

LOCAL GOVERNMENT POLICY IN THE SPATIAL PLANNING OF AUTONOMOUS REGIONS: BETWEEN DEVELOPMENT INTERESTS AND ENVIRONMENTAL SUSTAINABILITY

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Abstract: Regional spatial planning is important in achieving sustainable development in autonomous regions. However, in its implementation, spatial planning policies often contradict the public interest, economic growth, and efforts to preserve the environment. It aims to evaluate how local governments manage spatial planning within the framework of regional autonomy and assess the extent to which the policies implemented can create a balance between regional growth and environmental protection. The research method uses the qualitative approach and involves case studies in various fields that face significant development pressures, such as industry, mining, and tourism. The study results show that although local governments can set Regional Spatial Plans (RSP), political factors, weak oversight, and investment interests often override environmental aspects. Local government policies are efforts to unite development interests with ecological conservation. This article concludes that the effectiveness of regional spatial management policies in the regions is highly dependent on institutions' ability, management quality, community involvement, and political courage in balancing the interests of development and preservation. Improved rules, the incorporation of spatial information systems, and enhanced cooperation between parties are essential to achieve fair, sustainable, and change-sensitive spatial planning at the local level. This research suggests strengthening the capabilities of regional institutions, unifying appropriate spatial data, and community participation in the spatial planning and monitoring process.

Keywords: Development Interests, Environmental Sustainability, Local Government, Spatial Planning.

1 Introduction

One of the important tools for achieving sustainable development in Indonesia is spatial planning. Local governments have broad autonomy to manage their territories, including creating and implementing spatial planning policies. This allows regions to determine the direction of development that suits their capabilities and characteristics. However, in real life, this authority often conflicts between environmental con-

servation demands and encouraging economic growth (Firman, 2016).

Local governments are given significant authority to establish spatial planning policies, which are strategic policy tools intended to regulate the optimal use of space by environmental carrying capacity and development needs. This is regulated in Law Number 23 of 2014 concerning Regional Government and Law Number 26 of 2007 concerning Spatial Planning (Tenrisau, 2019). However, in real life, spatial planning policies

often conflict between two key interests: one encourages economic growth through infrastructure development, industrial estates, and investment, and the other maintains environmental sustainability and ecosystem balance. (Hudalah & Firman, 2012).

Social inequality and imbalance between development and environmental conservation. As a result of the transfer of protected area functions, spatial conflicts between sectors and community groups are increasing in several autonomous regions in Indonesia. More than 60% of RSP in districts and cities are not based on the environment, according to research conducted by the [Kementerian Lingkungan Hidup dan Kehutanan \(2021\)](#). This has the potential to accelerate the environmental crisis. Instead, national strategic and urban development often ignore ecological justice and sustainability.

Local governments need to formulate an ideal form of spatial planning policy that encourages development and ensures environmental sustainability. Amid the complexity of spatial governance involving various interests, spatial planning must be an integrative instrument that prioritizes the principles of spatial justice, community participation, protection of ecological areas, and adaptation to climate change (Sachs, 2008). Without proper policy formulation, regional autonomy in spatial planning has the potential to become a tool for legalizing space exploitation, which is contrary to the ideals of sustainable development as stipulated in the Sustainable Development Goals (SDGs) and the 2025-2029 National Medium-Term Development Plan (RPJMN).

Development in the regions often ignores environmental problems such as in the peak area of Bogor which is under pressure due to the large-scale construction of villas and tourist attractions and does not pay attention to the principles of conservation, this is the lack of spatial planning that focuses on ecology and weak supervision from the local government in balancing development with environmental conservation. (Jaya et al., 2021)

Regional Autonomy Regulation is stipulated by Law No. 23 of 2014 concerning Regional Government, which gives the regions authority to manage local government affairs in the Regions, including regional spatial planning issues, if local government policies have not followed adequate institutional capacity planning capabilities. In this case, the spatial arrangement often overlaps with laws and regulations and can cause conflicts of interest between economic actors, bureaucracy, and local communities.

Regional spatial planning is increasingly complex when associated with the concept of sustainable development in the region, local governments are required not only to focus on economic growth and physical development, but must consider a lot of social aspects and ecological aspects in a balanced way, this in spatial planning is not only about land allocation, but must involve strategic choices in maintaining ecology and the quality of life of the community. (Danoedoro, 2014)

The community's participation in formulating spatial planning policies is still weak, and the low public knowledge of a good and healthy environment causes a lack of social control in the face of adverse regional policies and environmental destruction. On the other hand, community participation in drafting regional spatial plans is still formal. (Dewi et al., 2021; Dwiyanto, 2014)

Based on this background, this research is important to explore how local government policies in spatial planning can be ideally designed to bridge the interests of development and environmental conservation simultaneously and sustainably. The objectives of this study are twofold: first, to analyze and describe how spatial planning policies implemented by local governments in autonomous regions have been directed to meet the needs of regional development; and second, to examine the extent to which these policies have integrated the principles of environmental sustainability and the carrying capacity of ecosystems in regional spatial planning.

The urgency of this research lies in its potential theoretical and practical contributions. Theoretically, it is expected to explain the legal dynamics of regional policies in the context of autonomy and environmental governance. Practically, the findings are expected to provide valuable insights for regional policymakers in formulating fair and sustainable spatial planning policies that prioritize long-term interests. Considering that regional spatial planning is a strategic instrument for local governments to regulate the optimal use of space in line with environmental capacity and development needs, yet in practice many regions face inequality between development and conservation interests resulting in spatial conflicts, uncontrolled land conversion, and ecological degradation an in-depth scientific study is therefore urgently needed to identify the extent to which spatial planning policies are effectively implemented at the regional level.

Based on the background that has been described, this research is focused on answering the following

main problems:

1. How are local government policies in the spatial arrangement of autonomous regions currently implemented to meet the needs of regional development?
2. To what extent has the spatial planning policy by the local government paid attention to aspects of environmental sustainability and the ecological carrying capacity of the region?

2 THEORETICAL FRAMEWORK

Environmental law theory. This theory views law as the main instrument in ushering in human relations with the environment, including in the spatial planning of autonomous areas. Environmental law provides a normative framework to ensure the use of space beyond the carrying capacity of ecosystem funds. (Douglas, 1992)

Public Policy Theory is used to understand public policy formulation, implementation, and evaluation, including spatial planning. In this theory, spatial policy results from the interaction between politics, bureaucracy, and society in responding to development and environmental issues. (Dunn, 2017)

Legal Theory Spatial Planning. This theory sees spatial planning as a legal instrument that regulates the use of space fairly and sustainably. In this context, spatial planning policies must be subject to legality, social justice, and environmental protection principles.

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3 RESEARCH METHODS

This research is a normative-empirical legal research (socio-legal research), which combines normative (doctrinal) legal approaches and empirical legal approaches. The normative approach examines legal regulations related to spatial planning, regional autonomy, development, and environmental protection. In comparison, an empirical approach is used to understand the implementation of spatial planning policies in the region, including the interaction between government actors, communities, and the private sector in its implementation. (Mustomi et al., 2024)

The data in this research consist of several primary sources. First, statutory regulations, including Law

No. 26 of 2007 on Spatial Planning, Law No. 23 of 2014 on Regional Government, and Law No. 32 of 2009 on Environmental Protection and Management, as well as regional regulations (RSP bylaws). In addition, the study draws on Regional Spatial Planning (RSP) documents, Strategic Environmental Assessments (SEAs), Environmental Impact Assessment (EIA) reports, and court decisions related to spatial planning disputes.

The data collection techniques employed include four approaches. The first is library research, which examines legal theories, concepts, and regulations relevant to the study. The second is interviews with key informants and policy implementers to obtain primary data on implementation in practice. The third technique is documentation, which involves gathering official documents, archives, reports, and media coverage. Finally, participatory observation is carried out to understand policy actors' factual conditions and behavior in the context of spatial planning implementation.

The collected data are analyzed using two complementary approaches. The first is normative-qualitative analysis, which interprets legal norms and policies based on legal principles, spatial planning principles, and sustainable development. This includes an examination of both the regulatory framework and the actual policy practices in the regions. The second is interactive analysis using the Miles and Huberman model, which consists of data reduction, presentation, and conclusion/verification. The study emphasizes identifying gaps between legal norms and the realities of policy implementation in the field.

To ensure the validity of the findings, this study applies source triangulation by comparing interview results, policy documents, and field data. In addition, member checks are conducted by clarifying interview findings with the informants to confirm accuracy and reliability.

4 DISCUSSION

4.1 Regional Government Policy in the Spatial Arrangement of Autonomous Regions and Implementation to Meet Regional Development Needs

Local government policies in the spatial planning of autonomous regions are still dominated by the orientation of meeting regional development needs. This aligns with the national agenda that encourages autonomous areas to increase their contribution to economic growth by optimizing space utilization. This

study found that the implementation of spatial planning policies that are too development-oriented has an impact on the occurrence of an imbalance between economic aspects and environmental conservation.

In protected areas as water catchments and green open spaces are increasingly pushed by the exclusion of residential areas and tourism projects with infrastructure, this shows that land conversion in buffer areas such as Cisarua sub-district, Megamendung sub-district continues to increase which ultimately contributes to a decrease in environmental quality and an increase in the risk of disasters such as floods and landslides.

Spatial planning policies related to environmental conservation in the field are still weak due to a lack of supervision, limited capacity of regional institutions, and low public participation in policy formulation. In addition, environmental instruments such as strategic environmental assessments and environmental impact analysis tend to be used as administrative formalities without substantive implementation, so the control of development's impact on space and the environment does not run optimally. (Sepriani, 2020)

This research shows that spatial planning policies at the regional level, especially in Bogor Regency, are currently being implemented to meet regional development needs. This can be seen from several priority projects, such as road development, the development of strategic economic zones, and the expansion of residential areas facilitated through adjustments to regional RSP and DSP. (Bappeda Kabupaten Bogor, 2024)

However, the policy has not fully paid attention to the balance of environmental conservation. Field data and interview results found that there is still massive land conversion, especially in areas that should function as protected areas and water catchment areas. The inequality in implementing spatial planning policies leads to increased vulnerability to ecological disasters such as floods, landslides, and a decline in environmental quality in general (Kementerian Lingkungan Hidup dan Kehutanan, 2021; WALHI Jawa Barat, 2023).

The following table summarizes the comparison between development orientation and environmental conservation in the implementation of spatial planning policies in Bogor Regency:

See Table 1

The table 1 above shows that although regional development has accelerated, environmental conservation has not received equal attention in implementing

spatial planning policies. This situation, if not corrected immediately, has the potential to worsen environmental degradation and hinder the realization of sustainable regional development.

Viewed from the perspective of Sustainable Development (Brundtland Commission, 1987), this situation reflects an imbalance between the three main pillars of development: economic, social, and environmental. The dominance of economic aspects without considering the ecological capacity of the region can trigger environmental degradation in the long term, as seen from the increase in land conversion, the reduction of protected areas, and the decrease in the carrying capacity of the environment in the Bogor Regency area (Kementerian Lingkungan Hidup dan Kehutanan, 2021).

The spatial policy implementation table analysis shows a gap between the policies listed in the RSP/SDP document and the factual conditions on the ground. For example, although normatively the Bogor Regency RSP 2024–2044 has designated protected areas, water catchment areas, and river boundaries as spaces that must be maintained, in reality, development in these areas is still ongoing, either through housing, villas, or tourism projects that violate spatial planning provisions. (Bappeda Kabupaten Bogor, 2024)

Several factors, including weak supervision, overlapping authority between the central, provincial, and regional governments, and the lack of technical capacity and human resources at the regional level, cause the weakness of this implementation. Another contributing factor is the low level of community participation in spatial planning and evaluation, where public aspirations related to environmental protection are often not substantively accommodated (WALHI Jawa Barat, 2023).

From the environmental law perspective, the weak implementation of SEA and AMDAL shows that environmental instruments are still not integrated into the regional development planning process. In fact, according to Law No. 32 of 2009 concerning environmental protection and management, SEA should be the primary basis of every development policy, plan, and program to ensure that the principles of sustainable development are realized. (Mustomi et al., 2025) The gap between formal policy and implementation on the ground needs to be addressed immediately by reformulating better spatial policies, strengthening regional institutional capacity, increasing public participation, and ensuring consistent law enforcement against spa-

Table 1. Implementation of Bogor Regency Spatial Policy Between Development and Environmental Conservation

No	Observed Aspect	Field Facts (Development)	Field Facts (Environmental Conservation)	Key Notes/Findings
1	Infrastructure Development	Increased road access to tourism areas	Monitoring of protected areas is not optimal	Land conversion is growing in buffer zones
2	Residential & Commercial Area Development	Rapid growth of housing, villas, and tourism areas	Many constructions violate spatial zoning regulations	Spatial utilization does not comply with RSP/DSP
3	Protection of Protected Areas & Water Catchment Zones	Many protected areas have been converted	Riverbank areas and conservation forests are under threat	Increased risk of floods and landslides
4	Implementation of Environmental Studies (SEA/EIA)	Many major projects possess environmental documents	Implementation of SEA/EIA recommendations is weak in practice	Environmental instruments remain primarily administrative

Source: Processed from the results of field interviews, observations from [Bappeda Kabupaten Bogor \(2024\)](#); [Kementerian Lingkungan Hidup dan Kehutanan \(2021\)](#); [WALHI Jawa Barat \(2023\)](#).

tial planning violations.

See table 2

The table 2 above shows that the Bogor Regency Government has several policies and programs oriented towards environmental conservation in the context of spatial planning. However, its implementation still faces various obstacles, such as weak law enforcement, limited resources, low community participation, and conflicts of interest between development and environmental protection.

4.2 The Spatial Planning Policy by the Local Government has Paid Attention to Aspects of Environmental Sustainability and the Ecological Carrying Capacity of the Region

Spatial planning policies prepared by local governments, especially Bogor Regency, have included aspects of environmental sustainability and ecological carrying capacity as an integral part of spatial planning documents. This can be seen from the existence of provisions in Bogor Regency Regional Regulation No. 1 of 2024 concerning the Bogor Regency Regional Spatial Plan for 2024-2044, which explicitly regulates the zoning of protected areas, river boundaries, water catchment areas, conservation forests, and green open spaces as spaces that must be protected and must not be converted for development purposes ([Bappeda](#)

[Kabupaten Bogor, 2024](#))

In addition, local governments have also integrated environmental instruments such as the Strategic Environmental Assessment (SEA) in the process of revising spatial planning policies. SEA is mandatory to ensure that every regional development policy, plan, and program does not exceed the environment's carrying capacity. ([Kementerian Lingkungan Hidup dan Kehutanan, 2021](#)) This effort shows the awareness of local governments on the importance of maintaining a balance between development needs and environmental conservation, in line with the principles of sustainable development as mandated in Law Number 32 of 2009 concerning Environmental Protection and Management.

The study also found that in several priority programs, such as the revitalization of the situ and lake, rehabilitation of critical land, and the improvement of green open space in urban areas, local governments have made efforts to pay attention to the ecological carrying capacity of the region. These programs are carried out to improve the quality of the environment, reduce the risk of environmental disasters, and maintain the balance of the local ecosystem. ([Kementerian Lingkungan Hidup dan Kehutanan, 2021](#))

Overall, the results of this study show that local governments have shown progress in including environmental sustainability aspects in spatial planning. How-

Table 2. Bogor Regency Regional Government's Policy On Environmental Conservation in Spatial Planning

No	Policy/Program	Main Objective	Field Implementation	Key Findings/Findings	Challenges
1	Regional Regulation No. 1 of 2024 on RSP 2024–2044	Designating protected areas, water catchment zones, riverbanks, and conservation forests as areas that must be preserved	Protected areas have been designated, but many are still converted to other uses	Weak monitoring and law enforcement	
2	Tree Planting and Forest Rehabilitation Program	Rehabilitating degraded land and reforestation to reduce erosion and improve environmental quality	Planting activities have been carried out at several sites, but not evenly across all priority areas	Not all critical areas are optimally addressed	
3	Implementation of Strategic Environmental Assessments (SEA)	Integrating environmental principles into regional policies, plans, and programs	SEA documents are prepared, but the implementation of recommendations remains weak	SEA has not become the primary reference in development planning	
4	Regulation of Buildings in Protected Areas	Demolishing illegal buildings in protected and water catchment areas	Enforcement is sporadic and inconsistent across regions	Socio-political pressure and economic interests hinder law enforcement	

Source: Processed from [Bappeda Kabupaten Bogor \(2024\)](#); [Departemen Lingkungan Hidup Kabupaten Bogor \(2021\)](#); [Kementerian Lingkungan Hidup dan Kehutanan \(2021\)](#); [WALHI Jawa Barat \(2023\)](#).

ever, implementation challenges at the technical and institutional levels remain a significant concern, so ecological sustainability is not only a planning document but also manifested in regional development practices.

Normatively, spatial planning documents in Bogor Regency have contained provisions that accommodate environmental sustainability, such as the determination of protected areas, river boundaries, green open spaces, and the protection of water catchment areas. However, in its implementation, there is still a gap between planning provisions and the reality on the ground. This is in line with the findings of the [Kementerian Lingkungan Hidup dan Kehutanan \(2021\)](#), which state that one of the main challenges in spatial planning in Indonesia is weak supervision and the lack of integration of ecological carrying capacity principles in the implementation of regional development.

This research also shows that the development of infrastructure, residential areas, and tourism in Bogor Regency often continues to run on land that should function as a shelter or water catchment zone. This increases the risk of ecological disasters, such as floods, landslides, and environmental degradation, as has often happened in the Puncak, Cisarua, and surrounding areas. ([WALHI Jawa Barat, 2023](#))

See table 3

Based on the table 3 above, there is a significant gap

between spatial planning policies that contain the principles of environmental sustainability and their implementation practices. One of the leading causes is the dominance of short-term economic development interests at the expense of sustainability principles and ecological carrying capacity. This situation strengthens [Simarmata \(2018\)](#) argument that in the context of regional autonomy, spatial planning is often used to encourage economic growth, but control of environmental impacts is still weak.

Furthermore, weak supervision and non-compliance with spatial zoning can damage local ecosystems and reduce the area's carrying capacity, such as the capacity of water catchment areas that prevent floods and landslides. ([Kementerian Lingkungan Hidup dan Kehutanan, 2021](#)) On the other hand, the lack of achievement of Green Open Space (GOS) worsens urban environmental conditions, such as increased temperature, air pollution, and decreased quality of life.

From the perspective of ecological justice, this condition also shows inequality where people living in disaster-prone areas or the environment whose quality is declining are the most affected by the weak implementation of spatial policies ([Schlosberg, 2007](#)).

Thus, although aspects of environmental sustainability and ecological carrying capacity have been contained in regional spatial policies, the main challenge

Table 3. Evaluation of the Implementation of Spatial Planning Policy on Environmental Sustainability in Bogor Regency

No	Observed Aspect	Provisions in Spatial Planning Policy	Field Implementation	Findings Analysis
1	Protected Areas and Water Catchment Zones	Protected areas are designated in the RSP	Land conversion into residential and tourism areas	Protection of designated areas has not been effective
2	Riverbanks and Lakeshores	Permanent buildings are prohibited	Commercial buildings still exist along riverbanks	Spatial planning provisions are violated in several locations
3	Development of Green Open Spaces (GOS)	At least 30% of urban areas must consist of GOS	GOS coverage in several districts is below the target	Green open spaces remain inadequate, potentially reducing environmental quality
4	Integration of SEAs and EIAs	SEAs/EIAs are mandatory for strategic projects	Documents are available, but field implementation is weak	Environmental recommendations are insufficiently followed
5	Monitoring and Law Enforcement	Spatial planning violations must be strictly sanctioned	Law enforcement remains selective and inconsistent	Strengthening of local monitoring capacity is required

Source: Processed from the results of field research (Bappeda Kabupaten Bogor, 2024; Departemen Lingkungan Hidup Kabupaten Bogor, 2021; WALHI Jawa Barat, 2023).

lies in implementation, supervision, and law enforcement. Therefore, it is necessary to reformulate a spatial strategy that prioritizes the balance between development and environmental protection by strengthening aspects of public participation, spatial data-based supervision, and full integration of sustainable development principles

5 CLOSING

5.1 Conclusion

This study shows that spatial planning policies by local governments, especially in Bogor Regency, have accommodated aspects of environmental sustainability and the ecological carrying capacity of the region normatively in planning documents, such as the Regional Spatial Plan (RSP), the Detailed Spatial Plan (DSP), and the implementation of the Strategic Environmental Assessment (SEA). The policy includes establishing protected areas, water catchment areas, river boundaries, and green open spaces to maintain ecological balance and prevent environmental damage.

The study's results also found a significant gap between normative provisions in spatial planning policies and the reality of implementation in the field. The conversion of protected areas, weak supervision, lack of law enforcement, and low community participation

are the main factors that cause environmental conservation aspects in spatial planning policies not to run effectively. This condition shows that the Bogor Regency area's carrying and ecological capacity are still threatened due to development pressures, especially in the settlement, tourism, and infrastructure sectors.

On the other hand, the commitment of local governments to implement programs such as situ revitalization, forest rehabilitation, and the improvement of green open space should be appreciated. However, coverage, consistency, and community involvement must be strengthened. Thus, it can be concluded that even though regional spatial planning policies have contained the principles of environmental sustainability, the effectiveness of their implementation is still a challenge that must be addressed.

5.2 Suggestion

1. Local governments need to increase the capacity and effectiveness of spatial supervision by utilizing information technology and spatial-based monitoring systems (GIS). Law enforcement against spatial planning violations must be carried out firmly, consistently, and not selectively, against violations committed by individuals, community groups, and large-scale business actors. This effort is crucial to prevent the conversion of protected areas and spatial damage that

impacts the regional ecosystem.

- Local governments need to update and strengthen protected area zones, water catchment areas, river boundaries, and green open spaces based on the latest studies related to ecological conditions. In addition, measures are taken to protect, rehabilitate, and restore areas that have experienced environmental degradation to maintain the ecological carrying capacity of the area. Regional economic development must be directed to sectors that support environmental sustainability, such as ecotourism, sustainable agriculture, and community-based natural resource management

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