

# Promoting Green Development: Environmental Attention and Regulation by Local Government in Central Java, Indonesia

Ngabiyanto<sup>1</sup>, Puji Lestari<sup>1</sup>, Ahmad Nurkhin<sup>2\*</sup>, Yozi Aulia Rahman<sup>3</sup>, Ahmad Syahrul Fauzi<sup>3</sup> and Anna Kania Widiatami<sup>2</sup>

<sup>1</sup> Department of Political Sciences, Universitas Negeri Semarang, Semarang, Indonesia
 <sup>2</sup> Department of Accounting Education, Universitas Negeri Semarang, Semarang, Indonesia
 <sup>3</sup> Department of Economics Development, Universitas Negeri Semarang, Semarang, Indonesia

Email: ahmadnurkhin@mail.unnes.ac.id

Abstract. Climate change has impacted all aspects of human life. Attention to the environment is a positive response to reduce this impact. This research is aimed at describing the environmental attentions and regulations of local government to promote green development. A documentation study was carried out to analyze the efforts of the regional government in Central Java, Indonesia to realize sustainable development. The documents analyzed are regional medium-term development plans (RPJMD or Rencana Pembangunan Jangka Menengah Daerah) and other related documents. The results of the study show that the government of Blora Regency, Central Java has paid sufficient attention to environmental issues, and this is manifested in the formulation of existing policies and regulations. The Indonesian government has established strategic policies regarding SDGs which must be implemented by regional governments. One of the development agendas is "building the environment, increasing disaster resilience and climate change". Environmental issues are also one of the focuses of the Blora Regency Government's mandatory non-basic service services. Based on the results of the Strategic Environmental Study, one of the priority strategic issues for Blora Regency for 2021-2026 is the environment. The Blora Regency Government has attempted to realize sustainable development in accordance with the policy directions of the central government and provincial government. Environmental issues are strategic issues that are the basis for developing Blora Regency which has the basis of competitiveness and sustainable development.

Keywords: Competitiveness, Environmental Attention, Sustainable Development,

# 1 Introduction

In recent years, climate change has had many negative impacts on the earth and has become one of the most serious challenges for humanity [1]. Climate change brings

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new, unprecedented threats to the world, such as increasing global temperatures, flooding, extreme rainfall, widespread forest fires, rising sea levels, melting polar ice caps, and severe storms that threaten biodiversity. Its unexpected economic impact is even greater and difficult to predict for current and future generations [2]. In the case of Indonesia, several districts/cities on the North Coast (Pantura) of central Java were afhydrometeorological fected bv wet disasters due to extreme weather (https://bnpb.go.id/, 15/3/2024). Recently there have been many natural disasters such as floods in Demak and its surroundings, landslides in several areas, forest fires in Kalimantan and Sumatra, and extreme rainfall in almost all regions of Indonesia. This phenomenon confirms that there is an environmental threat that will have an impact on the economic conditions of society.

Sustainable development then developed as a response to the future. This attention led to the establishment of the idea of sustainable development goals (SDGs) by the United Nations. SDGs aim to achieve balance in the development process by prioritizing what is called Triple E (Economy, Equality and Ecology) [3]. The ninth sustainable development goal in the 2030 Sustainable Development Agenda issued by the United Nations is to build resilient infrastructure, encourage inclusive and sustainable industrialization, and encourage innovation [4]. Thus, attention to the environment is increasing with various forms of implementation. Attention from all parties to the environment then becomes a necessity.

The purpose of environmental management is to improve the quality of human life. It involves organizing resources with government support to manage the use of goods, services, and natural and economic resources. This approach is primarily based on ecological principles [5]. Environmental regulatory policies are designed and implemented to reduce the misuse of natural resources by economic activities and to reduce environmental damage, but due to political factors, local government competition promoted by performance assessments can directly influence governments' environmental regulatory decisions, which in turn affect green development [6].

Previous findings indicate that environmental regulatory assessment has a significant role in promoting sustainable development. Further analysis shows that there is a strong positive spatial relationship between various indicators of environmental regulation and the growth of environmentally friendly industries [4]. Environmental regulations influence the level of environmentally friendly technological innovation at the regional level, which is influenced by regional variations [7]. A literature review indicates the impact of environmental regulations on company competitiveness, which is assessed in terms of trade, industrial location, workforce, productivity, and ability to innovate [8]. Another study reviews the influence of environmental attention from local governments on the development of environmentally friendly regions in China. To encourage sustainable development, local governments must increase their firmness in implementing local environmental regulations, promote environmentally friendly technological innovation, create conditions that support environmental development, and formulate a long-term strategic vision.

This research is aimed at exploring environmental attention and regulation from local governments in Central Java, Indonesia. Policies regarding sustainable development determined by local governments should be included in long-term development planning documents. This article will reveal the concerns of regional governments by analyzing the policies, strategies and efforts made by regional governments by looking at development planning documents and regional government performance report documents.

# 2 Method

A descriptive study will be carried out in this study to reveal the environmental concerns and policies of local governments to promote sustainable development. The object of research is the regional government in Central Java which has recently experienced quite extreme natural disasters. The focus of the research is Blora Regency which is one of the areas where the Cepu Block is located or around 37%. The Cepu Block is one of the oldest and largest oil and gas mining fields in Indonesia [9], [10]. Environmental and economic impacts have been and will be caused around the mining area [11], [12], [13]. Therefore, the Blora Regency Government should pay attention to environmental issues in its area. In addition, Blora Regency is an area that is prone to environmental issues (drought and others).

Documentation studies are carried out by analyzing regional development planning documents and other relevant documents. The data source comes from documents that have been published and accounted for before stakeholders. The 2021-2026 Blora Regency Regional Medium Term Development Plan (RPJMD) document is the main document analyzed in this research. Data analysis was carried out using quantitative and qualitative descriptive methods.

# **3** Result and Analysis

# 3.1 Environmental attention and regulation by local government of Blora regency

The attention and policies related to environmental issues by the Blora Regency government are revealed in the 2021-2026 Blora Regency RPJMD document and other documents. Several regulatory documents related to environmental issues in Blora district are RPJMN 2020-2024; Central Java Province RPJMD 2018-2023; Blora Regency RPJPD 2005-2025; Blora Regency RPJMD 2021-2026; Strategic Environmental Study (KLHS) of Blora Regency; and also, other derivative documents. The results of the analysis are expressed in the following explanation.

The Blora Regency Government pays great attention to environmental issues. This can be seen from the vision and mission that have been formulated. The vision of Blora Regency stated in the 2021-2026 Blora Regency RPJMD is "Sesarengan Mbangun Blora: Superior and Competitive". One of the missions developed is "Creating good infrastructure and sustainable environmental management". The preparation of the Blora Regency RPJMD document takes into account the Strategic Environmental As-

sessment (KLHS) document. The Blora Regency RPJMD has paid attention to the carrying capacity and capacity of the environment and ensured that the sustainable development goal indicators set by the National have been accommodated in the RPJMD targets and indicators. One of the RJPMD indicators that is relevant to KLHS includes the percentage of households that have access to adequate and sustainable sanitation services. This is relevant to the environmental quality index.

The formulation of goals includes ending poverty in all forms everywhere, eliminating hunger, achieving food security and good nutrition, as well as improving sustainable agriculture, ensuring the availability and sustainable management of clean water and sanitation, ensuring access to affordable, reliable, sustainable and modern energy for all, increasing inclusive and sustainable economic growth, productive and comprehensive employment opportunities, and decent work for all, building resilient infrastructure, increasing inclusive and sustainable industry, and encouraging innovation, making cities and settlements inclusive, safe, resilient and sustainable, ensuring sustainable production and consumption patterns, taking rapid action to overcome climate change and its impacts, protecting, restoring and increasing sustainable use of terrestrial ecosystems, sustainably managing forests, stopping desertification, reversing land degradation and stopping biodiversity loss, strengthening communities that inclusive and peaceful for sustainable development, providing access to justice for all, and building effective, accountable and inclusive institutions at all levels, and strengthening the means of implementing and revitalizing global partnerships for sustainable development.

The RPJMD also reveals data regarding the achievements of environmental affairs development performance in Blora Regency for 2016-2020 which is shown in table 1 below. The overall performance of environmental conditions can be seen from the achievement of the environmental quality index (IKLH), which tends to increase from 62.19 in 2016 to 70.25 in 2020. The achievement in 2020 of the components that make up IKLH, namely the water quality index, was 50.00, an increase from 48.86 in 2016 . The air quality index in 2020 was 76.46, an increase from 70.00 in 2016. The land cover index was 80.77 in 2020, an increase from 66.63 in 2016.

Indicators	Unit	Performance					
		2016	2017	2018	2019	2020	
Water pollution prevention services	%	100	100	100	100	100	
Follow-up services for public complaints resulting from alleged environmental pollution and/or destruction	%	100	100	100	100	100	

 Table 1. Blora Regency Environmental Affairs Development Performance

 Achievements 2016-2020.

Air pollution prevention services from stationary sources	%	100	100	100	100	
Percentage of green open space (parks and cemeteries) to the area	%	2.5	2.5	2.5	5.0	
Environmental Quality Index	indeks	62.19	69.58	73.37	74.63	
Water Quality Index	indeks	48.46	54.00	62.00	51.25	
Air Quality Index	Indeks	70.00	87.14	90.62	91.07	
Land Quality Index	indeks	66.63	68.10	68.96	79.83	
Percentage of total waste handled	%	69.90	73.45	73.00	80.00	
Percentage of waste reduced through 3R	%	N/A	N/A	18.00	20.00	

#### Source: Blora Regency RPJMD 2021-2026.

Environmental issues are also one of the focuses of mandatory non-basic service services. There are problems faced in environmental matters, including the following: (a) The achievement of the environmental quality index in Blora Regency is not yet optimal, the achievement in 2020 was 70.25, a decrease compared to 2019 which was 74.63; (b) Waste transportation is not yet optimal, as can be seen from the 2020 achievement of 89%; and (c) Waste reduction through 3R is not yet optimal, as can be seen from the achievement in 2020 which only reached 20.47%. This problem is an important matter that must be resolved by Blora Regency in the future. The districtscale strategic issue contained in the 2005-2025 Blora Regency RPJPD document is the low level of public awareness of the importance of the environment and the occurrence of land conversion. Based on the results of the RPJMD Strategic Environmental Study (KLHS), the priority strategic issues for Blora Regency for 2021-2026 are: poverty; starving; clean water and sanitation are not yet adequate; cities and settlements do not yet reflect sustainability; consumption and production do not yet reflect sustainability; polluted terrestrial ecosystems; energy is not affordable; low employment opportunities and economic growth; not yet optimal management of industry, innovation and infrastructure; there are still gaps; the role of non-government partners has not been optimal; and not yet optimal government governance.

The RPJMN explains Indonesia's future vision and mission with the policy direction and development agenda set by President Joko Widodo. There are five directions, namely human resource development, infrastructure development, regulatory simplification, bureaucratic simplification, and economic transformation. One of the development agendas is "building the environment, increasing resilience to disasters and climate change" which is directed through improving the quality of the environment, increasing resilience to disasters and climate change, as well as lowcarbon development. The environment and disasters are one of the strategic development issues in Indonesia. In addition, the 2018-2023 Central Java Province PJMD document also reveals that one of its development missions is to make the people of Central Java healthier, smarter, more cultured and loving the environment. Thus, environmental issues have become the concern of central and regional governments. One of the strategic issues in the 2018-2023 Central Java Province RPJMD is sustainable development by paying attention to the carrying capacity of the environment and the preservation of natural resources.

### 3.2 Promoting green development by local government of Blora regency

The Blora Regency Government has attempted to realize sustainable development in accordance with the policy directions of the central government and provincial government. Environmental issues are strategic issues that are the basis for developing Blora Regency which has the basis of competitiveness and sustainable development. Every strategic development policy in Blora Regency must pay attention to environmental issues. Many documents emphasize the importance of environmental issues and sustainable development. These regulations must be obeyed by all parties in Blora Regency in order to realize the vision and mission that has been set and in accordance with the concept of sustainable development.

Sustainable development is a development concept that aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. This includes a balance between economic growth, environmental protection and social justice. The concept of sustainable development has become the basis for the UN's 2030 Agenda and the Sustainable Development Goals (SDGs), which include 17 interconnected goals, focused on various aspects of human life and the planet, such as ending poverty, reducing inequality, tackling climate change, and protecting biodiversity. Another familiar concept besides sustainable development is green development, which is a development approach that prioritizes environmental sustainability by minimizing negative impacts on the ecosystem. This concept involves the application of environmentally friendly technologies and practices in various aspects of development, from architecture and construction, to transportation, energy and land use. Green development is often associated with other concepts such as green buildings, green cities, and green economies, all of which focus on creating a healthy and sustainable living environment. It is hoped that this principle can contribute to reducing the impact of climate change, conserving natural resources, and creating a better quality of life for society.

The Blora Regency Government can involve various parties to formulate policies in order to realize sustainable development and green development. Comprehensive analysis by various parties will produce long-term development strategies and plans that are more in line with the characteristics of the Blora region and society in general. Blora has recognized natural resource potential and local wisdom. Thus, intensive and comprehensive studies are needed to encourage complete and sustainable development of Blora. The study of the history of Blora can be a historical basis for better understanding the characteristics and development of society. The Blora Regency Government can invite council members, university academics, practitioners, entrepreneurs or the private sector, community leaders, religious leaders, and various other parties to contribute ideas in order to realize Blora's new vision and mission.

# 4 Conclusion

Document analysis has shown that the Blora Regency Government, Central Java, has paid attention to environmental issues in realizing sustainable development. The regulations set are also relevant to environmental issues as important documents for regional development in both the medium and long term. The preparation of the RPJMD for Blora Regency has been aligned with the RPJMN and RPJPD of Central Java Province as well as documents related to the Results of the Strategic Environmental Study (KLHS). Analysis of strategic problems and issues has linked environmental issues to become an important part of development focus, such as the environmental index, air quality index, water quality index and other indicators.

The formulation of the Blora Regency RPJPD (Regional Long Term Development Plan) document should provide more portions related to environmental issues. Climate change and global conditions have provided a warning for the government to be more attentive in dealing with environmental problems. Many extreme events are the impact of climate and environmental change, including in the Central Java region. Regional governments must be careful in analyzing environmental problems to realize sustainable development. Environmental issues have become a national strategic and development issue for the province of Central Java.

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