

Policy Analysis of Regional Regulations on Spatial Planning for Green Open Space Needs in Magelang Regency

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Abstract

This study aims to examine the policy of Magelang Regency Regional Regulation Number 5 of 2011, as implemented by the Magelang Regency Environmental Agency, and to describe the efforts undertaken by the agency in managing green open spaces. The background of this research is the suboptimal maintenance and management of green open spaces in Magelang Regency by the Environmental Agency. The primary focus of this study is on the efforts to fulfill the 30% land utilization target for green open spaces that benefit the community of Magelang Regency. This research is normative-descriptive in nature. Primary data were obtained through interviews with the Magelang Regency Environmental Agency. Meanwhile, secondary data were gathered from legal literature, statutory regulations, and various information sources relevant to the study. Data analysis was conducted qualitatively, referring to the management obligations and efforts to fulfill the community's right to living space. The results of this study are expected to contribute to the understanding of policy analysis based on regional spatial planning regulations and the efforts made to meet the minimum land utilization requirement for green open spaces.

Keywords: Regional regulation, spatial planning, green open space, policy implementation, environmental management.



INTRODUCTION

Indonesia, as one of the world's most populous developing nations,¹ faces increasingly complex urbanization challenges due to rapid population growth² and intensive land-use pressures. This phenomenon leads to environmental degradation,³ reduced ecosystem carrying capacity, and heightened socio-economic vulnerabilities. Drawing on urban ecology perspectives, physical and non-physical development in Indonesia generates multifaceted impacts that threaten environmental sustainability.⁴ To address this, Indonesia's national development paradigm emphasizes integrated, directed, phased, and sustainable planning, grounded in the Archipelagic Outlook (Wawasan Nusantara) and National Resilience frameworks, as stipulated in Law No. 26 of 2007 on Spatial Planning. This policy aims to maintain a balance between growth and the preservation of living environments.⁵

Sustainable development aligns with the national aspirations outlined in the Preamble to the 1945 Constitution,⁶ namely protecting the entire nation, advancing general welfare, fostering intellectual life, and contributing to world order based on peace and social justice. Development must account for the needs of current and future generations through prudent resource management. Law No. 32 of 2009 on Environmental Protection and Management defines the living environment as an integrated spatial unit encompassing all biotic, abiotic, and human behavioral elements that influence ecosystem continuity and the well-being of living beings. A key instrument for realizing this is the provision of Green Open Spaces (GOS), mandated by Law No. 26 of 2007 to comprise at least 30% of urban areas (20% public and 10% private) to reduce pollution, improve air quality, and strengthen urban resilience against climate change.⁷

¹ Irfani Fithria Ummul Muzayanah et al., "Population Density and Energy Consumption: A Study in Indonesian Provinces," *Heliyon* 8, no. 9 (September 2022): e10634, <https://doi.org/10.1016/j.heliyon.2022.e10634>; Irsan Hardi et al., "Green Human Development in Indonesia: Role of Renewable and Nonrenewable Energy," *Chinese Journal of Population, Resources and Environment* 23, no. 3 (September 2025): 397–411, <https://doi.org/10.1016/j.cjpre.2025.07.010>.

² Purwantiningrum Purwantiningrum, Ernani Rustiadi, and Didit Okta Pribadi, "Mapping the Spatial Pattern of Ecosystem Services in the Jabodetabek Metropolitan Area, Indonesia: Could Peri-Urban Areas Support the Urban Core?," *Regional Sustainability* 6, no. 6 (December 2025): 100276, <https://doi.org/10.1016/j.regsus.2025.100276>.

³ Purwantiningrum, Rustiadi, and Pribadi.

⁴ Deah Rama Anugrah et al., "Analisis Permasalahan Tata Ruang Di Indonesia," *Jurnal Adijaya Multidisplin* 1, no. 05 (October 23, 2023): 1045–1051–1045–1051; Irwan Parlaungan Panjaitan, "Implementasi Kebijakan Dan Intervensi Politik Terkait Lingkungan Hidup Dalam Pembangunan Berkelanjutan," *Parlemitter: Jurnal Studi Hukum Dan Administrasi Publik* 1, no. 2 (June 22, 2024): 34–54, <https://doi.org/10.62383/parlemitter.v1i2.47>.

⁵ Erna Ismiyani, Budi Winarno, and Marina Ramadhani, "Penataan Ruang Kota Berbasis Lingkungan Di Kota Surakarta: Implementasi Dan Dampaknya," *Jurnal Bengawan Solo Pusat Kajian Penelitian Dan Pengembangan Daerah Kota Surakarta* 2, no. 2 (December 20, 2023): 116–29, <https://doi.org/10.58684/jbs.v2i2.59>.

⁶ Achmad Adi Surya Guntur Silam et al., "Community Participation in Indonesia in Preservation and Continuation of Environmental Protection and Management," *Protection: Journal Of Land And Environmental Law* 1, no. 3 (March 31, 2023): 207–20, <https://doi.org/10.38142/pjlel.v1i3.813>.

⁷ Herlina Merinda and Yekti Mei Mahanani, "Policy Optimization in Providing Green Open Spaces by Urban Government: A Comparative Study in Streetscape Design Approaches," *Journal of Placemaking and Streetscape Design* 2, no. 2 (January 31, 2025), <https://doi.org/10.61511/jpstd.v2i2.2025.1486>; Doni Virgiawan et al., "Spatial Analysis of Public Green Open Space Availability Based on Area and Population in Tapin Utara Sub-District," *Sustainability (STPP) Theory, Practice and Policy* 5, no. 1 (July 5, 2025): 27–41, <https://doi.org/10.30631/sdgs.v5i1.3157>.

Urban and semi-urban areas continue to evolve dynamically,⁸ yielding benefits such as comprehensive infrastructure provision while simultaneously producing negative impacts in the form of green space erosion, which contributes to air, water, soil pollution, and biodiversity decline (Branch, 1995). GOS is defined in Article 1, Clause 31 of Law No. 26 of 2007 as elongated or clustered areas dominated by vegetation, serving ecological, protective, and recreational functions.⁹ Decentralization grants regions the authority to formulate Regional Regulations (Perda) that align with national interests while accommodating local wisdom (Bustanuddin, 2013). However, gaps frequently emerge between policy provisions and field implementation, particularly in ensuring public GOS accessibility amid the conversion of productive lands into settlements or infrastructure.

Magelang Regency, as an autonomous region in Central Java Province comprising 21 sub-districts, manages an area of approximately 1,085 km² dominated by agricultural, plantation, and forestry lands. Based on Magelang Regency Regional Regulation No. 7 of 2024 on the 2024-2044 Spatial Plan for Magelang Regency, the regency holds authority to establish spatial structure and pattern policies, including strategies for urban and rural area development. Although the regency received the Adipura Award in 2017 in recognition of its environmental cleanliness and management efforts, challenges persist in fulfilling GOS requirements, where protected and conservation lands cover significant areas, but public GOS is often inadequately mapped and tends to be privately managed for tourism purposes. Recent evaluations indicate that private GOS has been met, while public GOS still requires acceleration in line with provincial programs, with spatial patterns suggesting approximately 21% availability in the regency's urban areas.

This study aims to critically analyze the effectiveness of regional regulations on spatial planning in Magelang Regency in meeting green open space needs, exploring the extent to which these policies bridge the gap between national mandates and local implementation, including the identification of structural barriers and recommendations for improvement. This policy analysis approach is expected to reveal the dynamics between regulations and green land management practices in semi-urban contexts.

The research benefits include contributions to policymakers in enhancing regulatory coherence for sustainable planning, enriching environmental law literature in the decentralization era, and providing empirical insights for other Indonesian regions facing similar pressures, thereby supporting equitable, resilient, and environmentally oriented development.

METHOD

This study employs an empirical legal research design with a descriptive qualitative approach to analyze the implementation of regional spatial planning regulations in Magelang Regency, focusing on green open space (GOS) provisions under Regional Regulation No. 7 of 2024 on the 2024-2044 Spatial Plan for Magelang Regency. Empirical legal research is utilized to explore real-world phenomena and social realities, describing variables related to the research problem without generalizable inferences. Data collection was conducted at the Magelang Regency Environmental Agency (Dinas Lingkungan Hidup), selected as the primary site due to its central

⁸ Reza Riqullahiansyah Widyatna Winada and Ajeng Nugrahaning Dewanti, "Transformasi Wilayah Peri Urban Kecamatan Balikpapan Timur Berdasarkan Aspek Fisik, Sosial, Dan Ekonomi," *COMPACT: Spatial Development Journal* 2, no. 1 (April 28, 2023), <https://doi.org/10.35718/compact.v2i1.852>.

⁹ Elvida Yosefi Suryandari and Subarudi Subarudi, "Implementasi Peraturan Pemerintah Nomor 63 Tahun 2002 Tentang Hutan Kota," *Jurnal Analisis Kebijakan Kehutanan* 11, no. 3 (December 2014): 297–309, <https://doi.org/10.20886/jakk.2014.11.3.297-309>.

role in environmental management and spatial policy enforcement. This approach facilitates an in-depth examination of policy effectiveness by integrating secondary data from legal documents and literature with primary field observations, ensuring a grounded understanding of discrepancies between regulatory mandates and on-ground practices.

Primary data were gathered through semi-structured interviews with key informants from the Environmental Agency, using a pre-prepared questionnaire to elicit insights on GOS allocation, implementation challenges, and compliance with the 30% national threshold. Secondary data comprised legal texts, scholarly books, journal articles, and reports related to spatial planning and green spaces, sourced from reputable databases and official repositories. Data analysis followed a qualitative framework, involving thematic coding, triangulation for validity, and content analysis to evaluate policy coherence and gaps, as per Miles, Huberman, and Saldana (2014). Ethical considerations included obtaining informed consent from participants and ensuring data confidentiality, aligning with international standards for social science research.

RESULT AND DISCUSSION

The Role of Regional Government in Spatial Planning and Green Open Space Management for Sustainable Development

Description of Local Government

The term "government" (pemerintah) can be understood as "the authoritative direction and administration of the affairs of men/women in a nation state, city, etc." In the Indonesian context, it refers to the authoritative direction and administration of community activities within a nation, city, and so forth. Government can also be defined as "the governing body of a nation, state, city, etc.," which is the institution or body that administers the state, state government, or city (Tjandra W. Riawan, 2009:197). In a broad sense, government encompasses all powers: the legislative, executive, and judicial powers. In a narrow sense, however, government refers only to the executive branch (Tjandra W. Riawan, 2009:197). Article 1, point 2 of Law Number 23 of 2014 concerning Regional Government explains that regional government is the administration of governmental affairs by the regional government and the Regional House of Representatives (DPRD) based on the principles of autonomy and assistance tasks, with the broadest possible autonomy within the system and principles of the Unitary State of the Republic of Indonesia, as mandated by the 1945 Constitution of the Republic of Indonesia.

In accordance with the 1945 Constitution of the Republic of Indonesia, as elaborated in Law Number 32 of 2004, regional governments have the authority to regulate and manage their own governmental affairs based on the principles of autonomy and assistance tasks. Regional governments include Governors, Regents, or Mayors, and regional apparatuses as elements of regional government administration. In this regard, the role of the regional government encompasses all actions and measures undertaken to implement regional autonomy as a right, authority, and obligation to regulate and manage governmental affairs and the interests of local communities independently, in accordance with statutory regulations. The grant of broad autonomy to regions is aimed at accelerating the realization of community welfare through improved services, empowerment, and community participation. Furthermore, through broad

autonomy, regions are expected to enhance their competitiveness by adhering to the principles of democracy, equity, justice, privileges and specificities, as well as regional potential and diversity within the framework of the Unitary State of the Republic of Indonesia. To improve the efficiency and effectiveness of implementing regional autonomy, regional governments must consider the relationships among different levels of government and between regional governments, as well as regional potential and diversity.

Regional Regulations

The unitary state system illustrates that the relationship between levels of government (central and regional) operates under an inclusive authority model, wherein the authority of regional governments remains constrained by the central government through a control system aimed at maintaining unity. This format of a unitary state has influenced the nature of the relationship between the central and regional governments in the Republic of Indonesia to date. The established relationship has always been built on the premise that regions function as extensions of the central government (Sri Soemantri Martosoewignjo, 1998:52). Regional governments constitute a subsystem of the government of the Unitary State of the Republic of Indonesia.

Consequently, all goals and ideals mandated by the Preamble to the 1945 Constitution of the Republic of Indonesia also represent the aspirations and objectives that regional governments must achieve. With the implementation of the decentralization principle, regional governments assume control over the administration of governance in their respective regions. According to the provisions stipulated in Article 18 Paragraph (6) of the 1945 Constitution of the Republic of Indonesia, "Regional governments have the right to establish regional regulations and other regulations to implement autonomy and assistive tasks." Therefore, the binding force of Regional Regulations is limited to aspects of regional interest; however, this locally binding applicability does not imply that regional governments are exempt from central government oversight. The authority to formulate regional regulations is granted to regions, subject to ongoing legal supervision and guidance by the central government through competent government institutions, namely the Ministry of Law and Human Rights of the Republic of Indonesia.

Green Open Space

Green open space is a fundamental component of healthy and sustainable environmental management.¹⁰ Law Number 26 of 2007 concerning Spatial Planning defines Green Open Space (GOS) as elongated areas, pathways, or clusters where the land use is predominantly open, serving as a medium for plant growth, whether naturally occurring or intentionally cultivated. These areas are established based on the specific needs and designated functions of a region. Their purpose extends beyond preserving and balancing environmental conditions or surrounding ecosystems to also providing venues for social activities integrated with natural aesthetics.

¹⁰ O C Dewi et al., "Green Open Space: Awareness for Health or Sustainability?," *IOP Conference Series: Earth and Environmental Science* 120 (March 2018): 012014, <https://doi.org/10.1088/1755-1315/120/1/012014>; Peter Barlow, Sean Lyons, and Anne Nolan, "How Perceived Adequacy of Open Public Space Is Related to Objective Green Space and Individuals' Opinions of Area-Level Quality," *Sustainability* 13, no. 15 (July 30, 2021): 8516, <https://doi.org/10.3390/su13158516>.

According to the Minister of Public Works Regulation Number 05/PRT/M/2008 concerning Guidelines for the Provision and Utilization of Green Open Space in Urban Areas, green open space is defined as elongated areas, pathways, or clusters with predominantly open use, serving as a medium for plant growth, whether naturally occurring or intentionally planted.

Spatial Planning

According to D.A. Tisna Amidjaja, space is the physical manifestation of a region's geographic and geometric dimensions, serving as a container for humans to carry out their life activities in pursuit of a decent quality of life. The concept of space inherently positions it as an integral part of all human activities, thus necessitating regulations for its arrangement. The Regional Regulation (Peraturan Daerah/Perda) concerning the Spatial Plan (Rencana Tata Ruang Wilayah/RTRW) in Magelang Regency was formulated in response to the need to regulate spatial utilization within the region. The primary objective of this policy is to ensure that regional development proceeds in a balanced, sustainable manner, aligned with local potential and characteristics. The RTRW is a crucial instrument in spatial management aimed at improving the quality of life for the community, protecting the environment, and optimizing land use.

Spatial utilization constitutes the implementation process of the spatial plan outlined in the Magelang Regency RTRW. This utilization aims to optimize land use according to its designated functions, whether for agricultural activities, residential areas, industrial zones, or environmental conservation. Spatial utilization must also maintain a balance between development and environmental preservation, ensuring that development does not degrade vital ecosystems and natural functions. This is manifested in the realization of protected forests, which includes tree planting for conservation purposes, as well as the rehabilitation of critical and abandoned lands as part of developing buffer zones associated with protected forest areas.

Spatial utilization control is exercised to ensure that space usage adheres to the plans established in the Spatial Plan.¹¹ This control involves various mechanisms, such as permitting, monitoring, and law enforcement. Such control is essential to prevent deviations in land use that could disrupt the environmental balance and the integrity of regional spatial planning.

Efforts of the Magelang Regency Government to Fulfill 30% Green Open Space

A viable environment characterized by healthy, clean, and sustainable ecological conditions constitutes an essential component of the fundamental rights of every Indonesian citizen.¹² The right to a good and healthy environment is recognized as part of human rights and therefore requires active protection and fulfillment by the state,¹³ including regional governments. In this

¹¹ Dewa Gd Tresna Dharma, "Pengendalian Pemanfaatan Ruang Dalam Penataan Ruang," *Jurnal Analogi Hukum* 5, no. 2 (February 22, 2024): 132–37, <https://doi.org/10.22225/ah.5.2.2023.132-137>.

¹² Silam et al., "Community Participation in Indonesia in Preservation and Continuation of Environmental Protection and Management"; Sri Wahyuni, "The Process of Reforming of Environmental Aspect with The Sustainable Management for Indonesia's Environmental Law," *Eduvest - Journal of Universal Studies* 3, no. 3 (March 20, 2023): 655–66, <https://doi.org/10.59188/eduvest.v3i3.774>.

¹³ Bagus Gede Ari Rama, "The Right to a Clean Tourism Environment: A Perspective on Human Rights and Tourism," *JIHAD : Jurnal Ilmu Hukum Dan Administrasi* 7, no. 1 (March 1, 2025), <https://doi.org/10.58258/jihad.v7i1.8410>.

regard, environmental management must be carried out in an integrated, systematic, and sustainable manner to ensure that development activities do not compromise ecological balance. Such management also functions as a preventive mechanism against environmental pollution and environmental degradation that may arise from uncontrolled development activities. Consequently, the concept of a viable environment is inseparable from the availability and proper management of Green Open Space, which plays a vital role in maintaining environmental quality and ecological sustainability.

Green Open Space serves not only as an ecological buffer that supports environmental balance but also as an important element in improving the quality of life of urban communities.¹⁴ In urban areas that experience rapid population growth and infrastructure expansion, the existence of adequate green open space becomes increasingly crucial. According to Mrs. Heny Murdiyaningrum from the Environmental Agency of Magelang Regency, the provision of Green Open Space has become increasingly urgent in the context of rapid urban development. The continuous expansion of residential areas, commercial zones, and industrial buildings has significantly reduced the availability of open land that can function as green space. This condition presents a considerable challenge for regional governments in maintaining environmental balance while simultaneously supporting regional development and economic growth.

The rapid conversion of land for housing and industrial purposes often leads to a decline in environmental quality if not accompanied by proper spatial planning and environmental management. Therefore, the provision of green open space must become a priority in regional development policies. In response to this situation, policymakers at the regional government level are required to consistently implement policies that ensure the availability of adequate green open spaces within urban areas. This commitment is necessary to maintain ecological sustainability, improve air quality, reduce urban heat effects, and provide public spaces that support social interaction and recreational activities for the community.

As part of the efforts to increase the proportion of green open space in urban areas, the Magelang Regency Government implements various policies based on the Regional Spatial Planning Regulation. This regulation serves as a legal instrument that governs the planning, provision, and management of green open spaces within the regional spatial planning framework. Through this regulatory framework, the government seeks to ensure that the provision of green open space is carried out systematically and in accordance with applicable statutory provisions. The Regional Spatial Plan (RTRW) functions as a strategic guideline for spatial development in the region, including the allocation of land designated for public green open spaces, environmental conservation areas, and other ecological functions.

¹⁴ Nurrohman Wijaya and Delia Christianti, "Assessing Publicness in Urban Green Open Spaces: Lessons from Jakarta, Indonesia," *Journal of Urban Management* 15, no. 1 (March 2026): 360–74, <https://doi.org/10.1016/j.jum.2025.07.006>; Cynthia E.V Wuisang et al., "Characteristics of Public Green Open Spaces and Efforts In Enhancing The Quality and Function Using Tri-Valent Approach: Case of Manado City, Indonesia," *Eduvest - Journal of Universal Studies* 3, no. 2 (February 7, 2023): 309–26, <https://doi.org/10.59188/eduvest.v3i2.741>.

Furthermore, the implementation of green open space policies is carried out through coordination among relevant government agencies and through the integration of environmental considerations into regional development planning. By aligning spatial planning policies with environmental sustainability objectives, the Magelang Regency Government aims to gradually fulfill the national target of allocating at least 30 percent (30%) of urban areas for green open space. This effort reflects the government's commitment to ensuring that urban development remains balanced with environmental preservation, thereby creating a healthier, more sustainable, and livable environment for present and future generations.

CONCLUSION

An evaluation of the Green Open Space policy implementation in Magelang Regency reveals significant challenges, notably land scarcity in urban areas and the need for enhanced maintenance and supervision requiring greater budgetary allocation and community participation. Despite these obstacles, the Magelang Regency Government demonstrates a strong commitment to achieving the 30% Green Open Space target amidst rapid urban growth through concrete measures such as the development of city parks, revitalization of existing green areas, collaboration with the private sector, and village greening programs. Efforts to control spatial utilization are also carried out through licensing mechanisms, monitoring, and law enforcement to ensure conformity with the Regional Spatial Planning Regulation and to maintain a balance between development and environmental preservation.

To optimize the achievement of this target, active community participation in maintaining and preserving Green Open Spaces must be continuously enhanced through sustained socialization regarding the importance of green areas. Furthermore, stricter supervision must be implemented to ensure that existing Green Open Spaces remain well-maintained, comfortable, and functional for the public. Moving forward, it is expected that every development project will contribute to the addition of public Green Open Spaces that also function as water catchment areas, with the selection of plant species or trees that are proportional and suitable to local environmental conditions.

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