
Urban Forest Management in Boyolali Regency for Supporting the Balanced Development of Urban Areas

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Submitted: March 30, 2021 -Revised: April 26, 2021 -Accepted: April 28, 2021 -Published: April 30, 2021

ABSTRACT

This study aims to determine urban forest governance in order to support the balance of urban development in Boyolali Regency. Methods This research is a normative legal research. The sources of legal materials used are primary legal materials and secondary legal materials. The technique of collecting legal materials uses document or library studies and interviews. Interviews were conducted by clarifying with the resource persons. The legal material analysis technique uses the syllogism method and the interpretation uses a deductive mindset. The results showed that urban forest management in order to support the balance of urban development in Boyolali Regency was in accordance with Government Regulation Number 63 of 2002 concerning Urban Forests, but in its implementation it had not gone well. The availability of green open space and urban forest in Boyolali Regency has not met the minimum limit mandated by laws and regulations and there are no regulations specifically regulating the implementation of urban forests. The Boyolali Regency Government can follow the example of other regions or countries such as DKI Jakarta, Tangerang City and Kuningan Regency in managing urban forests.

Keywords: governance; green open space; urban forest

INTRODUCTION**Background**

The development of society in the world is growing rapidly from time to time. The population in a country that continues to grow will require the government of the country to always be ready to fulfilling facilities and fulfilling the life of society in rural and urban areas. According to the mandate of Article 28 H paragraph (1) The 1945 Constitution of the Republic of Indonesia confirms that, "*Setiap orang berhak hidup sejahtera lahir dan batin, bertempat tinggal, dan mendapatkan lingkungan hidup yang baik*" ⁽¹⁾. The right of a good environment is a part of human rights which is naturally as a gift from God to mankind.

Spatial planning is a mandatory local government affair because it is directly related to the basic services to the community. The authority to carry out spatial planning is not only the impact of regional autonomy, the authority has also been given to the regional government in accordance with the provisions in Article 7 Paragraph (2) of Law Number 26 of 2007 concerning Spatial Planning ⁽²⁾. The government's steps in providing and managing ruang terbuka hijau (green open space) in an area are an effort to ensure good environmental quality which is ensuring the sustainable environmental functions.

The existing types of urban green open space (RTHKP / Ruang Terbuka Hijau Kawasan Perkotaan), urban forest green open space has the best ecological function. This is because urban forest has at least 80-90% vegetation cover. The legal basis governing the policy on urban forest is Article 9 of Law no. 41 of 1999 concerning Forestry ⁽³⁾, the efforts of growth and develop urban forest have received government attention and support with the issuance of Government Regulation no. 63 of 2002 concerning Urban Forest and it is still in the form of an outline for the management of urban forest.

The construction of building and infrastructure in Boyolali Regency is progressing quite rapidly, it also encourages the increasing of total population as previously mentioned. This will have an impact on environmental problems caused by a decreasing in air quality and it will reduce the environmental comfort in Boyolali Regency. In order to minimize the negative impact of the development, the Boyolali Regency Government needs to take steps, one of which is to build an urban forest green open space because it is one way to increase the quantity and quality of good urban reforestation ⁽⁴⁾.

According to the 2019 Regional Environmental Management Performance Information Document of Boyolali Regency, the total public Ruang Terbuka Hijau (RTH) covering an area of 20%, the urban area or an area of 4,378 ha and the urban forest, is only 0.25 ha, hence there is not enough urban forest in Boyolali Regency. Compared to Jakarta City, the volume of reforestation and urban forest management in Boyolali Regency is still very minimum. The urban forest zone recorded in Regional Regulation No. 1 of 2014 concerning Detailed Spatial

Planning and Zoning Regulations for DKI Jakarta is 17.58 ha which includes 2 locations in West Jakarta and East Jakarta. Based on data in 2019, the number of urban forest managed by the Park and City Forest Department has a total area of approximately 187.69 ha ⁽⁵⁾. Then the State of Singapore further developed reforestation planning in Singapore starting in 1963 by launching the "Tree Planting" Campaign which was spearheaded by Prime Minister Lee Kuan Yew ⁽⁶⁾. During the reign of Prime Minister Lee Kuan Yew, he had a motivation to make Singapore as a clean and green city through the motto "clean greening" to overcome inequality, create a city identity, and national pride ⁽⁷⁾.

The obstacles experienced by the Boyolali Regency government have caused by the management of urban forest in Boyolali that has not been implemented properly. Boyolali Regency does not have a regional regulation yet that specifically regulates City Forest so that the implementation of urban forest is still based on Government Regulation Number 63 of 2002 and Regulation of the Minister of Forestry P.71/Menhut-II/2009 which in its implementation must still be carried out with regional regulations in order to run better. Based on the description above, the author intends to examine it in a paper with the title: "Urban Forest Management in Boyolali Regency for Supporting the Balanced Development of Urban Areas".

Problems Statement

Based on the background explanation that has been described previously, the authors formulate two main problems that will be discussed in this paper as follows:

1. How is the concept of urban forest management to support the balance of urban development that was organized by the Boyolali Regency government?
2. What are the obstacles experienced by the Boyolali Regency government in organizing urban urban forest to support the balance of urban development in Boyolali?

METHODS

The research method used was a normative legal research. The author used a statute approach and a comparative approach ⁽⁸⁾. Primary sources of legal materials, such as the 1945 Constitution of the Republic of Indonesia, Government Regulation Number 63 of 2002 concerning Urban Forest and Regulation of the Minister of Forestry of the Republic of Indonesia Number P.71/Menhut-II/2009 concerning Guidelines for the Implementation of Urban Forest. Secondary legal materials were in the form of books, journals and related scientific publications. The technique of collecting legal materials used document or library studies and interviews. The interview was conducted by clarifying with the resource person, namely the Boyolali Regency Environmental Department.

RESULTS

Based on table 1, from the target allocation of green open space in urban areas of 4,378 hectares, which has been achieved only 34.33% consists of 20% of public green open spaces, which is 1502.80 hectares. Green Open Space (RTH) is spread throughout urban areas covering 14 types of green open space with the following vegetated areas:

Table 1. Urban Green Open Space

Green open space	Area
City park	25.96 Ha
City forest	0.25 Ha
Island and road median	2.97 Ha
Pedestrian path	1.65 Ha
Railroad border	12.85 Ha
The border of the route	323.31 Ha
River border	930.77 Ha
Around the reservoir	59.53 Ha
Around the spring	66.28 Ha
Cemetery area	79.23 Ha
Total	100.00

DISCUSSION

Urban Forest Management in Boyolali Regency for Supporting the Balanced Development of Urban Areas

One of the factors that support the preservation of environmental functions is the existence of ruang terbuka hijau (green open space) which plays an essential role in maintaining environmental quality in urban areas. Ruang Terbuka Hijau (RTH) creates advantage towards environmental components in the form of absorbing heat, reducing noise levels and air pollution levels, and acting as a carbon sink through the oxygenation process ⁽⁹⁾. Zoer'ain Djamal Irwan asserts that one of the green open space, namely urban forest, can reduce the surrounding temperature by 3.46%, increase humidity by 0.81%, reduce noise levels by about 18.94%, and reduce noise levels dust around 46.13% during the day at the start of the rainy season ⁽¹⁰⁾. The existence of urban forest in urban development can actually be directed to overcome global warming. However, green open space areas are often sacrificed in urban development along with the rapid rate of population growth ⁽¹¹⁾.

Law Number 26 of 2007 concerning Spatial Planning mandates that a plan for the provision and utilization of spatial planning contains a plan for the provision and utilization of the green open space with a minimum area of 30% of the city's area. RTH in urban areas consists of public green open space and private green open space, the proportion of green open space in urban areas is at least 30% consisting of 20% public green open space and 10% private green open space. Provision of green open space in urban areas is one of the priorities in spatial planning, in order to improve environmental functions, the implementation of urban forest is urgently needed to be realized. Efforts made by the government in maintaining the area of green open space and improving the environmental function of urban areas are issuing Government Regulation No. 63 of 2002 concerning Urban Forest.

Meanwhile, green open space planning in Boyolali Regency has been regulated through Regional Regulation No. 9 of 2011 concerning Boyolali Regency Spatial Plan 2011-2031. However, the regional spatial plan does not explicitly mention urban forest, yet it only targets the green open space area of urban areas, which are approximately 4,378 ha. The target allocation of green open space in urban areas of 4,378 hectares, which has been achieved only 34.33% consists of 20% public green open space. Thus the total area of green open space until 2019 reached 1502.80 ha, there is still a shortage of 2875.2 ha ⁽¹²⁾.

According to the interview on Tuesday, May 31 2021 at 11.00 am with Mrs. Ririn Ning Mastuti, Head of Park DLH Boyolali District, Boyolali District Government does not have a Regional Regulation on urban forest because the Boyolali District Government does not have a focus on the formation of Regional Regulations yet regarding the urban forest. This caused by the location of the urban forest which was appointed by the Boyolali Regent's Decree in 2011 that has not decreased that much and its function has not changed. In addition, the Boyolali Regency Government does not have a focus on its budget in implementing the formation of a Regional Regulation regarding the urban forest.

The existence of urban forest in Boyolali Regency is regulated in Boyolali Regent Decree Number 522.4/549 of 2011 concerning Amendment to Boyolali Regent's Decree Number 522.4/91 of 2005 concerning Designation of Sonokridanggo Area as City Forest Area of Boyolali Regency. Based on the Regent's Decree, the area of urban forest is 2,500 m² which is the minimum area criteria for land units that can be designated as urban forest. The percentage of urban forest area of 0.00024% of the total area of Boyolali Regency and urban forest in Boyolali is on the country land, this amount is far from the minimum percentage of urban forest area of 10% of urban areas.

The management of urban forest has been conducted by the Boyolali Regency Environmental Department. Based on the interview on Tuesday, April 6 2021 at 10.30 with Mrs. Endah, DLH staff of Boyolali Regency, before Boyolali urban forest being handed over to DLH Boyolali Regency, the establishment and management of urban forest is managed by the Dinas Pertanian Perkebunan dan Kehutanan Kabupaten Boyolali (Disperentanbunhut) in forestry sector. In 2018, the Boyolali Regency urban forest was managed by DLH Boyolali. Urban forest management conducted by DLH Boyolali Regency has been well implemented. However, the management of the urban forest by the DLH Boyolali Regency is only conducted by implementing routine maintenance of the urban forest which is carried out by the Park Division of the DLH Boyolali Regency.

Up to present, the Boyolali Regency Government has not done the re-mapped of the green open space in Boyolali Regency, including the mapping of urban forest, it comes back again that the Boyolali Regency Government currently does not have a focus on the environment. However, the Boyolali Regency Environmental Department has also targeted to have 34.33% green open space consisting of 20% of public green open space from an urban area or an area of 4,378 hectares to support the Boyolali Green District Excellence Program or Boyolali Green City.

Several cities in Indonesia have implemented urban forest management in accordance with Government Regulation No. 63 of 2002 concerning Urban Forest. One of them is the Special Capital Region of Jakarta or DKI as the largest metropolitan area in Indonesia which has an area of 664.01 km², with a total of 10.56 million people. Since 2010, the population of DKI Jakarta has increased by around 954 thousand people⁽¹³⁾ in the management and implementation urban forest that has issued the Governor Regulation Number 17 of 2017 concerning the Implementation of Urban Forests in addition to the Governor's Decree regarding the appointment of urban forests in DKI Jakarta. Then, the condition of the Tangerang City Forest is better than Boyolali Regency, because the Tangerang City Forest has an area of 1.2 ha. Unfortunately, this area only covers 0.0072% of the area of Tangerang City. Similar to Boyolali Regency, in the implementation of urban forest in Tangerang City, there is no local regulation regarding the City Forest. There is also Kuningan Regency which has issued Regent Regulation No. 8 of 2008 concerning the Implementation of City Forest, this can be applied in Boyolali Regency because it has geographical conditions similar to Kuningan Regency.

The Obstacle in the Implementation of Urban Forest in Boyolali Regency

The implementation of a policy conducted by the government is inseparable from inhibiting factors or problems. Likewise, the management of urban forest in Boyolali Regency is inseparable from problems so that policies do not run optimally. The main problems of Indonesian law are not only legal products, but also law enforcement. Law enforcement, according to Satjipto Raharjo in Ridwan HR⁽¹⁴⁾, is the enforcement of abstract concepts or ideas. Hence, it can be said that law enforcement is an attempt to make these ideas a reality. Satjipto Rahardjo said that talking about law is essentially separated from legal principles which then formed as a legal system. Law or regulation that is made must be carried out properly so that the goals set can be achieved.

The implementation of urban forest in Boyolali Regency does not have any regional regulation that specifically regulates urban forest as stated in Government Regulation Number 63 of 2002 concerning Urban Forests. Norms, Standards, Procedures and Criteria (NSPK) have not been decided by the central and local government regarding the urban forest that causing the development and management that have not run properly and caused this as an obstacle in the low management of urban forest⁽¹⁵⁾.

A good regulation must be implemented by those who involved in it and those who burdened with enforcement. The responsibility for urban forest management in Boyolali Regency is assigned to Regional Apparatus Organizations. The Boyolali Regency Environmental Department has the main task and function of carrying out government affairs in the environmental sector based on the principles of regional autonomy and assistance task, that has conducted a study on forest, provided recommendations in determining urban forest to the Boyolali Regency Government, and has the responsibility of managing urban forests in the Boyolali Regency. The sanction for violators in environmental protection and management has been stated in the Boyolali Regency Regional Regulation Number 13 of 2015 concerning Environmental Protection and Management, yet the sanction that has not been applied explicitly for those who damage green open space and urban forest by the Boyolali Regency Government have not run optimally.

In addition to law enforcement, there are obstacles faced in the implementation of urban forests in Boyolali Regency, one of which is human resources. The existence of human resources is very important to carry out the authority that has been given. The number of workers who are not proportional to the area makes management less effective and less than optimal, because with an urban forest area of 0.25 hectares, the number of workers is only 1 (one) in comparison. The efforts that can be made regarding the lack of manpower are by optimizing the available human resources, by increasing contract workers.

One of the factors that affected other than human resources is the budget. The Boyolali Regency government's effort to increase the area of green open space in order to fulfill the provisions of 30% of the city's green open space are constrained by the expensive compensation of land release so that the land purchase plan cannot be implemented. The activities of organizing urban forest carried out by the OPD are inseparable from the official budget activity from the Boyolali Regency Regional Revenues and Expenditures Budget (APBD). The budget for the management of green open space and urban forest conducted by the DLH of Boyolali Regency comes entirely from the APBD which is very limited in number to manage green open space and urban forest managed by DLH. The approved budget for the management of green open space and urban forest for DLH in 2019 is only Rp. 674,713,000, of which 200,000,000 million is only used for animal feed. The animal feed budget is used simultaneously with Pandan Arum Park Boyolali, this was conveyed based on the interview on Monday, May 31 2021 at 11.05 WIB, with Mrs. Ririn Ning Mastuti, Head of Park at the Boyolali Regency Environmental Department.

Barriers in budget procurement and the lack of focus of the Boyolali Regency Government in organizing urban forest in Boyolali Regency are also the main factor in the absence of good urban forest management in

Boyolali Regency. The availability of the budget is an important factor in the implementation where it is also related to the formation of legal products regarding urban forest, the availability of human resources, land provision, urban forest development, and urban forest management. The focus of the Boyolali Regency Government which has not led to the implementation of urban forest becomes the main obstacle in the implementation of urban forest in Boyolali Regency where the local government is the main instrument that will determine and shape policies related to urban forest in the region. This focus is also related to the local government's awareness of the development and improvement of environmental conditions so that it can be said that the Boyolali Regency Government does not have good awareness yet regarding the improvement of Boyolali Regency's environmental conditions.

The existence of land is a major factor in the formation of urban forest. Land is needed as a place to grow vegetation in urban forest. The minimum size of the land to be used as urban forest has also been determined, namely 2,500 m² based on Government Regulation No. 63 of 2002 concerning Urban Forest. The availability of land is very influential on the availability of green open space. The availability of the green open space has not met the 30% percent due to limited space constraints. Likewise, the area of urban forest is still far from the minimum requirement of 10% of the total area. Based on the percentage allocation, 34.33% of green open space consists of 20% of public green open space from an urban area or an area of 4,378 hectares, but only 1502.80 hectares that have been achieved and the percentage of urban forest area is 0.00024% of the total area of Boyolali Regency. The Boyolali Regency Government continues to strive to fulfill 30% of green open space.

Providing new green open space is the fastest way to increase the area of green open space. The steps that can be taken in the effort to develop the expansion of green open space in Boyolali Regency include: a. Land consolidation; b. Exchanging land; c. Land donations; and d. Corporate Social Responsibility (CSR).

Building public awareness regarding the importance of protecting the environment in the development of urban areas is not an easy thing. People who have more knowledge in the field of forestry and the environment will have their own motivation to build an urban forest. However, for common people, urban forest is seen as useless thing. Therefore, it is necessary to conduct counseling, socialization, education programs, training, publications, environmental campaigns and other programs that can be implemented to change the mindset of common people. Urban forests can be realized easily in areas that have a friendly sense of nature and high environmental awareness in order to achieve balance in the urban development process.

CONCLUSION

The implementation of urban forest management in Boyolali Regency is still not running optimally in accordance with Government Regulation Number 63 of 2002 concerning Urban Forest. Boyolali Regency does not have any Regional Regulation that regulates City Forest, yet the designation of the location and area of urban forest is stated in the Decree of the Boyolali Regent Number 522.4/549 of 2011 concerning Amendments to the Decree of the Boyolali Regent Number 522.4/91 of 2005 concerning Designation of the Sonokridanggo Area as a City Forest Area. Boyolali Regency in the regent's decision appointed a management agency, namely the Boyolali Regency Environmental Department. Urban forest management implemented by DLH Boyolali Regency has been carried out well in terms of maintenance. However, the mapping of green open space has not been implemented until present, it comes back again that the Boyolali Regency Government currently does not have a focus on the environment. The Boyolali Regency Government can imitate other cities such as DKI Jakarta, Tangerang City, Kuningan Regency in establishing regulations and also urban forest management strategies. Boyolali Regency in implementing urban forest has several obstacles such as the absence of special regulations regarding urban forest management, law enforcement on the destruction of green open space that has not been implemented properly, lack of human resources in managing urban forest, limited budget and lack of government focus, and public awareness in urban forest management.

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