

GOVERNMENT EFFORTS TO ENHANCE PUBLIC GREEN OPEN SPACES

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Abstract

This research explores the government's initiatives to improve public green open spaces in Pekanbaru City. Utilizing a qualitative approach, data were obtained through interviews, field observations, and documentation. The results show that the government has implemented a range of measures, such as urban spatial planning strategies, the construction of parks and green areas, and programs to raise environmental awareness. Despite these efforts, several obstacles persist, including scarce land availability, limited public involvement, inadequate funding, weak coordination among agencies, and the lack of green spaces in densely populated areas of the city.

Keywords: Municipal Government, Green Open Space, Strategy

INTRODUCTION

The city functions as a key center for a range of public socio-economic activities, including government operations, industry, trade, transportation, and education. The expansion of these urban functions has driven a steady rise in population density, a trend further intensified by rapid urbanization (Joko Sunaryo, 2021). As the population grows and the demand for urban infrastructure and services increases, urban development continues to escalate. This growth has brought about substantial ecological changes, leading to a deterioration in environmental conditions. Consequently, the availability of Green Open Spaces becomes vital in enhancing the city's visual appeal and promoting better environmental quality (Joko Sunaryo, 2021). These public green spaces play a crucial role in boosting oxygen levels and absorbing carbon dioxide within urban settings.

Urban expansion frequently comes at the expense of public spaces, leading to a notable reduction in both the extent and quality of open areas, especially Green Open Spaces. This reduction has negative consequences for urban life, including more frequent flooding, elevated air pollution, and decreased social productivity due to limited areas for public interaction.

Green Open Spaces refer to natural or cultivated areas dominated by vegetation. These spaces offer multiple benefits, such as promoting groundwater infiltration, supporting ecosystems, improving air quality, increasing biodiversity, mitigating flood risks, lowering noise levels, and serving as recreational zones for residents.

Urban Green Open Spaces are essential elements of city structure. They fulfill core ecological roles and also contribute architecturally, socially, and economically. Maintaining these public spaces is crucial not only to regulate atmospheric conditions and conserve water and soil but also to strengthen the environmental resilience of cities.

Pekanbaru, the capital city of Riau Province, comprises 15 districts and is one of 12 administrative regions within the province. In urban settings, Green Open Spaces represent the synergy between natural resources and human activity. A sustainable city is characterized by a harmonious interaction between people and nature. However, high urban population density often disrupts this balance due to shrinking green areas. Therefore, restoring ecological balance through strategic environmental planning and the expansion of green spaces is essential for fostering a livable, clean, attractive, and cooler urban atmosphere.

Green Open Spaces help filter polluted air, regulate urban temperatures, and provide clean air for residents. As one of Indonesia's rapidly industrializing cities, Pekanbaru has experienced substantial loss of green areas. Industrial development typically transforms vegetated land into densely built environments, such as factories, office complexes, shopping malls, and other urban infrastructure often replacing parks, urban forests, and community green zones.

These spaces are vital to every city, serving as environmental assets that act as the city's lungs regulating air quality, absorbing rainwater, and buffering noise pollution.

Nonetheless, Green Open Spaces in Pekanbaru face serious threats, including urban sprawl, poor maintenance, and low public awareness about environmental stewardship. Therefore, it is imperative to prioritize efforts that safeguard and improve Green Open Spaces capacity, ensuring they continue to provide ecological and social value for current and future urban communities.

Table 1. Calculation of Public Green Open Space Area Based on Its Function in Pekanbaru City

No	Jenis RTH	Alokasi Rencana RTH	Rencana Luasan RTH (HA)
1.	Jalur hijau jalan	5%	2.746,6
2.	Pemukaman	0,5%	274,7
3.	Taman	4%	2.625,9
4.	Hutan Kota	4.5%	3.370,5
5.	Area terbuka hijau di fasilitas yang dimiliki pemerintah	2%	1.055,2

6. Pohon Penghijauan	4%	2.705,3
Total	20 %	12.778,2 HA

Source: Pekanbaru City Environmental and Sanitation Agency, 2024

The responsibility for achieving the mandated 20% coverage of public Green Open Space in Pekanbaru is distributed across multiple regional agencies. These include the Department of Agriculture, which manages urban forest areas; the Department of Public Housing and Settlement Areas, overseeing cemetery spaces; and the Environmental and Sanitation Agency, responsible for parks and green belts.

Green Open Space regulations are grounded in various legal frameworks, including Law No. 26 of 2007 on Spatial Planning and Ministerial Regulation No. 05 of 2008 regarding its implementation. Other relevant legislation includes Law No. 32 of 2009 on Environmental Protection and Management, Government Regulation No. 44 of 2015 on Spatial Planning, and Ministerial Regulation No. P.20/MENLHK/SETJEN/KUM.1/4/2018, which provides guidelines for drafting national action plans for the development and preservation of Green Open Spaces.

According to these regulations, cities are required to allocate at least 30% of their total land area for Green Open Spaces in their spatial plans 20% of which must be designated as public Green Open Spaces under municipal management for the benefit of the community, while the remaining 10% may consist of privately owned or community-managed green areas.

Public Green Open Spaces include city parks, urban forests, cemeteries, and roadside green belts. In contrast, Private Green Open Spaces may encompass recreational and cultural parks such as Alam Mayang Recreational Park, Pekanbaru Creative Park, Kencana Park, Nusantara Flower Garden, and Pekanbaru Flower Park. Article 29, Paragraph (2) of Law No. 26 of 2007 requires that a minimum of 30% of a city's area be allocated as Green Open Space, with Paragraph (3) further emphasizing that at least 20% must be public Green Open Spaces.

Pekanbaru spans a total of 63,901.54 hectares, of which 8,970.10 hectares are categorized as non-urban. Thus, the urban area encompasses 54,931.49 hectares. Presently, Public Green Open Spaces occupy 12,708.2 hectares, and Private Green Open Spaces cover 6,390.15 hectares.

The shortfall in Public Green Open Space availability in Pekanbaru is primarily driven by high population density and development strategies that prioritize the construction of physical infrastructure such as buildings, residential areas, commercial zones, offices, and industrial estates over environmental considerations. This imbalance threatens urban health and quality of life. Therefore, spatial planning efforts in the city must prioritize the provision of green areas and actively involve the public in preserving spatial and environmental quality.

Pekanbaru's growing population density is also driven by incoming migration from outside Riau Province, as individuals relocate to the city for employment or educational opportunities. Combined with the city's annual population growth, this has contributed to increasingly crowded urban conditions. According to Ministerial Regulation No. 1 of 2007 concerning the Planning of Urban Green Open Spaces (RTHKP), one type of Green Open Space is the neighborhood or residential park small-scale green areas intended for limited recreational use by local residents.

Based on observations made by the researcher on the government's initiatives to expand public Green Open Spaces in Pekanbaru, several key issues have been identified:

1. The efforts by the Pekanbaru City Government have yet to meet the minimum target for public Green Open Space provision. As outlined in Diagram 1.1, the city is required to allocate at least 20% of its total area to public Green Open Spaces. With a total area of 63,901.54 hectares, this translates to approximately 12,780.2 hectares. However, in reality, only around 1,542 hectares have been developed as public Green Open Spaces.

2. The annual growth of public Green Open Spaces remains minimal, as indicated in Table 1.4. The city's development agenda continues to prioritize physical infrastructure projects—such as the construction of buildings, offices, shop houses, housing estates, hotels, industrial areas, shopping malls, and other commercial facilities—often at the expense of preserving and maintaining existing green areas, which are frequently left in poor condition.

In response to these issues, the researcher has chosen to conduct an in-depth study to analyze the government's efforts in enhancing public Green Open Spaces in Pekanbaru City. Beyond fulfilling legal requirements, the development of these green areas is intended to support their broader environmental and social benefits, including improving the city's ecological health and fostering a more beautiful, livable, and refreshing urban environment.

RESEARCH METHODS

This study was carried out at the Environmental and Sanitation Agency of Pekanbaru City, located at Jalan Datuk Setia Maharaja No. 4, in the Simpang Tiga Sub district of Bukit Raya District, Pekanbaru. The agency was selected as the research site due to its primary responsibility and authority in managing green spaces across the city.

To thoroughly explore the government's strategies in improving public Green Open Spaces in Pekanbaru, a qualitative research approach was adopted. This method emphasizes the in-depth examination of government initiatives related to public green space development in the city. Qualitative research outlines the sources of data, methods of data collection, and the processes involved in the study. According to Saryono, as cited in Ismail Nurdin (2019:75), qualitative research is used to analyze, construct, interpret, and describe the nature of social phenomena that cannot be measured numerically.

Informants for this study were selected using purposive sampling, meaning individuals were chosen based on specific criteria aligned with the objectives of this qualitative descriptive research. As Saryono explains in Ismail Nurdin (2019), qualitative research is intended to explore, construct, interpret, and explain the nature of social phenomena that are complex and not easily reduced to numbers or predictions.

Research informants are individuals who provide necessary information during the research process. These informants include both key informants and general informants. Key informants are those who possess in-depth knowledge and crucial information related to the research topic, while general informants are selected based on their familiarity and connection to the issues being studied.

Based on this framework, the key informants in this research are:

1. Head of Spatial Planning and Environmental Structuring Division, Environmental and Sanitation Agency of Pekanbaru City
2. Head of Parks Division, Environmental and Sanitation Agency of Pekanbaru City
3. Sub-Coordinator of Parks and Ornamentation, Environmental and Sanitation Agency of Pekanbaru City
4. Street Sweeping Officer, Environmental and Sanitation Agency of Pekanbaru City
5. Vendors operating around the city parks.

The data analysis in this study incorporates triangulation techniques, which include methodological triangulation (employing diverse data collection methods), data source triangulation (gathering information from multiple relevant sources), and investigator triangulation (engaging different researchers to independently collect data). This multi-faceted approach allows for the acquisition of a more extensive and in-depth understanding of the subject matter, thereby enhancing the validity, reliability, and depth of the data collected.

RESULT AND DISCUSSION

According to Geof Mulgan, as cited in Suwarsono (2017:405), government strategy consists of five key components:

1. **Purposes** – This refers to the aspirations or goals that an organization aims to achieve. In the context of government, the ultimate goal is public welfare. Specifically, this includes creating a balance between human needs and environmental sustainability through the management of Green Open Spaces.

The author adopts the perspective that all relevant parties have carried out their duties and functions accordingly. This is supported by several statements from employees of the Environmental and Sanitation Agency (DLHK) of Pekanbaru City.

“We are already working in accordance with our duties and functions. In the parks division, there is supervision and a sub-coordinator. Functional roles in the parks division include three main tasks: planning, tree pruning, and landscaping.”

Based on this interview, it can be concluded that the employees of the DLHK Pekanbaru City are generally performing their duties well. However, in practice, more attention is still needed, especially in raising public awareness regarding the importance of Green Open Spaces. Serious efforts are required to improve and manage these spaces to ensure their sustainability and the fulfillment of the intended goals.

Lastly, in relation to the *Purpose* indicator, the researcher also conducted an interview with a local vendor operating near the park. According to the vendor, they stated:

“Yes, it aligns with their duties and functions. The agency provides a space for us to sell in front of the green open space at the park below Leton I. If we couldn’t sell here, we wouldn’t have a steady income, so the government gives us this opportunity.”

Based on the interview findings, the researcher concludes that the Environmental and Sanitation Agency has carried out its roles and responsibilities in accordance with established procedures. Nevertheless, several challenges persist, such as limited public awareness of the significance of Green Open Spaces, constrained budget allocations, and insufficient coordination among related government agencies.

2. **Environment** – This represents the space in which individuals, nature, and all surrounding conditions influence human survival and diversity. It encompasses both internal and external factors that affect development and sustainability.

The environment is defined as the space in which individuals, nature, and all surrounding conditions influence human survival and diversity. It also acts as a stabilizing factor in the face of environmental changes, including changes that affect Green Open Spaces. Environmental changes directly impact the planning and implementation of programs designed by the city administrators of Pekanbaru. Environmental conditions are thus key indicators in evaluating the success and adaptability of such programs.

Within the Environment indicator, the author examined whether agency staff are directly involved in field activities to improve public Green Open Spaces in Pekanbaru. Several opinions were collected from employees of the Environmental and Sanitation Agency (DLHK) of Pekanbaru City.

“Yes, because every city park is guarded 24 hours a day. From morning until afternoon, supervisors are on duty to monitor cleanliness, and from 3:00 PM until early morning, there are also personnel on watch. Efforts include providing facilities, greening, maintenance, and supervision.”

The interviews suggest that the Environmental and Sanitation Agency (DLHK) plays an active role in a range of environmental enhancement efforts, including conservation, environmental monitoring, routine maintenance, and the management of public parks.

The researcher also interviewed the Sub-Coordinator of Parks and Gardens at the Pekanbaru Environmental and Sanitation Agency (DLHK), inquiring whether agency personnel are directly involved in environmental initiatives to enhance public green open spaces.

"Yes, efforts include participation in cleaning, maintenance, greening, and environmental supervision."

Interview findings indicate that the Environmental and Sanitation Agency is indeed engaged in maintenance, cleaning, and monitoring activities. However, observations reveal that many parks remain underdeveloped, with damaged vegetation and neglected trees, highlighting the need for more consistent and intensive efforts in managing public green spaces.

3. **Directions** – These are instructions issued by leadership to ensure structure, relevance, and motivation. Directions serve as guidance to achieve more effective and sustainable management and development of public Green Open Spaces, with the aim of improving community quality of life.

Under the **Direction** indicator, the author explored how coordination is implemented to improve public Green Open Spaces in Pekanbaru City.

"In the Parks Division, coordination involves three functional areas: planning, tree pruning, and landscaping. Regular maintenance and care must be carried out for existing public Green Open Spaces."

Based on the interview, it can be concluded that internal coordination within the Parks Division of the Environmental and Sanitation Agency is functioning effectively and in accordance with expectations. However, the responsibility for managing public Green Open Spaces does not lie solely with the agency. Active public awareness and community involvement are equally vital in supporting the development and preservation of public Green Open Spaces in Pekanbaru City.

The researcher also interviewed a street vendor located near the park to gain insights on potential forms of coordination that could enhance public green open spaces. Based on the interview, the following conclusions were drawn:

"In my opinion, coordination is still lacking, because I don't really understand what kind of coordination is being implemented. I often notice that the park cleaning staff only clean half of the park."

The interview indicates that the general public still lacks sufficient understanding and awareness of how Green Open Space management is coordinated. Most individuals are primarily familiar with utilizing these spaces but are unaware of the processes involved in their upkeep and governance. Consequently, there is a need for the government to strengthen public education and outreach efforts to emphasize the importance of Green Open Space management. Additionally, greater community involvement in the planning and decision-making processes is essential to enhance public awareness and understanding of coordination mechanisms in the management of public green spaces.

4. **Actions** – These are efforts carried out by institutions and the government, involving various external situations and tools used in decision-making. Actions include strategies, policies, regulations, as well as the maintenance, management, and utilization of Green Open Spaces.

For this indicator, the author explored the question of which institutions are involved in the improvement of public Green Open Spaces in Pekanbaru City.

"CSR funding has already been provided by Bank BRI, BLM, Awal Bros Hospital, Dava Hotel, Telkomsel, and Honda. The assistance includes parks managed by the Environmental and Sanitation Agency (DLHK) of Pekanbaru City, trash bins, and more. DLHK also collaborates with universities, such as by receiving donations of flowers and trees, as well as with the general public."

Based on the interview, several institutions are actively involved, and the participation of the community is expected to further enhance public Green Open Spaces in Pekanbaru City.

The researcher also posed the same question to the Sub-Coordinator of Parks and Ornaments at the Environmental and Sanitation Agency. In response, he stated:

"We have also collaborated with the Civil Service Police Unit (Satpol PP) to assist in monitoring."

The interview highlights that the Environmental and Sanitation Agency has formed collaborative partnerships, including with the Civil Service Police Unit (Satpol PP), particularly in the supervision and monitoring of public Green Open Space management.

Finally, the researcher interviewed a local vendor near the park regarding which institutions are involved in the development of Green Open Spaces. In response, he stated:

"In the Parks Division, the supervisors from the Environmental and Sanitation Agency are involved in maintaining cleanliness and beauty, such as cutting the grass and removing plastic waste. They also inspect dead plants and replant them—this is part of the improvement process."

The interview suggests that the Environmental and Sanitation Agency of Pekanbaru City has carried out its duties effectively. However, despite these efforts, the absence of strict monitoring and enforcement of environmental regulations may lead to public complacency, allowing individuals to dispose of waste irresponsibly without fear of repercussions.

5. Learning – This refers to evaluation or reflection on the current situation. Through this process, any mistakes or deficiencies in implementation can be identified and addressed for future improvement.

In this indicator, the author explored the question of what kinds of evaluations are conducted to improve Green Open Spaces in Pekanbaru City.

An interview was conducted with the Head of Parks, who provided the following statement:

"Evaluation involves continuous public outreach—we never tire of conducting socialization efforts. This year, we assigned four officers to monitor GOS on a daily basis. They patrol and inspect for any damaged plants or fallen trees. If there is a tree that falls in the middle of the road, officers immediately respond."

Based on the interview, it can be inferred that the Environmental and Sanitation Agency (DLHK) of Pekanbaru conducts routine evaluations to enhance Green Open Spaces, aiming to ensure that the results align with established objectives.

In addition, the researcher interviewed the Sub-Coordinator of Parks and Ornaments regarding the same question. In response, he stated:

"The agency conducts improvements and additions based on evaluations to enhance the effectiveness of policies, programs, and projects, while also educating the public on the importance of GOS for the environment."

The interview indicates that, following evaluations, the agency takes steps to implement improvements and corrective measures. The researcher concludes that ongoing refinement is essential to enhance performance. It is therefore recommended that the agency also provide regular training for its personnel to reduce the likelihood of future errors and ensure more effective management of Green Open Spaces.

CONCLUSIONS

Based on the analysis and discussion outlined in the preceding chapters, this conclusion has been drawn by referencing the data collected and examined in line with the research focus and objectives. In Pekanbaru City, Green Open Spaces have not been fully developed or revitalized by the local government. In practice, the current availability and quality of these

spaces remain inadequate when compared to the rapid expansion of urban infrastructure, particularly commercial and office developments. The accelerated growth of such physical structures appears to be disproportionate to the provision of green areas.

Moreover, the municipal government has yet to fully implement the mandates outlined in Law No. 26 of 2007 on Spatial Planning, which requires local administrations to allocate a minimum of 30% of their area to Green Open Spaces—of which at least 20% must consist of public green spaces managed by the city government.

Several key challenges hinder the development of Green Open Spaces in Pekanbaru, including:

1. The limited capacity of the city government to procure and manage green areas effectively.
2. Inadequate budget allocations for the development and maintenance of Green Open Spaces.
3. High population density in certain urban zones, which restricts the availability of land for green development.
4. Low levels of public awareness regarding the importance of Green Open Spaces for environmental sustainability and community well-being.
5. Escalating land prices, where the government's purchasing capacity is constrained by the Tax Object Sales Value (NJOP), limiting access to strategic land areas.

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