results (Minister of Public Works Regulation No. 5/PRT/M/2008, three attributes of a Green City [24] and interview results) based on Table 7 show that the management of the City Park construction project has not been carried out optimally as seen from:

1. Pre-construction stages (preparation for planning and planning) that have not been managed optimally
2. The document that underlies the City Park design is still too general and does not refer to the focus attributes of the Green City Action Plan
3. Design guidelines and standards support the implementation of green planning and design; green open space and green community as the focus attributes of the Green City Action Plan are not yet available in detail
4. Cost estimate that does not have a clear basis
5. Stakeholder involvement is not optimal.

Based on the interviews, the management process for implementing the City Park construction project has been following the Minister of Public Works Regulation No. 05/PRT/M/2008, starting from the preparation stage of planning, planning, and implementation. However, the management/management has not been carried out properly, so that the completeness of the required documents related to project implementation cannot be appropriately prepared. Stakeholder involvement has also been carried out, but not optimally. These two things ultimately affect the productivity of the City Park construction project. Triangulation results from the document of the Minister of Public Works Regulation No. 05/PRT/M/2008, the results of observations and interviews can be seen in Table 8.
Table 8. Grouping Results of Triangulation of Provisions in Regulations, Results of Observations and Interview Results on the Quality of City Park Construction Projects (Research Document Authors, 2021)

<table>
<thead>
<tr>
<th>Regulations</th>
<th>Observation Results</th>
<th>Interview Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minister of Public Works Regulation No. 5/PRT/M/2008 on Implementation of Green Open Space; the 2019 DKI Jakarta Green Open Space Construction and Development Guidebook:</td>
<td>Ecological function: ➢ Ecological function (the creation of a comfortable micro-climate, the application of the system reduces, reuse, and recycle for organic waste, the rainwater harvesting system, the absorption of pollution) ➢ The economic function (increasing the value of economic benefits of Parks) ➢ The social function of culture (as a forum for interaction and activism of local communities and provide local identity) ➢ Aesthetic function (increase the beauty of the surroundings) ➢ Mitigation function (providing the evacuation areas and related mitigation frequent disasters in the region)</td>
<td>Ecological function: There are case studies that have environmentally friendly land use facilities and systems, but they are not functioning</td>
</tr>
<tr>
<td></td>
<td>Economic function</td>
<td>Socio-cultural functions</td>
</tr>
<tr>
<td></td>
<td>There are no case studies that use parks to improve the welfare of local communities</td>
<td>➢ The case studies are less expensive historical values / local value, so it does not reflect local identity</td>
</tr>
<tr>
<td></td>
<td>Socio-cultural functions</td>
<td>➢ The case study has provided a place for the community to do activities, but it has not materialized in the form of facilities supported by optimal infrastructure</td>
</tr>
<tr>
<td></td>
<td>There are no case studies that provide local identity, and all samples have tried to provide facilities for community interactions and activities, but not 100% yet</td>
<td>Aesthetic function</td>
</tr>
<tr>
<td></td>
<td>Aesthetic function (quality of maintenance)</td>
<td>Many case studies are neglected and obsolete due to suboptimal maintenance quality</td>
</tr>
<tr>
<td></td>
<td>100% case study seeks to improve the beauty of the environment, but currently looks outdated (abandoned)</td>
<td>Mitigation Function</td>
</tr>
<tr>
<td></td>
<td>Physically (land availability) is available, but the supporting facilities and infrastructure are not available</td>
<td></td>
</tr>
<tr>
<td>Mitigation function</td>
<td>80%provides a case study of the evacuation area but can not serve as an evacuation area optimally</td>
<td></td>
</tr>
</tbody>
</table>

The results of the triangulation (Minister of Public Works Regulation No. 05/PRT/M/2008, the 2019 DKI Jakarta Green Open Space Construction and Development Guidebook; the results of observations; and interviews) based on Table 8 show that case study of City Park as a product of a construction project:
1. Has not played the function contained in the Minister of Public Works Regulation No. 05/PRT/M/2008 optimally
2. Has contributed to beautification, but quickly obsolete and neglected
3. Has provided a forum for the community to carry out activities, but the container is not yet in the form of a facility that anticipates the needs of the local community
4. Has many park facilities, facilities, and infrastructure that are neglected, outdated, and damaged
5. Has provided an area that can be used as an evacuation area but is not supported by facilities and infrastructure
6. Has not provided facilities and environmentally friendly management systems for the optimal fulfillment of ecological functions
Figure 3. Chart of Management Conditions for the Implementation of City Park Construction Projects in Jakarta (Research Document Authors, 2021).

Figure 3 shows the management condition of the City Park construction project in Jakarta. The existence of City Parks that are less than optimal as a construction project product is caused by various problems that occur in the management process of implementing City Park development projects, especially the Pre-Construction stage. The absence of definitions and targets that refer to the application of sustainable principles in green planning and design; the unavailability of clear regulations regarding the implementation of sustainable green open spaces and optimal stakeholder involvement in green communities as attributes of the focus of the Green City Action Plan make it difficult to determine the direction of City Park design and project terms of reference. In the end, the design of the City Park cannot be carried out optimally. At the same time, design is at the core of creating quality urban green open spaces [27]. This further result, it is difficult to prepare other technical documents and necessary steps for the implementation of the City Park development project. These documents are documents prepared at the pre-construction stage. This situation shows that the most problematic management of the implementation of the City Park development project lies in the pre-construction stage. In addition, efforts to involve stakeholders that were not managed and prepared properly at the pre-construction stage also had an impact on City Park products. City Park design is not directed, does not accommodate the needs of the community, causing the construction phase to not run and be monitored properly. In the end, the City Park as a construction project product becomes inaccessible and inclusive and cannot fulfill the expected function. For this reason, it is necessary to make improvements at the pre-construction stage which can be done by determining clear definitions and targets in the application of sustainable principles for City Parks. This step can be done by involving competent stakeholders. Then it can be continued with the establishment of regulations and standards that support its implementation. Thus, the activities and preparation of planning documents at the pre-construction stage that will be used as a reference in the construction stage can be more focused and clear.

Conclusions
The management of the City Park construction project in Jakarta has not been running well and consistently. The problem lies in the absence of a definition and target for the construction and renovation of City Parks that refers to green planning and design; green open space and green community as the focus of the Green City Action Plan attributes that supports the realization of a green city. This causes the pre-construction stage of City Parks Project cannot running well. Activities and documents that cannot be properly prepared at the pre-construction stage and stakeholder involvement that has not been appropriately managed and has not been supported by regulatory/policy instruments that causes a lack of stakeholder understanding and commitment to the importance of sustainability, making the implementation of management more difficult. This causes the development of City Parks cannot be carried out optimally and ultimately causes City Parks not be able to play a role according to the functions that have been set.

The root cause of the City Park Construction Project management failure is the unavailability of definitions and targets that refer to the application of sustainable principles in green planning and design; the absence of clear regulations related to the implementation of sustainable green open spaces and optimal stakeholder involvement in green communities as the Green City Action Plan attributes. As a result, the pre-construction stage and the involvement of stakeholders, especially the community, could not be prepared and implemented properly. This causes the resulting City Park to be of low quality and unsustainable. This root cause can be used as the basis for steps to improve management of the implementation of sustainable City Park construction projects in Jakarta. It is hoped that the City Park become more qualified and sustainable.
Conflicts of interest
The authors declare that there is no conflict of interest regarding the publication of this paper.

References