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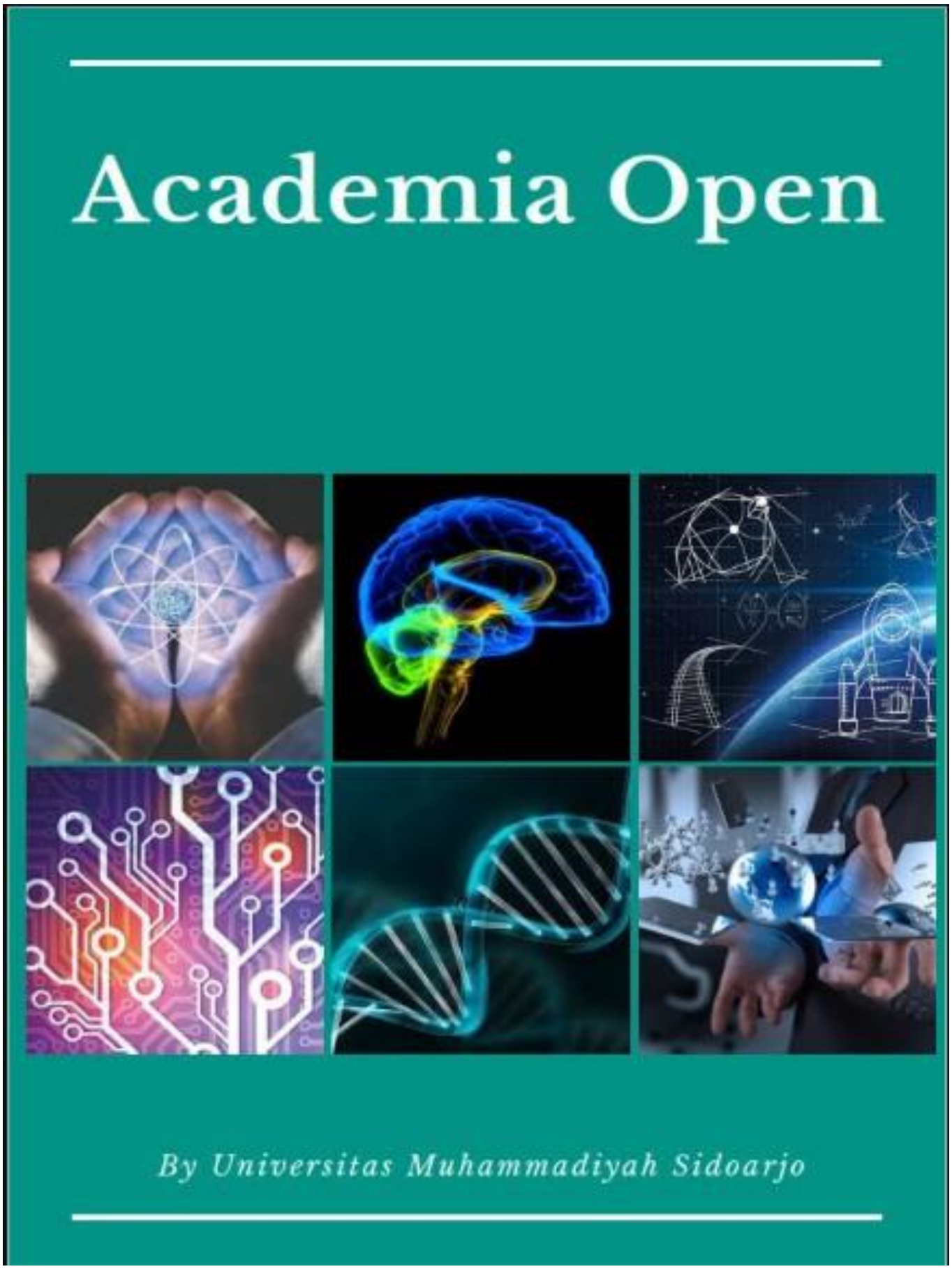

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Collaborative Public Strategy for Green Space Planning in Sidoarjo

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Abstract

General Background Sustainable urban development requires adequate open vegetative zones to fulfill essential environmental and social functions within modern cities. **Specific Background** Sidoarjo Regency struggles to meet the statutory requirement of twenty percent open civic areas due to rapid urbanization and extreme land conversion pressures, leaving coverage at merely 0.06 percent. **Knowledge Gap** While previous studies identify spatial deficits and low civic awareness as primary obstacles, comprehensive analyses evaluating the holistic governmental response to these specific urban challenges remain limited. **Aims** This research examines the governmental approach employed by the Environmental and Sanitation Agency of Sidoarjo Regency in planning and administering civic environmental assets. **Results** Based on Geoff Mulgan's framework, the findings reveal that the agency applies standard operating procedures, cross-sectoral coordination, academic partnerships, and corporate social responsibility collaborations to expand ecological areas. Key actions include park revitalization, green corridor creation, and community facility optimization, though human resource shortages, fiscal deficits, and inadequate community participation restrict optimal execution. **Novelty** This study uniquely applies a multidimensional framework to regional ecologicalplanning, demonstrating howinstitutional learning and policy direction interact with severe land limitations. **Implications** The findings suggest that local authorities must prioritize multi-stakeholder collaboration and adaptive asset optimization to achieve Sustainable Development Goal 11 regarding inclusive and accessible civic environments.

Highlights:

- Cross-sectoral partnerships with corporations and academic institutions supply vital resources for expanding urban green zones.
- Revitalizing existing parks and optimizing community facility areas serve as practical solutions to land limitations.
- Budget deficits and low civic awareness regarding environmental maintenance continually restrict local government policy execution.

Keywords :Sustainable Development Goals, Local Government, Environmental Governance, Spatial Planning, Cross Sectoral Collaboration

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I. Introduction

Sustainable development is a development paradigm that integrates environmental, social, and economic dimensions to ensure the fulfillment of present needs without compromising the ability of future generations to meet their own needs [1]. This concept underpins the Sustainable Development Goals (SDGs), a global agenda consisting of 17 goals aimed at addressing poverty, inequality, environmental degradation, and climate change [2]. Among these goals, SDG 11 seeks to make cities and human settlements inclusive, safe, resilient, and sustainable. In particular, Target 11.7 emphasizes the provision of universal access to safe, inclusive, and accessible public spaces, including green open spaces, by 2030 [2]. This is consistent with the statement of UN-Habitat (2019) regarding the standardization of effective public spaces, wherein such spaces must facilitate the needs of and be accessible to all members of society without any profit-oriented motive [3].

Rapid urbanization in Indonesia has intensified pressure on urban ecosystems through increasing land conversion, environmental degradation, and climate-related risks [4]. To address these challenges, Law No. 26 of 2007 on Spatial Planning mandates that urban areas allocate at least 30% of their land as Green Open Space (RTH), consisting of 20% public RTH and 10% private RTH [5]. Green open spaces play a strategic role in supporting environmental sustainability by providing ecological, social, recreational, and aesthetic benefits for urban communities [6].

Sidoarjo Regency illustrates the challenges of achieving this target amid rapid urban growth. The population was more than two million residents in 2024, which increased the demand for residential and industrial property and decreased the availability of open spaces [7]. Even though it has received several environmental awards, the percentage of RTH in Sidoarjo is still quite small, which is only 0.06% of the entire area of the regency, which is 714.27 km². This figure is far lower than neighbouring regions such as Gresik, Pasuruan City, and Mojokerto. Furthermore, the Land Quality Index is still in the bad category, with managed public RTH reaching just about 31 hectares in 2025. Previous studies have shown that land conversion pressures, restricted land availability and poor public awareness are important hurdles to RTH growth in Sidoarjo regency [8]. Table 1 shows the comparison of RTH proportions in neighbouring regencies/cities.

Table 1. RTH Proportions Across Neighboring Regencies/Cities, 2024 [6][7]

Regency/City	Total Area (km²)	RTH Area (km²)	RTH (%)	National Target
Gresik	1,256.76	146.40	11.65%	30%
Pasuruan	39.00	0.47	1.20%	30%
Mojokerto	20.21	0.054	0.27%	30%
Sidoarjo	714.27	0.40	0.06%	30%

Table 1 shows that Sidoarjo has the lowest proportion of Green Open Space (RTH) among neighboring regencies, highlighting the imbalance between rapid urbanization and green space provision. Previous studies have identified land conversion pressure and limited public awareness of the ecological importance of green spaces as the primary factors contributing to this condition [6]. This environmental problem is also illustrated by Sidoarjo's Land Quality Index (IKL) (see Table 2). IKL grew marginally from 24.42 in 2023 to 25.28 in 2024 but was still below than the target set by the government. This shows that the improvement of environmental quality is not in line with the urban pressure of development [9]. These findings imply that the supply and management of RTH are still insufficient to support urban expansion.

Table 2. Land Quality Index (IKL) of Sidoarjo Regency, 2021–2024 [9]

Year	Target	Realization	Gap
2021	27.10	23.72	−3.38
2022	27.11	23.63	−3.48
2023	27.12	24.42	−2.70
2024	27.13	25.28	−1.85

Table 2 shows that the Land Quality Index (IKL) realization consistently remained below the annual target throughout the observed period, with the largest gap of 3.48 points recorded in 2022. Although the gap narrowed to 1.85 points by 2024, the persistent shortfall indicates that improvements in environmental quality have not kept pace with rapid urbanization and ongoing land conversion pressures. The importance of improving the development of Green Open Space (RTH) can also be seen in the Sidoarjo Regency Medium-Term Regional Development Plan (RPJMD) 2025-2029 which considers environmental degradation, climate change vulnerability and air pollution as important development concerns. In response, RTH development is a flagship programme of the regency in improving the environmental quality and encourage sustainable urban growth.

Although the development of Green Open Space (RTH) is strategic and has been designated as a flagship programme in Sidoarjo Regency, the gap between the regulatory targets and the actual provision of RTH shows that there are still substantial obstacles in execution. Previous studies have focused on the adequacy of RTH provision and hurdles to RTH development, but there has been limited research on the government's strategy approach to the difficulties. Therefore, in this study, the public strategy of the Department of Environment and Hygiene (DLHK) of Sidoarjo Regency in the development of public Green Open Space is analysed. The study applies Geoff Mulgan's (2009) public strategy framework to explore the formulation of strategic objectives, their translation into policy actions, and the evaluation of their implementation, thus offering a holistic perspective of local government initiatives towards sustainable urban development

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and the achievement of SDG 11, in particular Target 11.7 pertaining to inclusive and accessible public green spaces.

II. Literature Review

A. Public Sector Strategic Management

Strategic management is an essential process that enables public organizations to achieve their goals effectively and respond to changing environmental conditions. Unlike private organizations, which primarily focus on profit generation, public sector organizations are oriented toward creating public value and improving societal welfare [10]. Nawawi (2017) defines public sector strategic management as the process of formulating and implementing strategic decisions and actions to achieve organizational objectives and enhance community well-being. Similarly, Bastian (2016) emphasizes that public sector management encompasses all organizational resources and processes required to achieve public welfare outcomes [10].

In the contemporary governance context, strategic management has become increasingly important as public organizations are expected to be not only efficient and accountable but also adaptive to social, economic, and environmental challenges. Therefore, the effectiveness of public sector strategic management is measured by its ability to deliver quality public services, solve public problems, and generate positive outcomes for society rather than by financial performance alone [10]. This perspective is particularly relevant to the development of public Green Open Space (RTH), where government agencies must strategically utilize available resources and coordinate multiple stakeholders to achieve environmental sustainability and public welfare objectives.

B. Geoff Mulgan's Theory of Public Strategy

This study adopts Geoff Mulgan's (2009) public strategy framework, which defines public strategy as the systematic use of public resources and authority by government institutions to create public value. In contrast to traditional planning methods, this framework treats strategy as a flexible and adaptive process that is constantly adjusted to changing external variables. Mulgan (2009) describes five interconnected characteristics of public strategy:

1. **Purposes:** the compelling reasons that drive government action, which emerge from the gaps between public needs, aspirations, fears, and current realities.

2. **Environment:** the present and anticipated contexts in which goals are pursued, as well as the organizational capacities available to achieve them. It is from the interaction of purposes and environment that governments and agencies define their chosen direction.

3. **Direction:** the desirable and achievable goals, outcomes, priorities, and sequencing that guide strategic intent, including the relative prioritization of actions to be taken.

4. **Action:** the detailed strategies, policies, laws, programmes, and inspirational leadership necessary to mobilize commitment toward public value creation. Since all actions may produce unexpected results, strategy also depends critically on learning.

5. **Learning:** systems designed not only to evaluate which actions succeeded or failed, but also to determine whether purposes, analyses, and chosen directions require fundamental reconsideration.

These dimensions collectively encompass the formulation of strategic goals, assessment of internal and external conditions, establishment of priorities and policy direction, implementation of strategic actions, and continuous learning through monitoring and evaluation. Together, they provide a comprehensive framework for understanding how public organizations formulate, implement, and refine their strategies in response to emerging challenges. This study is relevant to the framework as it provides a systematic analysis of the strategies for public Green Open Space (Ruang Terbuka Hijau/RTH) development of the Department of Environment and Hygiene (Dinas Lingkungan Hidup dan Kebersihan/DLHK) of Sidoarjo Regency. In addition, its emphasis on adaptation and organisational learning provides a good framework for evaluating governmental attempts to cope with urbanisation constraints while increasing environmental sustainability and public welfare.

C. Local Government

Local government, as defined under Law No. 23 of 2014 on Regional Government [11], is the organisation of the administration of government affairs by regional authorities based on the concepts of regional autonomy and co-administration in the context of the Unitary State of the Republic of Indonesia. Through decentralization, local governments are granted the authority to manage and regulate regional affairs in accordance with local needs and priorities, while remaining aligned with national development objectives.

In carrying out their functions, local governments are responsible for delivering public services, promoting community welfare, and enhancing regional competitiveness. They also occupy a strategic role in managing environmental resources and implementing sustainable development policies at the local level. Within this context, local governments possess both the authority and the responsibility to plan, develop, and manage public Green Open Space (Ruang Terbuka Hijau/RTH) as part of broader efforts to improve environmental quality, support sustainable urban development, and respond to the evolving needs of local communities.

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D. Green Open Space (RTH)

Green Open Space (Ruang Terbuka Hijau/RTH) is defined under the Regulation of the Minister of Public Works No. 5 of 2008 [12] as an urban open space predominantly covered by vegetation that serves ecological, social, aesthetic, and recreational functions. Within Indonesia's spatial planning framework, RTH constitutes an essential component of urban public space that supports environmental sustainability and community well-being. Depending on its origin, RTH may be natural green places, such as conservation and protected areas, or built green spaces, such as public parks, urban forests, street greenery, and recreation areas.

The main purpose of RTH development is to balance built-up areas with green spaces in urban areas to ensure the ecological carrying capacity of cities and at the same time meet the social and recreational needs of urban residents. According to the

Indonesian spatial planning legislation, at least 30 percent of urban land area must be provided as RTH, consisting of 20 percent public RTH and 10 percent private RTH. This aim indicates the government's desire to mainstream environmental issues into the urban development plans.

The role of RTH is strategically important in preserving ecological balance, increasing environmental quality, protecting biodiversity, controlling water resources, mitigating urban heat island effects, lowering air and noise pollution, and promoting overall urban liveability from a functional perspective [13]. In increasingly urbanising areas, RTH also has an important role to play in developing inclusive and accessible public spaces for a range of community groups and in climate resilience. According to Rijal (2017), the ways to increase green spaces in urban areas are planting trees along road corridors, rooftop gardens, green buffer zones, green areas along riversides, and protecting existing green spaces from land use conversion.

However, despite its recognised importance, RTH development in many cities in Indonesia still faces chronic issues such as land scarcity, competing land-use demands, local government budget limitations, institutional coordination deficiencies, and lack of community participation. These constraints underscore the need for innovative and adaptive strategies in RTH planning and management. Therefore, effective RTH development requires integrated spatial planning, sustainable long-term management, and meaningful collaboration among government institutions, the private sector, and local communities to ensure its enduring environmental and social benefits.

III. Methods

This study employed a qualitative approach using a case study design [14], [15] to examine the public strategy implemented by the Department of Environment and Hygiene (DLHK) of Sidoarjo Regency in developing public Green Open Space (RTH). Sidoarjo Regency was selected as the research site due to the persistent gap between existing RTH coverage and statutory targets, despite ongoing policy interventions and environmental achievements. Moreover, the regency still faces a serious obstacle for RTH growth due to rising urbanisation and land-use shift.

Data were acquired from primary and secondary sources. Primary data were gathered via observation and semi-structured interviews with informants actively involved in RTH development and management. Secondary data were collected from legislation, official government papers, statistical data and relevant scientific literature. Informants were selected using purposive sampling, including the Head of the Cleanliness and Green Open Space Division, policy analysts, and relevant staff members. Snowball sampling was subsequently employed to identify additional informants, including field maintenance personnel, the Gegana Team, and community members utilizing public green spaces.

Data collection techniques consisted of observation, interviews, and documentation. Data were analyzed using the interactive model of Miles, Huberman, and Saldaña (2014), which includes data collection, data condensation, data display, and conclusion drawing and verification [16]. To ensure data credibility, this study applied source triangulation, method triangulation, and time triangulation by comparing information obtained from different informants, methods, and periods of data collection.

IV. Results and Discussion

The findings of this study are presented and analyzed through the five dimensions of Mulgan's public strategy framework: Purposes, Environment, Direction, Action, and Learning. These dimensions provide a structured basis for assessing how the Department of Environment and Hygiene (DLHK) of Sidoarjo Regency develops and implements its public Green Open Space (RTH) strategy. Table 3 summarizes the key findings for each dimension, highlighting the strategic objectives, supporting and constraining factors, policy directions, implementation actions, and learning processes identified during the research. A more detailed explanation of each dimension is presented in the sub-sections that follow.

Table 3. Summary of DLHK Sidoarjo RTH Strategy Across Mulgan's Five Dimensions

Dimension	DLHK Sidoarjo Implementation	Key Challenges
Purpose	Fulfil 20% public RTH target; improve environmental quality; provide inclusive public spaces	Low baseline (0.06% of land area)
Environment	CSR partnerships; academic collaboration; workforce specialization; inter-agency coordination	Land scarcity; limited civic awareness

Direction	SDG 11 → Law No. 26/2007 → Ministerial Reg. 05/2008 → Perda No. 4/2024 → Perbup No. 28/2022 → SOPs	Regulatory cascade complexity
Action	RTH master plan; priority zones; revitalization; developer land optimization; green corridors; community education	Budget and land constraints
Learning	Weekly field monitoring; multi-team reporting; social media feedback; RDTR revision feedback loop	Limited participation mechanisms

A. Purpose

Mulgan (2009) argues that effective public strategy begins with the formulation of clear and compelling goals that respond to the gap between public needs and existing conditions [10]. In the context of public Green Open Space (RTH) development, the Department of Environment and Hygiene (DLHK) of Sidoarjo Regency has established objectives that extend beyond regulatory compliance. The main purpose is to enhance the public RTH provision in compliance with Law No. 26 of 2007 on Spatial Planning, which requires urban areas to set aside at least 20% of their territory for public RTH [5]. For achieve this objective, DLHK implements phased development by prioritizing selected locations and targeting the construction of new RTH sites annually.

As well as quantitative expansion, DLHK is also directed towards broader environmental and social aims. Public RTH can help to improve environmental quality through reducing pollutants, conserving ecology, mitigating floods, and beautifying urban areas, while creating inclusive public spaces for recreation, social interaction, and community activities. These objectives are also supported by the Biodiversity Management Programme (KEHATI) which aims to improve the ecological function of RTH by conserving native plant species.

Besides the quantitative expansion DLHK is also oriented to the wider purposes of environment and society. Public RTH can contribute to the improvement of environmental quality through pollution reduction, ecological conservation, flood mitigation and the beautification of urban areas, and provide inclusive public places for recreation, social interaction and community activities. The Biodiversity Management Programme (KEHATI) which aims to improve the ecological function of RTH by protecting native plant species also supports these goals.

B. Environment

According to Mulgan (2009), the environment dimension reflects an organization's ability to understand, assess, and respond to both its internal capacities and the external conditions that influence strategic decision-making and policy implementation [10]. A comprehensive understanding of the organizational environment enables public institutions to identify available resources, anticipate potential challenges, and adapt their strategies to changing circumstances. In the context of the public Green Open Space (RTH) development in Sidoarjo Regency, this dimension includes certain internal and external variables that support or restrict the implementation of the development programme. All of these elements together determine the ability of the Department of Environment and Hygiene (DLHK) to design, construct, administer and maintain public green areas in the face of increasing urbanisation pressures. This the environmental dimension is analysed by two categories that are supporting factors and hindering elements.

a.) Supporting Factors

Several internal and external conditions support DLHK's efforts in developing and managing public green open spaces. Internally, DLHK operates under well-established Standard Operating Procedures (SOPs) that guide all stages of RTH management, including planning, development, maintenance, and monitoring. These procedures contribute to systematic implementation, improve accountability, minimize operational errors, and facilitate coordination among divisions. In addition, DLHK also has a solid cooperation with other Regional Government Organisations (OPD). The collaboration with the Public Works Department (Dinas Pekerjaan Umum) helps the land identification and procurement process, while the cooperation with the Regional Asset and Financial Management Agency (BPKAD) allows the utilisation of regional assets and Public Infrastructure, Facilities and Utilities (PSU) as potential RTH locations. External support is also reflected in cooperation with business sector actors in the framework of Corporate Social Responsibility (CSR) programmes. Some companies such as Bank Jatim and Mitra Keluarga Hospital have donated facilities such as park furniture, lighting and ornamental features to improve the quality of public green areas. In addition, DLHK has also collaborated with Universitas Brawijaya in a Memorandum of Understanding (MoU) to assist with evidence-based planning, including the formulation of an RTH Master Plan and the determination of priority areas for future development. These collaborations provide additional resources and technical expertise that strengthen the implementation of RTH development initiatives.

b.) Inhibiting Factors

Despite these supporting conditions, DLHK faces several constraints that hinder the development of public green open spaces. Internally, the agency experiences limitations in human resources relative to the size and spatial distribution of the areas under its responsibility. As a result, workloads are substantial and field monitoring activities cannot always be conducted optimally. Budget efficiency policies have also limited operational flexibility, and the agency has had to prioritise vital activities and defer other programmes. Moreover, some of the support infrastructure and equipment remain inadequate and require upgrade to better field operations. The main challenge outside is the restricted land available due to fast land-use shift. The development of Sidoarjo as an industrial and residential district causes green and agricultural land gradually converted into built-up areas. Residential areas represent 46.54% of the total land use but the public green open space is barely 0.04% which brings considerable hurdles to RTH expansion. This has led to DLHK often having to use small and

fragmented plots along roadsides, public buildings and government held assets instead of obtaining larger areas for green space development. A further key challenge is the comparatively little knowledge among the population of environmental stewardship. Despite warning signs and maintenance efforts, littering, vandalism, damage to plants and abuse of park services continue to occur. Such behaviours not only decrease the quality of public green areas, but also increase maintenance expenses and diminish the sustainability of RTH administration. These findings are similar with the research conducted by Muhimma and Yusuf (2023) who stated that land scarcity and inadequate public knowledge are the major external constraints to the provision of public green open space in Sidoarjo Regency.

C. Direction

In Mulgan's framework, direction refers to an organization's ability to mobilize resources, coordinate stakeholders, and establish clear priorities to achieve strategic objectives [10]. In the context of public Green Open Space (RTH) development, DLHK Sidoarjo operates within a well-defined and integrated policy framework that provides clear direction for implementation. At the global level, RTH development aligns with SDG 11 on Sustainable Cities and Communities, particularly Target 11.7 concerning inclusive and accessible public spaces. This commitment is reinforced nationally through Law No. 26 of 2007 on Spatial Planning, which mandates that urban areas allocate 30% of their land for Green Open Space, consisting of 20% public RTH and 10% private RTH [5]. At the regional level, the Sidoarjo Regency Medium-Term Regional Development Plan (RPJMD) 2025–2029 identifies park development and revitalization as a flagship program to improve environmental quality and urban livability. In addition, Regent Regulation No. 28 of 2022 formally establishes DLHK's authority and responsibilities in managing public RTH.

These policy directions are operationalized through the DLHK Strategic Plan (Renstra) and the RTH Master Plan, which translate broader development objectives into specific programs, priorities, and implementation targets. As confirmed by the

Head of the Cleanliness and Green Open Space Division, all RTH development activities are guided by these planning documents, ensuring consistency between policy objectives and implementation practices.

The findings indicate that the direction dimension has been implemented effectively through the existence of a coherent policy hierarchy linking global commitments, national regulations, regional planning documents, and agency-level strategies. This finding is consistent with Kamila, Albani, and Rusdiana (2025) who state that the successful and sustained execution of RTH development programmes [17] requires a clear policy direction and regulatory backing. Therefore, the Direction indicator may be viewed as one of the strongest aspects of DLHK's public strategy. It provides a clear and reasonable basis for RTH development in Sidoarjo Regency.

D. Action

Mulgan (2009) argues that effective strategies must be translated into concrete actions through appropriate policies, programs, and implementation mechanisms [10]. In the case of public Green Open Space (RTH) development, DLHK Sidoarjo has implemented a range of strategic actions aimed at expanding RTH coverage, improving environmental quality, and increasing public accessibility.

The first strategic step is the compilation of the RTH Master Plan, which is the main reference for planning and development activities. From this document, DLHK determines priority places for RTH development based on population density, availability of existing green space and community needs. This technique makes sure that scarce resources are targeted towards regions of highest demand and maximum impact.

Second, we will revitalise existing green space. Instead than focusing on new development, DLHK has focused on renewing underutilised parks with upgraded facilities and landscape renovation. Some prominent examples include the revitalisation of Taman ASEAN to Taman Tara and the upgrading of Sidoarjo Town Square that have enhanced visitor activity and community usage. The projects suggest that revitalisation can be a good way to improve the quality and functioning of public green spaces and reduce the need to acquire new land.

Third, DLHK has expanded RTH coverage through the utilization of public facility land (fasum) transferred by housing developers to the local government. This approach provides a practical solution to land scarcity by converting available public assets into green open spaces. Fourth, DLHK has built green corridors on road medians, pedestrian pathways and riverbanks in order to distribute urban greenery throughout the regency. Fifth, community education programmes have been implemented through direct outreach, social media campaigns and instructional materials to promote public engagement in maintaining and protecting green spaces.

Overall, these acts provide a complete approach and tackle the quantitative and qualitative aspects of RTH development. The results support Sultan, Putra, et al. (2025) that parks development and revitalisation are significant to increase the provision of urban green space and in line with Muhimma and Yusuf (2023) that RTH development in Sidoarjo is carried out with various and quality-oriented programmes [18]. Nevertheless, challenges remain, particularly in relation to land acquisition, uneven program implementation across sub-districts, and the need to strengthen public awareness and participation. These constraints indicate that, although the Action dimension has been implemented effectively, further efforts are required to maximize its long-term impact.

E. Learning

Mulgan (2009) emphasizes that effective public strategy requires continuous learning through monitoring, evaluation, and adaptation to ensure that organizational actions remain aligned with strategic objectives [10]. In the context of public Green

Open Space (RTH) development, DLHK Sidoarjo has established several mechanisms to support organizational learning and policy improvement.

Routine monitoring of RTH conditions in the regency is one of the main mechanisms. DLHK performs routine field inspections to evaluate parks and green space physical conditions, identify new issues, and determine if current facilities continue to be delivering benefits to the community. Monitoring efforts are based on a territory-based supervision system in which specific management areas are assigned to designated coordinators, who are therefore able to identify and report field issues more quickly.

DLHK also has special work teams to manage vegetation, facilities, lighting facilities and tree preservation. The periodical evaluation sessions enable the workers at different levels of the organisation to discuss the findings of these teams. The results of monitoring and evaluation are subsequently used as inputs for operational improvements and future policy decisions. This process demonstrates the existence of a feedback mechanism through which field observations are translated into corrective actions and program adjustments.

The findings indicate that DLHK has developed a functioning organizational learning system that supports adaptive management of public Green Open Space. Regular monitoring, evaluation meetings and follow-up measures help the agency to identify difficulties and enhance the programme execution in time. However, there are some limits. Monitoring activities are still periodic rather than real-time, which can lead to delays in responding to emerging issues. Moreover, the role of the community is still rather limited in the appraisal process, yet local inhabitants are the main consumers and beneficiaries of public green spaces. Increased involvement of community people could provide useful feedback for the improvement of the quality and sustainability of RTH management.

These results are consistent with Putri, Fatwati and Ma'ruf (2024) that monitoring systems and public participation are still vital to be improved in local government green space management, while there are already mechanisms for its management [19]. The evidence from the Learning dimension cumulatively shows that DLHK has institutionalised monitoring and evaluation methods, but the effectiveness of organisational learning might be improved by increased community engagement and more responsive monitoring mechanisms.

V. Conclusion

This study concludes that the Department of Environment and Hygiene (DLHK) of Sidoarjo Regency has implemented a relatively comprehensive public strategy for Green Open Space (RTH) development that aligns with sustainable urban development objectives and supports the achievement of SDG 11, particularly Target 11.7 on inclusive and accessible public green spaces. Based on Geoff Mulgan's (2009) public strategy framework, the strategy demonstrates varying levels of effectiveness across the dimensions of Purposes, Environment, Direction, Action, and Learning.

The findings show that DLHK has a clear strategic direction, supported by a consistent policy framework, inter-agency cooperation, and a series of implementation programmes, including park revitalisation, RTH expansion, green corridor development, and community outreach. In addition, routine monitoring and evaluation methods have allowed for organisational learning and ongoing programme improvement. Of the five elements, Direction was the strongest element of the strategy, with clear regulatory and planning guidelines existing at national and regional levels.

However, the success of RTH development is still constrained by other problems, such as restricted land availability, resource constraints, continuing land-use shift, and relatively low levels of public participation and environmental awareness. Thus, the future development of RTHs should focus on improving multi-stakeholder collaboration, maximising the utility of available land resources, and enhancing community engagement to improve the sustainability and effectiveness of future RTH development activities. These changes are important to speed progress towards the mandated public RTH target and to help the realisation of a more sustainable, inclusive and environmentally resilient urban environment in Sidoarjo Regency.

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