



RESEARCH ARTICLE

OPTIMIZING FOREST AND FORESTRY CONTROL EFFORTS: LEGAL FRAMEWORK AND URGENCY OF REGIONAL REGULATIONS IN CONTROLLING FOREST AND LAND FIRES

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Abstract

Forest and land fires (Karhutla) often occur in Indonesia, triggered by drought due to El Nino-Southern Oscillation (ENSO) or human activity. This research examines the arrangements for controlling forest and land fires in Indonesia and analyzes the basic problems in controlling forest and land fires and explores the urgency of forming related regional regulations. The research method uses a normative juridical approach through statutory and conceptual analysis. The results show basic problems, such as large areas of forest and land, lack of coordination between institutions, unclear management rights, and minimal community participation. The formation of regional regulations is very important to optimize forest and land fires control, because it can adapt strategies to local characteristics and support national policies.

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Introduction:-

Forests play a crucial role in maintaining the balance of global ecosystems, regulating the carbon cycle, and providing habitat for many species. However, in reality forest and land fires still occur frequently. In Indonesia itself, if we quote data submitted by the National Disaster Management Agency (BNPB) Disaster Information and Communication Data Center, it appears that during 2023 there have been 487 recorded forest and land fire incidents, with details of the 5 provinces with the most, including: Aceh (68 incidents) , Bangka Belitung Islands (48 incidents), Central Kalimantan and South Kalimantan (43 incidents), and Central Java (41 incidents).(Forest and Land Fires August 2023, nd)Forest and land fires (Karhutla) have detrimental impacts on humans, animals and the environment, and have the potential to cause significant economic losses. Human activities and natural factors are the main causes of forest and land fires, where one small incident such as a spark can trigger a large fire.

Research conducted by Novitasari et al., shows that forest fires can spread quickly, even reaching speeds of 23 km/hour, with destructive effects and are difficult to stop.(Novitasari, 2024)In South Sumatra Province, for example, forest and land fires have reached significant proportions, especially in areas with large areas of flammable peatland. Peatlands, which are soils with a high organic content, are very difficult to extinguish because fires can spread to great depths and remain burning even after the surface has been extinguished.

Forest and land fires have become a serious problem in various parts of the world, causing significant ecological, economic and social losses. The impact is not only limited to the natural environment, but also affects human welfare and the sustainability of ecosystems.(Indra Leo Firmansyah, Anita Indah Irma Wati, Indah Permata Sari,

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Azzahria Maulida Syifa, 2024) In the midst of increasing fire incidents caused by various factors, fire control has become very important to protect natural resources, maintain biodiversity and ensure environmental sustainability.

The legal framework plays a key role in efforts to control forest and land fires. Effective and comprehensive regulations are the basis for developing strategies, policies and preventive and responsive actions in dealing with fires. However, in this context, not all regions have an adequate legal framework or are able to handle fire challenges optimally. In this paper, we will explore the legal framework required to optimize fire control efforts, with a focus on local regulations. This investigation aims to highlight the urgency of the need for strong and effective regional regulations in overcoming the problem of forest and land fires.

By understanding the existing legal framework and potential improvements, it is hoped that better solutions can be found to reduce the risk of fire and its impacts. Through this research, it is hoped that stakeholders can understand the important role of regional regulations in forest and land fire management and identify areas where legal improvements are needed to increase the effectiveness of fire control efforts at the local level. Thus, optimizing forest fire control through the legal framework and the formation of regional regulations is important in effective mitigation and control efforts.

Research Methods:-

The research method used in this paper is a normative juridical approach (dogmatic legal research) which is carried out by reviewing secondary data through literature studies to examine primary legal materials in the form of statutory regulations or other legal documents. (Muhammad, 2004) Through a statutory approach, it is carried out by reviewing statutory regulations relating to the delegation of authority, including the Environmental Protection and Management Law, as well as the Forestry Law. The legal concept approach (conceptual approach) is carried out by examining views regarding the delegation of authority. Apart from that, research results, study results and other references were also reviewed.

Discussion:-

1) Forest and Land Fire Control Regulations in Indonesia

Forest and land fire control regulations are based on several principles, principles and theories of environmental law. These principles, such as the principles of benefit and sustainability, democracy, justice, togetherness, openness and integration, are the basis for community involvement in efforts to prevent and handle forest and land fires. (Kornelis, 2023) The principle of legal certainty emphasizes the need for clarity in laws and regulations related to controlling forest and land fires. The principle of responsibility highlights the importance of upholding responsibility for perpetrators of arson, both civil and criminal. And the principle of environmental justice emphasizes the need for justice in law enforcement regarding forest and land fires.

Apart from principles, environmentally sound principles and sustainable development are also needed. This principle encourages efforts to prevent, control and manage forest and land fires because of their impact on the environment and ecosystem. (Aisyah, 2017) Environmental law theory is applied to understand regulations related to controlling environmental damage due to fire. One relevant theory is the theory of absolute responsibility (strict liability), which is used to enforce the law against perpetrators of forest and land burning.

Based on these principles and principles, controlling forest and land fires requires a holistic approach that involves the community, policy makers, law enforcement officials, as well as the compliance of every person and business entity. An in-depth understanding of environmental legal theory, principles and principles of environmental law, such as legal certainty, responsibility and environmental justice, is an important foundation in creating effective policies and regulations. These principles also serve as guidelines for creating a safe and sustainable environment. In addition, environmental law theory provides a comprehensive view of the regulation of forest and land fire control, including aspects of criminal acts, environmental law enforcement, and a holistic-ecological approach. All of this comes together in an effort to protect the environment and society from the negative impacts of forest and land fires.

In Indonesia, the regulation of forest and land fire control is reflected in various laws and regulations, starting from the 1945 Constitution of the Republic of Indonesia (1945 Constitution of the Republic of Indonesia) to regional regulations. The 1945 Constitution of the Republic of Indonesia, as the highest norm, grants attributional authority to regional governments in establishing other regulations to carry out autonomy and assistance tasks (Article 18

paragraph (6) of the 1945 Constitution). Law Number 41 of 1999 concerning Forestry provides a strong legal basis for fire control, by regulating the protection of forests and forest areas and the prohibition of forest burning (See Article 47 letter a of Law Number 41 of 1999). Law Number 24 of 2007 concerning Disaster Management regulates the responsibilities of the state and regional governments in managing forest and land fires as part of efforts to protect against natural and non-natural disasters (See Article 8 of Law Number 24 of 2007). Furthermore, Law Number 32 of 2009 concerning Environmental Protection and Management gives regional governments the authority to regulate the control of environmental pollution and/or damage related to forest and land fires (See Article 13 paragraph (3) of Law Number 32 of 2009 jo Article 63 paragraph (2) Law Number 6 of 2023). Meanwhile, Law Number 39 of 2014 concerning Plantations regulates the prohibition on clearing and/or cultivating land by burning and the obligation for plantation business actors to have a land fire control system (See Article 56 paragraph (1) of Law Number 39 of 2014).

Control of forest and land fires is also further regulated by several government regulations. First, Government Regulation Number 4 of 2001 concerning Control of Environmental Damage and/or Pollution Related to Forest and/or Land Fires (PP 4/2001). This PP is based on the understanding that forests and/or land have important functions for human life and the environment, so that control of environmental damage and/or pollution needs to be carried out. Forest and/or land fires are identified as the main cause of environmental damage and/or pollution, both from internal and external sources, and have caused significant ecological, economic, social and cultural losses.

In Articles 11 and 12 PP 4/2001, it is stated that there is a prohibition on carrying out forest and/or land burning activities as well as the obligation to prevent environmental damage and/or pollution related to these fires. Article 13 emphasizes the obligation for those responsible for businesses that can have a major impact on environmental damage and/or pollution to prevent forest and/or land fires at their business location. Article 14 regulates the requirements for facilities and infrastructure that must be owned by the person in charge of the business to prevent forest and/or land fires at their business location, including early detection systems, fire prevention tools, and regular fire management training.

Second, Government Regulation Number 57 of 2016 (PP 57/2016) amends Government Regulation Number 71 of 2014 concerning Protection and Management of Peat Ecosystems. This PP recognizes the vulnerability of peat ecosystems and the need for intensive efforts in peat protection and management. Overcoming damage to the peat ecosystem related to forest and land fires is regulated in Article 27 paragraphs (2) and (3) which emphasizes extinguishing fires, isolating vulnerable areas, constructing water control structures, and other actions that do not harm the peat ecosystem.

Third, Government Regulation Number 22 of 2021 (PP 22/2021) concerning the Implementation of Environmental Protection and Management is stipulated to further regulate the provisions of Law 6 of 2023 concerning Job Creation. Article 272 paragraphs (1) and (2) establish criteria for environmental damage related to forest and/or land fires. This PP also emphasizes disaster management that results in air pollution, including forest and land fires, as well as the authority of Regional Governments in monitoring the use of peat ecosystems.

Furthermore, Minister of Environment and Forestry Regulation Number P.32/MENLHK/SETJEN/KUM.1/3/2016 (Permen LH Number 32/2016) regulates the control of forest and land fires. Article 69 outlines the implementation of forest and land fire prevention, including community empowerment, implementation of early warnings and preventive patrols. Article 72 sets out fire management objectives, including improving data analysis, mutual cooperation in extinguishing, and evacuation services.

Finally, Minister of Agriculture Regulation Number 5 of 2018 (Permentan 5/2018) concerning Clearing and/or Processing Plantation Land Without Burning requires plantation business actors to carry out activities without burning. This regulation also regulates systems, facilities and infrastructure for controlling actions that have been and are being carried out, as well as urgent needs in the context of handling and recovering forest fires. In this case, the Governor coordinates with relevant agencies at the provincial level and the Central Government to obtain the assistance needed to overcome widespread forest fires.

Through established regulations, the government determines several aspects related to forest and land fire management. Starting from the prohibition on burning of forests and land, the obligation of permit holders to extinguish fires, to coordination efforts between agencies and reporting related to post-fire response and recovery.

All of these steps are directed at protecting the environment, reducing economic, social and cultural losses caused by forest and land fires. Apart from that, the importance of preventive efforts is also emphasized in regulations, such as community empowerment, outreach, training, and the formation of forest security brigades and groups. All of this aims to increase awareness, speed up early detection, and minimize the risk of forest and land fires.

These regulations also regulate increasing human resources and equipment in fighting fires. This includes establishing firefighting teams, procuring firefighting equipment, as well as facilitating funds for the restoration of ecosystems affected by fire, such as peat ecosystems. Apart from mitigation efforts, field checks on hot spots and information on forest and land fires are also regulated. This process includes location classification, hot spot categorization, checking priorities, as well as reporting and following up on the information obtained.

Through the discussion outlined above, it can be seen that regulations related to controlling forest and land fires in Indonesia are actually quite comprehensive. However, in reality, forest and land fires still frequently occur in various regions of Indonesia. This raises questions about the fundamental problems faced in efforts to control forest and land fires. Therefore, an in-depth evaluation of the implementation and enforcement of these regulations is needed, as well as identification of the main factors that cause gaps between the existing legal framework and the actual incidence of forest and land fires in the field. It is also necessary to consider various aspects such as monitoring, law enforcement, the role of the community, as well as coordination between institutions and stakeholders in order to increase the effectiveness of controlling forest and land fires in Indonesia.

2) Fundamental Problems and Urgency of Forming Regional Regulations Related to Forest and Forestry Fires

a. Basic Problems in Controlling Forest and/or Land Fires

In general, the basic problems in controlling forest and land fires include several interrelated aspects. One of the main aspects is weak coordination and cooperation between government agencies, related agencies and stakeholders in fire management. Lack of effective communication between various parties can hamper response efforts. The significant influence of the Central Government in efforts to control forest and land fires in the affected areas has negatively impacted the level of influence of the Regional Government and the local Forest Service in implementing forest and land fires control. The Central Government is dominant in decision making, although by law control of authority is in the hands of the regions, both at the provincial and district levels.

The high role of the Central Government in controlling forest and land fires (karhutla) at the regional level is very visible from the influence it has on various agencies under its authority. This influence is reflected in several forms, including the formation of the Peat Restoration Agency (BRG), the issuance of Presidential Instruction (Inpres) no. 11 of 2015, the signing of a Memorandum of Understanding (MoU) between the Central Government and the Indonesian National Police (POLRI) and the Indonesian National Army (TNI), as well as the threat of removal from office for officials in these two institutions if forest and land fires occur in the areas they lead. Even though it does not have legal force, in fact this influence plays an important role. For example, there are large-scale transfers of POLRI and TNI officials which may be an implementation of the Central Government's threats to these two institutions.

This influence and pressure from the Central Government also has an impact on agencies with authority in environmental and forestry matters, such as the Ministry of Environment and Forestry (KLHK). This pressure increases the interest and influence of the Ministry of Environment and Forestry in controlling forest and land fires in the region. The Ministry of Environment and Forestry has a very important role in the forest and land fire control program because it has the authority to validate concession permits, as regulated in Article 2 of Ministerial Regulation No. 31 of 2014. The impact of this concession permit is large on fires, especially in peatlands due to canalization activities. Apart from that, the Ministry of Environment and Forestry also played a role in the formation of the Forest and Land Fire Control Task Force (Satgas Dalkarhutla) and Manggala Agni, in accordance with Minister of Environment and Forestry Regulation No. 32 of 2016. As with the Central Government, the promulgation of this regulation is proof of the high importance of the Ministry of Environment and Forestry in carrying out forest and land fire control programs in the regions.

This large influence from the Central Government and the Ministry of Environment and Forestry ultimately has a negative impact on the level of influence of the government and the Forest Service in the regions. The strong dominance of both shows that in fact, the influence of government at the provincial and district levels is not as strong as at the central level even though based on existing regulations, authority lies in the hands of the

regions.(Irfan Kemal Putra, Bambang Hero Saharjo, 2019)This dominance of the Central Government, together with their direct involvement, is the result of the lack of capability of regional governments to control forest and land fires. This is in accordance with research which states that there is a lack of regional government capability in controlling forest and land fires.(Meiwanda, 2016)Several factors causing this lack of capability include limited tools to control forest and land fires on peatlands, the geographical condition of the forests, which mostly consist of peatlands with long distances between districts, and the previous focus which was only on dealing with haze without comprehensive prevention efforts.(Ardhi Yusuf, Hapsah, Sofyan Husein Siregar, 2019)One response from the central government to this shortage was the formation of the BRG.

The large influence of the Central Government also has an impact on the level of interest of the National Disaster Management Agency (BNPB), Provincial Regional Disaster Management Agency (BPBD), and Regency BPBD. According to Law no. 24 of 2007, all disaster management agencies may only be deployed for extinguishing operations after the status of forest and land fires is declared a disaster by the regional head or president. However, facts on the ground show that they are often deployed from the start of a fire, before disaster status is declared. Although this has led to success in controlling forest and land fires, it raises questions regarding the proper implementation of the law.

In Article 50 of Law no. 24 of 2007 also states that by declaring forest and land fires a disaster, it will be easier for operational parties to get access and support, including in terms of providing budgets. However, the problem that occurs is that there is no budget for BNPB's operational costs in controlling forest and land fires, which ultimately must be borne by BNPB itself. This shows a large financial need for local governments to control forest and land fires, especially in areas that are prone to fires.

The next problem is the extent of forest and land areas in Indonesia, including conservation, protected and production forests. This creates complex monitoring, extinguishing and handling challenges. Factors such as deforestation, peatland degradation, lack of fire breaks, and poor land management contribute to fire risk.(Walhi, 2023)Efforts to address deforestation, peatland degradation and unsustainable land management practices are critical to preventing fires.

Ambiguity in forest and land management rights is a serious problem, which can trigger conflicts regarding claims over land use. Lack of management in state forest areas is the cause of the government's weakness in protecting forest resources. For example, in Lampung Province, one of the conflicts occurred in the Register 45 Production Forest area in Mesuji Regency. Therefore, resolving land disputes in protected forest areas is important to resolve forest and land management conflicts. The lack of community participation in efforts to prevent and control fires is also a problem. Communities need to be more active in monitoring, preventing and handling fires to increase the effectiveness of mitigation efforts and strengthen awareness of the importance of protecting forests and land. This requires educating the public about the dangers of fire and increasing awareness of safe practices in land management.

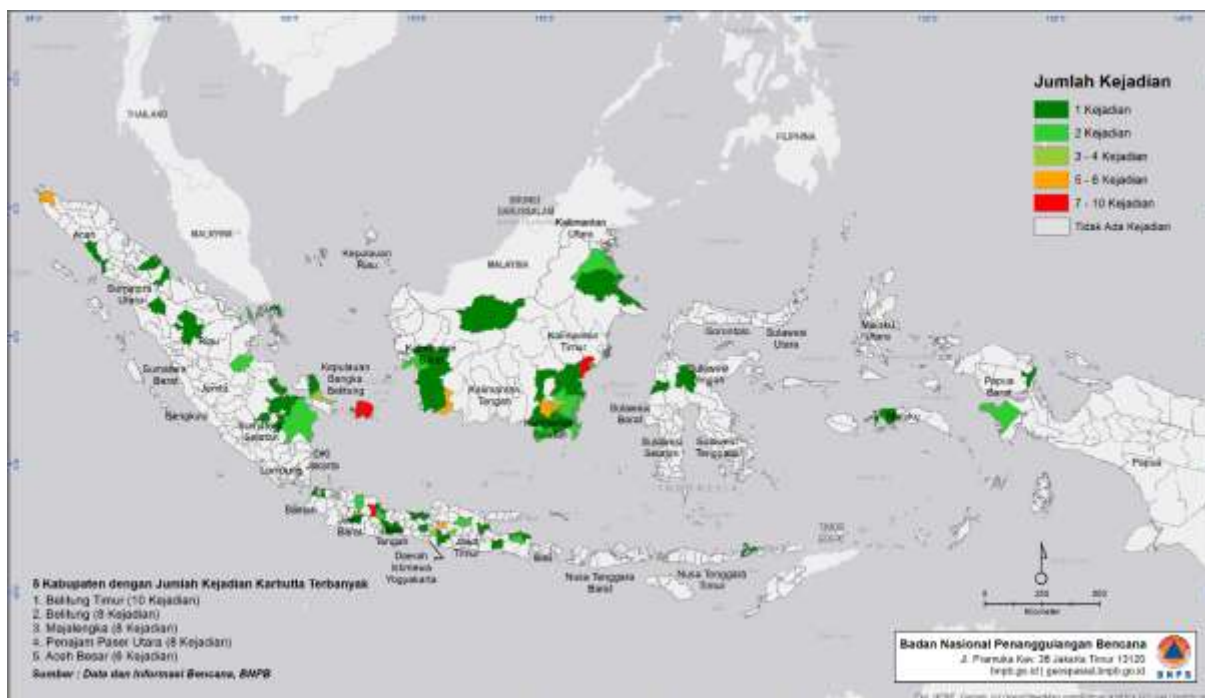
To overcome this problem, comprehensive steps are needed, including increasing coordination between government agencies, stronger regulatory enforcement, more effective fire prevention, resolving conflicts related to land management rights, and increasing community participation in efforts to prevent and control fires. In this way, Regional Governments at both provincial and district levels can strengthen forest and land fire control systems and ensure the sustainability of natural resources and community safety.

b. The Urgency of Forming Regional Regulations Concerning Forest and/or Land Fire Control

Forest and land fires are an environmental issue that has a broad impact, not only limited to the area where it occurs, but also has the potential to affect other countries or regions. For example, forest fires in Sumatra and Kalimantan, Indonesia, not only harm Indonesia but also have a negative impact on neighboring countries such as Singapore and Malaysia.(CNBC, 2023)Singapore's National Environment Agency said 212 hot spots were detected on the island of Sumatra in 2023. A brief shift in wind direction blew some of the thin haze towards Singapore, worsening air quality in the island nation. The Malaysian State also expressed the same thing, which urged them to take action against the forest and land fires. The impact of these fires is not only economic, but also social and environmental, including air pollution which can cause health problems such as respiratory problems and eye irritation.

The impact of forest and land fires is not only felt locally but also globally, because the smoke can spread to other areas, disrupt trade and educational activities, and cause significant economic losses. This impact not only has a direct impact on certain economic sectors, but can also hinder government efforts to reduce poverty in affected areas. It is important to remember that environmental impacts in one country can have a domino effect on neighboring countries. Therefore, cooperation between countries in the region is very necessary to overcome the impact of environmental pollution caused by forest and land fires. A firm policy from the Regional Government in regulating and controlling companies that have land management permits is crucial to minimizing the risk of fire. The initiative to form regional regulations related to controlling forest and land fires is expected to achieve several goals, such as protecting natural resources, preventing air pollution, providing direction for the government and the community, and strengthening community participation in fire control efforts.

The urgency of establishing regulations at the regional level regarding controlling forest and land fires (karhutla) is an urgent issue in Indonesia. This country has experienced a significant increase in forest and land fires in recent years, with data for 2023 showing an increase of 144 incidents, which is 64.29% of the total disaster incidents during August 2023. The distribution of forest and land fire areas can be seen in the following image. .



Source: National Disaster Management Agency, <https://data.bnpb.go.id/>

The Indonesian government has taken steps to overcome this problem, including the formation of the Ministry of Environment and Forestry (KLHK) and the development of regulations such as Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number P.32/MenLHK/Setjen/Kum.3/1/2016 which focuses on controlling forest and land fires. Apart from that, the government is also optimizing the budget for activities related to preventing and mitigating forest and land fires with a focus on supporting local governments in efforts to control forest and land fires. (KLHK, 2018) This is done with the support of Revenue Sharing-Reforestation Funds (DBH-DR) funds by the Provincial and Regency/City Governments. This distribution is in accordance with the Regulation of the Minister of Finance of the Republic of Indonesia Number: 230/PMK/07/2017 concerning the Use, Monitoring and Evaluation of Profit Sharing Funds from Natural Resources Forestry Reforestation Funds.

The importance of regional regulations in overcoming forest and land fires cannot be denied. Regional regulations can provide a more tailored approach to addressing the specific needs and challenges of each region, taking into account local conditions and the unique characteristics of each region. (Mardiansyah, 2016) Apart from that, regional regulations can also help ensure that efforts to control forest and land fires are more effective and sustainable in the long term. With more concrete regulations and active community participation, the negative impacts of forest and

land fires can be effectively minimized. Therefore, regulating and controlling forest and land fires at the regional level has a very crucial urgency from various aspects, including legal aspects, controlling bad impacts, and community participation.

Conclusion:-

Forests are an important element in maintaining the balance of the global ecosystem. However, it turns out that forest and land fires (karhutla) still occur frequently, with detrimental impacts on humans, animals, the environment and the economy. Therefore, controlling forest and land fires is very important to protect natural resources and ensure environmental sustainability. The legal framework plays a key role in efforts to control forest and land fires. Effective and comprehensive regulations are needed to develop strategies, policies and preventive and responsive actions in dealing with forest and land fires. In Indonesia, regulations related to controlling forest and land fires include various regulations, ranging from laws to government and ministerial regulations that regulate the prohibition of forest and land burning, mandatory fire extinguishing, as well as prevention and law enforcement efforts.

However, even though these regulations exist, forest and land fires still occur frequently in various regions of Indonesia. This raises questions about the fundamental problems faced in efforts to control forest and land fires, such as weak coordination between government agencies, lack of community participation in prevention and mitigation, and large areas of forest and land that are difficult to monitor and manage. Therefore, the urgency of forming regional regulations related to controlling forest and land fires is important. Regional regulations can strengthen the forest and land fire control system at the local level, increase coordination between government agencies and community participation, and ensure the sustainability of natural resources and community safety. Thus, it is hoped that this regional regulation can help reduce the risk of forest and land fires and their detrimental impacts.

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