



Law Enforcement Against Perpetrators Of Forest-Fire Crimes Within The Criminal Justice System In Indonesia

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ABSTRACT

This research highlights the gap between stringent regulations and the reality of court decisions, while seeking an ideal law enforcement model for individual and corporate perpetrators of forest burning. The research questions addressed in this thesis are: how are legal sanctions applied to perpetrators of forest-burning crimes within the criminal justice system, and what is the ideal concept for the application of legal sanctions against perpetrators of forest-burning crimes within the criminal justice system in Indonesia? The theories employed in this research are the theory of law enforcement and the theory of punishment. The results of the research indicate that Indonesia's criminal justice system has formulated layered sanctions for perpetrators, both individuals and corporations, in the form of imprisonment and fines. However, in practice, the application of these sanctions still faces a number of obstacles, such as weak coordination among law enforcement agencies, difficulties in proving the element of intent, and law enforcement against intellectual actors or corporations, which is often not yet optimal. Therefore, optimization of progressive and comprehensive law enforcement is required, including the utilization of scientific evidence and firm sanctions to restore environmental losses.

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1. INTRODUCTION

Preserving and maintaining the quality of the environment requires several principal means as prerequisites, namely institutional facilities, financial resources, and legal instruments. Law has an important position and significance in resolving environmental problems and constitutes the juridical basis for implementing government policies. Law constitutes a series of instruments available to the government to realize environmental policies formulated by the government and incorporated into environmental legislation as their foundation and framework.¹

Criminal policy in law enforcement constitutes one of the efforts to protect the environment. Such policy must encourage the development of new methods aimed at preventing crime while simultaneously protecting the environment. Crimes in the form of environmental pollution and destruction have had enormous impacts on human life, including global warming, flash floods, forest fires, and landslides, which have caused casualties as well as losses to community economic resources, social facilities, and public facilities. In addition, the decline in the carrying capacity of the environment has resulted in various endemic diseases affecting almost all regions of Indonesia, such as outbreaks of dengue fever, gastroenteritis, pulmonary diseases, diarrhea, and others.

Forest fires may occur due to natural factors or human activities, whether intentional or unintentional. Human activities may constitute intentional factors undertaken in connection with certain activities, such as preparing land for shifting cultivation, plantations, industrial plantation forests, transmigration, or large-scale livestock activities such as

¹ Mien Rukmini, *Aspek Hukum Pidana dan Kriminologi (sebuah bunga rampai)*, PT Alumni, Bandung, 2006, hlm 94.



cattle farming, which continuously requires fresh forage. By burning *alang-alang* grass, fresh young grass can immediately be obtained as cattle feed. Unintentional factors, on the other hand, include fires caused by cigarette butts discarded carelessly which appear to have been extinguished when discarded but in fact still contain embers. Fires may also originate from campfires left by campers or from fires used by people working in forests.

Forest and land fires occurring in Indonesia are not unusual for the public, as such incidents occur almost every year. However, it is considered unusual by the public when perpetrators of frequently occurring forest and land fires are not subject to enforcement measures by law enforcement authorities in accordance with applicable laws and regulations. Forest and land fires caused by human actions constitute legal events, namely events or occurrences that give rise to legal consequences.²

During 2016–2021, several provinces in Indonesia experienced severe smoke disasters caused by forest and land fires, which affected public health and resulted in fatalities among both children and adults. The locations of fires were not limited to forest and land areas but had also spread into residential areas. The areas most frequently affected by forest and land fires were peatland ecosystem areas, all of which had permits for forest utilization and cultivation rights for plantations.

Based on data from the National Disaster Management Agency (Badan Nasional Penanggulangan Bencana/BNPB), there had been 526 forest and land fire incidents in Indonesia from January 1 to September 5, 2023. Although only eight months had elapsed and the following four months remained until the end of the year, the number of forest and land fire cases had increased by 108.73% compared with 2022, when there were 252 incidents. In 2024, BNPB recorded 629 forest and land fire cases throughout the year, with a total burned area of approximately 376,000 hectares. In 2025 (up to July), the Ministry of Forestry recorded that fires were under control, with the burned area decreasing compared with 2024, at approximately 8,594 hectares through June/July 2025. However, there were reports of up to 213,000 hectares by the end of the year according to Ministry of Forestry data. In 2026 (as of March), the Ministry of Environment and Forestry recorded 929 hotspots within the previous 24 hours at the end of March 2026.³ Forest and land fires have also caused the air to become mixed with smoke, resulting in impaired visibility, declining air quality, and health problems among some residents, such as eye irritation and acute respiratory infections (ARI). According to data from the Indonesian Forum for the Environment (Wahana Lingkungan Hidup Indonesia/WALHI), forest and land fires caused residents to suffer from ARI. In Jambi Province, there were 20,471 people affected; in Central Kalimantan Province, 15,138; in South Sumatra Province, 28,000; in Riau Province, 97,139; and in West Kalimantan Province, 10,010.⁴

The factors causing forest and land fires may include human actions, climatic factors, the physical condition of peatland ecosystems, as well as a combination of these factors. The human factor involving the burning of forests and land is demonstrated by the arrest of a number of company officials and members of the public by the police who were suspected of having carried out forest and land burning.⁵

Climate change has also been identified as a cause of forest and land fires because it has contributed to increasing air temperatures. Damage to peatland ecosystems caused by business activities that fail to take into account the characteristics of peatlands also contributes to forest and land fires.

Which factor is the most dominant will continue to be a subject of endless debate because of the numerous social, economic, and political interests in fire-affected areas. Regardless of debates concerning causal factors and the involvement of certain groups, human beings, who are equipped with knowledge and technology and entrusted with the responsibility to preserve nature, must be positioned as a determining factor. It can almost certainly be stated that 70% (seventy percent) to 80% (eighty percent) of the factors causing forest and land destruction are attributable to human activities.⁶

² Suriansyah Murhaini, *Hukum Kehutanan: Penegakan Hukum Terhadap Kejahatan di Bidang Kehutanan*, Laksbang Grafika, Yogyakarta, 2012, hlm 9.

³ Tempo.Co, Riset: Ada 100.300 Kematian Akibat Kebakaran Hutan 2015, diakses pada tanggal 20 Februari 2026

⁴ <http://www.mongabay.co.id/2015/10/06/Berikut-korporasi-di-balik-kebakaran-hutan-dan-lahan-itu>, diakses tanggal 23 Februari 2026 jam 10.00 Wib

⁵ Nurhasan Ismail, “*Penegakan Hukum Pembakaran Hutan Dan Lahan*” makalah disampaikan pada seminar penegakan hukum dalam perspektif kebakaran hutan dan lahan gambut, fakultas Hukum Universitas Gadjah Mada, Yogyakarta, 7 Desember 2015

⁶ Supriadi, *Hukum Kehutanan & Hukum Perburuan Di Indonesia*, Sinar Grafika, Jakarta, 2010, hlm. 387.



Law of the Republic of Indonesia Number 32 of 2009 concerning Environmental Management has cumulatively prescribed imprisonment and fines as principal punishments for perpetrators of Environmental Crimes, which may be supplemented by disciplinary measures (*maatregel*). Article 108 provides that any person who carries out land burning as referred to in Article 69 paragraph (1) letter h shall be punished with imprisonment for a minimum of 3 (three) years and a maximum of 10 (ten) years and a fine of at least IDR 3,000,000,000.00 (three billion rupiah) and at most IDR 10,000,000,000.00 (ten billion rupiah). In practice, however, most legislation governing environmental crimes outside Law Number 32 of 2009 regulates criminal sanctions alternatively, namely imprisonment or a fine alone.⁷

Forest and peatland fires during the dry season may be caused or triggered by natural events, activities of companies operating in the plantation sector, or human negligence. Forest and land burning constitutes a prohibited act because, in addition to violating Article 50 of Law Number 41 of 1999 in conjunction with Law Number 19 of 2004 concerning Forestry, it also violates Article 11 of Government Regulation Number 4 of 2001 concerning the Control of Environmental Damage and/or Pollution Related to Forest and/or Land Fires, as well as Article 312 of Law Number 1 of 2023 concerning the Criminal Code.

There are several examples of forest-burning cases occurring in Indonesia, including the following:

1. The area affected by forest and land fires in Riau Province in 2021 was 1,400.08 hectares. This was stated by the Head of the Regional Disaster Management Agency (Badan Penanggulangan Bencana Daerah/BPBD).
2. The Regional Disaster Management Agency (BPBD) of South Kalimantan recorded that throughout 2021, forest and land fires in South Kalimantan occurred 331 times and burned 2,482.45 hectares of land and forest.
3. In the NTB region, 29,157 hectares were recorded in 2020, increasing to 100,908 hectares in 2021. In the NTT region, the area of burned forest and land was 114,719 hectares in 2020 and increased to 137,297 hectares in 2021.

In the development of Indonesian criminal law, corporations may be subject to criminal liability or may be regarded as subjects of criminal law. Corporations genuinely exist and occupy an important position in our society and have the capacity to cause losses to other parties in society, just as human beings do. Treating corporations like human beings (*natural persons*) and imposing liability for criminal offenses committed by corporations is consistent with the legal principle that everyone is equal before the law (*principle of equality before the law*).

Such corporations, which may have a significant impact on social life, should also be required to respect the fundamental values of society as determined by criminal law. However, corporate crime is an offense committed by management, employees, or authorized parties on behalf of or in the interests of a corporation (legal entity/business entity) that causes harm to other parties. The New Criminal Code (Law Number 1 of 2023) recognizes corporations as subjects of law, with principal sanctions in the form of fines, revocation of licenses, and even dissolution.

2. RESEARCH METHOD

The research method employed in this dissertation is normative juridical research, conducted as an effort to obtain the data required in relation to the problems under study. The data used consist of secondary data and tertiary legal materials. In addition, primary data are also used to support the secondary legal materials. Data analysis was conducted using a qualitative juridical analysis method.

3. RESEARCH QUESTIONS

1. How is law enforcement against perpetrators of forest-burning crimes implemented within the criminal justice system?
2. What is the ideal concept for the application of legal sanctions against perpetrators of forest-burning crimes within the criminal justice system in Indonesia?

4. DISCUSSION

A. Law Enforcement Against Perpetrators of Forest-Burning Crimes Within the Criminal Justice System

Forest and land fires have broad, serious, and direct impacts on public health, the economy, disruption of human activities, ecological balance, and environmental damage. Forest fires may be caused either by natural factors or by intentional human actions. Fires caused by natural factors generally do not produce major impacts or significant losses. Natural forest fires may occur due to prolonged dry seasons, lightning strikes, volcanic activity, and ground fires. However, forest fires caused intentionally by humans remain difficult to minimize. The government has

⁷ Undang-Undang Republik Indonesia Nomor 32 Tahun 2009 tentang *Pengelolaan Lingkungan Hidup*. Lembaran Negara Republik Indonesia Tahun 2009 Nomor 140. Tambahan Lembaran Negara Republik Indonesia Nomor 5059.



undertaken various efforts to prevent forest fires but has not yet been able to prevent similar disasters, which continue to recur every year. Forest fires caused intentionally by humans include uncontrolled land burning, which may result in deforestation, conflicts between companies and communities owning land, local economic factors, lack of public awareness, and weak law enforcement.⁸

The Government of Indonesia has implemented several measures to address forest fires occurring in Indonesia, including firefighting and weather modification technology (Teknologi Modifikasi Cuaca/TMC) in several provinces identified as forest-fire-prone areas, as well as ground and aerial operations involving 35 helicopters deployed to areas prioritized for forest-fire management. The Government of Indonesia has also implemented the Forest and Land Fire Law through a joint statement by the Minister of Environment and Forestry and the Chief of the Indonesian National Police, Number PKS.3/MENLHK/PHLHK/GKM.3/2/2020 and Number Mak/01/II/2020 concerning Law Enforcement on Forest and Land Fires. This information establishes that every person responsible for an activity and/or such activity must comply with prohibitions and comply with provisions and requirements concerning the prevention and control of forest and land fires.⁹

Indonesia has also implemented regulations concerning forestry and the environment as contained in Law Number 41 of 1999 concerning Forestry, Law Number 32 of 2009 concerning Environmental Protection and Management, and Government Regulation Number 4 of 2001 concerning the Control of Environmental Damage and/or Pollution Related to Forest and/or Land Fires. Article 50 paragraph (3) of Law Number 41 of 1999 concerning Forestry also provides that every person is prohibited from burning forests, while Article 69 paragraph (2) of Law Number 32 of 2009 concerning Environmental Protection and Management states that everyone is prohibited from clearing land by burning. A person who intentionally causes a forest fire may be subject to imprisonment for a maximum of 15 years and a fine of up to IDR 5,000,000,000.00, while any person who negligently burns a forest may be subject to imprisonment for a maximum of 5 years and a fine of up to IDR 1,500,000,000.00.

The formulation of environmental offenses is always associated with criminal sanctions (criminal threats), because, theoretically, criminal sanctions are intended to enforce environmental legal norms. Criminal sanctions arise as a reaction to enforce compliance with environmental legal norms. Environmental legal provisions under Law Number 32 of 2009, for example, contain legal provisions or norms relating to rights, obligations, and authority in environmental protection and management.¹⁰ Criminal sanctions constitute one type of sanction intended to enforce or ensure compliance with the legal provisions governing forest management under the law. As criminal offenses, the sanctions include imprisonment, fines, and disciplinary measures. Imprisonment and fines vary considerably depending on the nature of the act and its consequences. In addition to criminal sanctions and fines, perpetrators may also be subject to disciplinary measures as formulated in Article 119 of Law Number 32 of 2009, namely:¹¹

- a. Confiscation of profits obtained from the criminal offense;
- b. Closure of all or part of the place of business and/or activities;
- c. Repair or restoration of the consequences of the criminal offense;
- d. An obligation to perform what was unlawfully neglected; and/or
- e. Placement of the company under custodianship for a maximum period of 3 (three) years.

The application of criminal sanctions against perpetrators of forest burning has been regulated by law. Under the applicable legislation, the criminal sanctions imposed on perpetrators take several forms depending on the criminal offense committed. The following are several forms of criminal offenses relating to environmental destruction and pollution and the sanctions threatened against such offenses:¹²

1. Acts Resulting in the Exceeding of Ambient Air Quality Standards, Water Quality Standards, Sea Water Quality Standards, or Environmental Damage Criteria

Normatively, Article 98 contains three paragraphs. Article 98 paragraph (1) provides as follows: any person who intentionally commits an act resulting in the exceeding of ambient air quality standards, water quality standards, sea water quality standards, or environmental damage criteria shall be punished with imprisonment for a minimum of three years and a maximum of ten years and a fine of at least IDR 3,000,000,000 and at most IDR 10,000,000,000.

⁸ Beritno, P. (2019). Efektivitas Penegakan Hukum Terhadap Pembakaran Hutan Dan Lahan Di Kalimantan Tengah. *Jurnal Ilmu Hukum Tambun Bungai*, 4(2).

⁹ Dari, F. S. W. (2022). Kesadaran Hukum Masyarakat Dalam Pencegahan Pembakaran Hutan. *De Cive: Jurnal Penelitian Pendidikan Pancasila dan Kewarganegaraan*, 2(10), 381-389.

¹⁰ Muhammad Akib, *Hukum Lingkungan*, Raja Grafindo Persada, Jakarta, 2014, hlm 165-167

¹¹ Lihat Pasal 119 Undang-Undang No. 32 Tahun 2009

¹² Muhammad, Akib, *Hukum lingkungan: perspektif global dan nasional*, Depok: Rajawali Pers, 2016, hlm 88



The subjective elements of the article consist of "every person" and "intentionally." The meaning of "every person" in this article includes an individual or legal entity, whether incorporated or unincorporated. Therefore, perpetrators under Article 98 paragraph (1) are not limited to human beings or individuals but also include corporations.¹³

Article 98 paragraph (2) provides that if the perpetrator's act results in injury to a person and/or danger to human health, the threatened punishment is imprisonment for a minimum of four years and a maximum of twelve years, and a fine of at least IDR 4,000,000,000 and at most IDR 12,000,000,000.¹⁴

The essence of Article 98 paragraph (2) is basically the same as Article 98 paragraph (1), namely that both constitute material offenses. The distinction lies in the consequences caused by the perpetrator's act. The consequence under Article 98 paragraph (1) concerns the environment, whereas the consequence under Article 98 paragraph (2) consists of injury to a person and/or danger to human health.¹⁵

Because the consequences under Article 98 paragraph (2) are more serious than those under Article 98 paragraph (1), as they concern legal protection of human interests, the criminal sanctions under Article 98 paragraph (2) are therefore heavier: from a minimum of three years and a maximum of ten years to a minimum of four years and a maximum of twelve years, and from a fine of at least IDR 3,000,000,000 and at most IDR 10,000,000,000 to a fine of at least IDR 4,000,000,000 and at most IDR 12,000,000,000.

Nevertheless, if the consequences caused by the perpetrator's act are serious injury or death, the criminal sanctions are further increased from imprisonment of a minimum of four years and a maximum of twelve years to imprisonment of a minimum of five years and a maximum of fifteen years, and from a fine of at least IDR 4,000,000,000 and at most IDR 12,000,000,000 to a fine of at least IDR 5,000,000,000 and at most IDR 15,000,000,000.

2. Negligence Resulting in the Exceeding of Ambient Air Quality Standards, Water Quality Standards, Sea Water Quality Standards, or Environmental Damage Criteria

Article 99 also consists of three paragraphs. Article 99 paragraph (1) is formulated as follows: any person who, due to negligence, causes the ambient air quality standard, water quality standard, sea water quality standard, or environmental damage criteria to be exceeded shall be punished with imprisonment for a minimum of one year and a maximum of three years and a fine of at least IDR 1,000,000,000 and at most IDR 3,000,000,000.

Upon examination, the distinction between the formulation of Article 98 paragraph (1) and Article 99 paragraph (1) above lies only in the subjective element, namely intent and negligence. The subjective element under Article 99 paragraph (1) is negligence. The remaining elements of the offense are formulated as material offenses and are the same. Because there is a significant difference between a criminal offense committed intentionally and one committed negligently, it is logical that the criminal threat under Article 99 paragraph (1) is lighter than the criminal threat under Article 98 paragraph (1).¹³

The formulation of the offense in Article 99 paragraph (2) merely constitutes an aggravation of the criminal threat because the consequences are more severe/serious than those under Article 99 paragraph (1), namely injury to a person and/or danger to human health. The imprisonment is increased from a minimum of one year and a maximum of three years to a minimum of two years and a maximum of six years, and the fine is increased from a minimum of IDR 1,000,000,000 and a maximum of IDR 3,000,000,000 to a minimum of IDR 2,000,000,000 and a maximum of IDR 6,000,000,000.

Nevertheless, if the consequences caused by the perpetrator's negligence consist of serious injury or death, the criminal sanctions are also increased from imprisonment of a minimum of two years and a maximum of six years to imprisonment of a minimum of three years and a maximum of nine years, and the fine is increased from a minimum of IDR 2,000,000,000 and a maximum of IDR 6,000,000,000 to a minimum of IDR 3,000,000,000 and a maximum of IDR 9,000,000,000.

There are several obstacles to controlling forest and land fires, including obstacles at the planning and budgeting stage; obstacles within institutions responsible for preventing and extinguishing forest and land fires; obstacles in supervision and law enforcement; obstacles concerning land status and utilization; obstacles involving facilities and infrastructure; obstacles in peatland areas; obstacles related to community behavior/habits; obstacles involving human resources; and, finally, obstacles in resolving problems, as follows:¹⁶

¹³ ibid

¹⁴ ibid

¹⁵ ibid

¹⁶ Nisa, A. N. M. (2020). *Penegakan hukum terhadap permasalahan lingkungan hidup untuk mewujudkan pembangunan berkelanjutan* (studi kasus kebakaran hutan di indonesia). Jurnal Bina Mulia Hukum, 4(2), 294-312.



a. Planning and Budgeting Obstacles

Obstacles to controlling forest and land fires at the planning stage arise because planning has not yet been integrated and strategic, compounded by inadequate budgetary support. This commonly occurs because perceptions and levels of concern are not the same. To overcome these obstacles, it is necessary to optimize the role of Bappenas, the Ministry of Finance, and BNPB at the central level, as well as optimize the role of provincial and regency/city Bappeda at the regional level to create synergy in planning and provide adequate budgets. It should be remembered that increasing the awareness of all parties that fires constitute a serious problem requires the concern of all parties.

b. Institutional Obstacles in Preventing and Extinguishing Forest and Land Fires

Obstacles within institutions responsible for preventing and extinguishing forest and land fires occur because fire-control activities continue to operate separately (*sectoral ego*), with no clear determination of who serves as the field commander for the entire area. At the operational level, coordination is difficult to implement, particularly when funding is involved. Efforts to overcome these obstacles include socialization and optimization of the role of the Regency/City Governments and Regional Disaster Management Agencies (BPBD) in accordance with Presidential Instruction 16/2011.

c. Obstacles in Supervision and Law Enforcement

Obstacles in supervision and law enforcement arise from weak supervision by regional governments due to factors such as lack of financial support and limited human resources, resulting in the continued practice of land clearing by burning. Another factor worsening the situation in the field is the level of public concern and participation in preventing, supervising, and managing fires.

Broadly speaking, law enforcement efforts intended to create a deterrent effect have not yet been effective. Several efforts that may be undertaken to minimize obstacles in law enforcement include:

1. Empowerment of Civil Servant Investigators (PPNS) and adequate operational funding. PPNS can be empowered as investigators who can focus more specifically on problems involving land clearing by burning.
2. An equally urgent effort is to change behavior and increase community participation in the prevention, supervision, and management of forest and land fires by involving religious leaders, community leaders, youth leaders/youth organizations, and local village officials.

There must be a common understanding of the importance of law enforcement among law enforcement personnel, expert witnesses, and parties involved in enforcing the law against violators.

d. Obstacles Concerning Land Status and Utilization

Obstacles to controlling forest and land fires concerning land-use status occur in the licensing and use of land, which are not orderly. This results in many areas having unclear status or management, such as former Forest Concession Rights (HPH), surplus reserved land, or land that has not been utilized because it does not yet have Cultivation Rights (HGU).

For example, HGU issued by the National Land Agency (BPN) is usually smaller than the area designated by the Regent/Governor, and the remaining land is not officially returned by the company to the licensing authority, namely the Regent/Governor. Consequently, when an incident occurs, there is no party responsible. To address the potential for future problems, licensing must be put in order and firm sanctions must be imposed on parties that abandon their land.

e. Professionalism of Law Enforcement Officials

Quantity, in the sense of adequate numbers of law enforcement personnel, and quality, in the sense of the ability and expertise (professionalism) of law enforcement officials in handling environmental cases, will affect the effectiveness of environmental law enforcement. In environmental law enforcement, both in the preventive and repressive dimensions, there is still a shortage of PPNS personnel in relevant technical agencies (Bapedal, for example), so they only handle preventive cases such as monitoring, guidance, and warnings.

f. Forestry Criminal Law Provisions Cannot Reach Intellectual Actors

The legal provisions formulated in criminal offenses in the forestry sector have been unable to bring intellectual actors of crimes to justice, particularly unscrupulous state officials, law enforcement officers, or civil servants involved in collusion, because this is not specifically regulated in Law Number 41 of 1999.

The application of Article 55 paragraph (1) of the Criminal Code classifies perpetrators of criminal offenses as persons who commit, order others to commit, or participate in committing criminal acts. Nevertheless, the joint criminal liability that must be borne in the occurrence of such crimes may also diminish the public's sense of justice because, despite differences in the quality and consequences of the acts committed by participating perpetrators, they



may be punished with the same maximum penalty as the principal perpetrator under Article 55 paragraph (1) of the Criminal Code, while the role of the principal perpetrator is often difficult to determine.

g. Absence of a Specialized Court for Forestry Crimes

Criminal offenses in the forestry sector constitute extraordinary crimes, and therefore their handling requires extraordinary methods. Accordingly, judicial proceedings involving forestry crimes need to be conducted by a specialized court so that criminal cases in the forestry sector can be handled comprehensively.

h. Weak Coordination Among Law Enforcement Agencies

Weak coordination among law enforcement agencies may result in overlapping authorities and policies, thereby creating a high risk of conflicts of interest. Uncoordinated law enforcement is one of the obstacles to enforcing criminal offenses in the forestry sector. Judicial proceedings, from investigation through trial, require substantial costs, lengthy legal processes, adequate facilities and infrastructure, and appropriate handling of forestry criminal cases.

It is this weakness that causes perpetrators/promoters of forest burning not to fear the existing legal sanctions, while forest management becomes increasingly uncontrolled. Consequently, increasingly larger forest areas are burned and converted into plantation areas without considering the impacts of such burning.

In relation to Law Number 32 of 2009 concerning Environmental Protection and Management, environmental law enforcement may be classified into three categories, namely: 1. environmental law enforcement in relation to administrative/state administrative law; 2. environmental law enforcement in relation to civil law; and 3. environmental law enforcement in relation to criminal law.

Consistent enforcement of administrative sanctions by the government in accordance with its existing authority will have an impact on law enforcement, particularly in maintaining the sustainability of environmental functions. In this regard, enforcement of administrative sanctions constitutes the frontline of environmental law enforcement (*primum remedium*).

This means that criminal law enforcement activities against environmental crimes may only commence after the competent authorities have imposed administrative sanctions and taken action against the violator by imposing such administrative sanctions. If these measures prove incapable of stopping the violation, efforts may be made to resolve the dispute through alternative mechanisms outside the court, including deliberation/settlement, negotiation, or mediation. If these efforts reach an impasse, environmental criminal law enforcement instruments may then be employed.

The resolution of forest-burning cases follows the same process as the resolution of criminal cases generally. The examination procedure is conducted pursuant to the provisions of the Criminal Procedure Code (KUHP). Investigation of forest-burning criminal offenses may be conducted not only by investigators of the Indonesian National Police but also by civil servant officials whose duties are related to the relevant institution.

This is consistent with Article 77 of Law Number 41 of 1999, which provides that, in addition to investigators of the Indonesian National Police, certain Civil Servant Investigators whose duties and responsibilities encompass forest management are granted special authority as investigators as referred to in Article 1 paragraph (1) of the Criminal Procedure Code.

Such Civil Servant Investigators are granted authority in forestry investigations to:

- a. Examine the accuracy of reports or information concerning criminal offenses involving forests, forest areas, and forest products;
- b. Examine persons suspected of committing offenses involving forests, forest areas, and forest products;
- c. Examine the identification of a person present within a forest area or legal jurisdiction;
- d. Conduct searches or seizures of evidence relating to criminal offenses involving forests, forest areas, and forest products in accordance with applicable laws and regulations;
- e. Request information and evidence from individuals or legal entities in connection with criminal offenses involving forests and forest areas;
- f. Arrest and detain persons in coordination with and under the supervision of police investigators;
- g. Prepare and sign official records; and
- h. Terminate an investigation if there is insufficient evidence of a criminal offense involving forests, forest areas, and forest products.

The effectiveness of law enforcement against forest fires is extremely important because it can reduce environmental problems in Indonesia. Law enforcement concerning forest fires still requires improvement in several



aspects, including law enforcement through civil lawsuits and law enforcement against corporations involved in forest fires. This is because forest fires may also be caused by individuals, organizational groups, and individuals.¹⁷

B. The Ideal Concept for the Application of Legal Sanctions Against Perpetrators of Forest-Burning Crimes Within the Criminal Justice System in Indonesia

A forest is an integrated ecosystem in the form of an expanse of land containing natural resources dominated by trees within a natural community whose environmental components cannot be separated from one another. Forests constitute abundant natural resources belonging to the Indonesian nation that can be utilized in everyday life. Therefore, as a gift from Almighty God, forests must be preserved and not destroyed because forests can be passed down from one generation to another.

In Indonesia, violations of environmental law continue to occur. Forest fires remain widespread in Indonesia and increase every year. Forest fires have major impacts on all living beings, the environment, and other aspects. Forest fires in Indonesia have been regarded as an annual occurrence by some members of the public.¹⁸

Forest and land fires in Indonesia occur quite frequently, and even a large part of society considers forest and land fires to be seasonal, meaning that such events occur almost every year, while law enforcement efforts have not been widely undertaken. Forest and land fires committed by or resulting from human actions constitute legal events, namely events or occurrences that give rise to legal consequences. Forest and land fires not only have negative impacts on natural and artificial ecosystems but also create legal responsibilities for their perpetrators. They even require the government and law enforcement authorities to take the necessary legal action in accordance with their authority and duties. The wider community also has a social responsibility to prevent forest and land fires.

Forest and land fires in Indonesia frequently occur in plantation business areas and community-owned agricultural areas. From the perspective of legal regulation, forest and land fires are related to regulations in the forestry sector (Law Number 41 of 1999), the plantation sector (Law Number 18 of 2004), and the environmental sector (Law Number 23 of 1997, which was subsequently replaced by Law Number 32 of 2009). These various regulations contain provisions prohibiting burning and provisions concerning sanctions that may be imposed on perpetrators of such burning, which ultimately results in environmental pollution and/or destruction.

At the level of law enforcement, however, there are considerable obstacles. Apart from unclear formulations of offenses and various sanctions, evidentiary processes are also quite difficult, except in cases where perpetrators are caught in the act. In particular, preventive and repressive law enforcement measures against forest and land fire cases and their ecosystem impacts remain ineffective. This reality can be seen from the limited number of forest and land-burning cases brought before the courts. Indeed, there are almost no perpetrators of forest and land burning in Indonesia who have been subjected to the legal sanctions described above.

In efforts to prevent forest fires, it is important to understand the causes of forest fires and how to prevent them. Forest fires intentionally caused by humans are usually associated with land clearing activities using fire, such as for oil palm and rubber plantations. Therefore, increasing public awareness of the dangers of forest fires and ways to prevent them, as well as strengthening supervision and control of uncontrolled waste burning, is extremely important.

To reduce environmental problems in Indonesia, forest-fire prevention efforts are essential. Forest fires can cause extensive environmental damage and negatively affect human health. Therefore, it is important to prevent and control forest fires and increase public awareness of the dangers of forest fires and how to prevent them.

Indonesia has one of the largest tropical forest areas in the world. These forests not only function as the lungs of the world but also provide habitats for various rare and endemic species of flora and fauna. However, in recent decades, Indonesia has frequently faced forest-fire problems that have had major impacts on the environment, economy, and public health. Forest fires in Indonesia generally occur as a result of human activities such as clearing land for agriculture and plantations through uncontrolled slash-and-burn methods. Climate change also contributes to the increasing frequency and intensity of forest fires.¹⁹

¹⁷ Marpaung, Leden, *Tindak Pidana Terhadap Hutan, Hasil Hutan dan Satwa*, Erlangga, Jakarta, 1995, hlm 66

¹⁸ Bruce Mitchell, et.al, 2000, *Pengelolaan Sumber Daya dan Lingkungan*, Edisi Pertama, Gadjah Mada University Press, Yogyakarta.

¹⁹ Soebagyo, Joko, 1999, *Hukum Lingkungan, Masalah dan Penanggulangan*, Cetakan Kedua, Rineka Cipta, Jakarta, hlm 77



Forest fires cause ecosystem damage, biodiversity loss, and significant greenhouse gas emissions, which exacerbate global climate change. Smoke generated by fires also causes hazardous air pollution, affects the health of millions of people, and disrupts economic and social activities. Therefore, serious and sustained efforts are required to prevent forest fires in order to reduce environmental problems in Indonesia.

Various efforts can be undertaken to prevent forest fires. First, stronger regulations and stricter law enforcement against illegal forest-burning practices need to be strengthened. Second, education and outreach to local communities concerning the importance of forest conservation and more environmentally friendly alternative land-clearing methods need to be conducted. Third, institutional capacity and coordination among relevant agencies in preventing and handling forest fires must be optimized. Fourth, the development of technology and innovation for early detection and suppression of fires is also highly necessary.

Forest fires constitute one of the serious environmental problems in Indonesia, particularly during the dry season. To prevent forest fires and reduce their negative impacts on the environment, several efforts may be undertaken, including the following:

First, strict regulation and effective law enforcement are essential to preventing forest fires. The government needs to ensure that laws concerning forest burning are strictly enforced. Violators must be given appropriate sanctions to create a deterrent effect. Strict field supervision and increased capacity of law enforcement institutions are also necessary to support these efforts.

Second, education and outreach to local communities living around forests are important because such communities often lack sufficient knowledge concerning the negative impacts of forest fires and alternative, environmentally friendly methods of land clearing. Sustainable and comprehensive educational and outreach programs are essential to increasing public awareness and knowledge. Training in agroforestry techniques, land utilization without burning, and sustainable forest management may form part of such programs.

Third, implementing sustainable forest management practices by encouraging community-based forest management, agroforestry, and environmentally friendly agricultural techniques constitutes an important step in preventing fires. The government and non-governmental organizations can provide support in the form of training, funding, and technical assistance to local communities.

Fourth, the development of fire-management infrastructure is essential. This includes providing firefighting equipment, constructing observation towers, and creating access routes that facilitate the mobilization of firefighting teams. Adequate infrastructure enables rapid and effective responses to forest fires.²⁰

Effective forest-fire prevention requires a holistic and integrative approach involving various stakeholders and combining technology, education, regulation, and community participation. With strong commitment and cooperation, forest fires and their environmental impacts in Indonesia can be significantly reduced.

Forest-fire prevention is not solely the responsibility of the government but also requires active participation from communities, the private sector, and non-governmental organizations. Collaboration and synergy among these parties are expected to produce effective and sustainable solutions to protect Indonesia's forests from the threat of fire and preserve the environment for future generations.

The application of legal sanctions in various cases of environmental pollution and destruction through environmental criminal law instruments is considered weak. This is caused by the complexity of the aspects arising in the environmental law enforcement process. In this regard, the main problem is not caused solely by evidentiary factors but is more strongly influenced by factors outside the environmental sphere, namely political, social, and economic factors. Addressing pollution constitutes a complex problem and requires cross-sectoral efforts.

In environmental law, criminal prosecution may be pursued after approaches through administrative law and civil law have failed to resolve environmental problems. Environmental crimes in the form of environmental pollution are categorized as administrative penal law or public welfare offenses. Such criminal offenses were regulated under Law Number 23 of 1997 concerning Environmental Management.

Various provisions in legislation expressly prohibit every person and business entity from carrying out burning during plantation land clearing. In addition, they are required to extinguish fires and take preventive measures, including monitoring and reporting the spread of fire based on satellite imagery every semester to the Governor,

²⁰ Ade Tria Surya Rahmadanti dan Sri Endah Wahyuningsih, Penerapan sanksi Pidana Terhadap Pelaku Tindak Pidana Pembakaran Hutan dan Lahan di Provinsi Kalimantan Barat. Seminar Nasional Mahasiswa Fakultas Hukum Universitas Islam Sultan Agung. Semarang. April 2019.



Regent, Mayor, and relevant technical institutions. Although various provisions contain prohibitions against forest and land burning, in reality such activities frequently occur, and law enforcement also encounters numerous obstacles.

The optimal application of additional criminal sanctions can provide a stronger deterrent effect against corporations engaged in forest and land burning when the corporation's purpose in burning forests or land is to save land-clearing costs. Considerations include time, the cost of purchasing equipment, the possibility of company management being arrested, and so forth. If only principal punishment is imposed, such punishment has a specific maximum limit. If the profit obtained from the criminal offense exceeds the maximum principal punishment, the corporation may consider the conduct beneficial and therefore may not experience a deterrent effect.

The application of additional criminal sanctions is not merely intended to provide a stronger deterrent effect against corporations responsible for forest fires but also constitutes one of the measures for maintaining environmental sustainability. Effective application of criminal sanctions can begin with a strong commitment from law enforcement authorities themselves. Law enforcement officials, including Police investigators, Civil Servant Investigators (PPNS), Forest Police, prosecutors, judges, and advocates, must possess strong competence and integrity in the environmental field, particularly in cases involving forest fires.

The ideal application of sanctions against forest-burning perpetrators in Indonesia should shift the paradigm from retributive punishment toward restorative justice and penal mediation. This concept requires perpetrators to pay compensation for ecosystem restoration, applies layered punishment to corporations, and positions criminal law as the primary means (*primum remedium*).

Forest-burning crimes are not merely ordinary administrative violations but constitute extraordinary crimes that threaten human rights to a good and healthy environment. Therefore, criminal sanctions must become the primary priority (*primum remedium*) to provide a deterrent effect, rather than merely functioning as an *ultimum remedium*. To overcome evidentiary difficulties in court, investigators and public prosecutors must rely on scientific evidence. The use of environmental forensics, satellite imagery, and ecological loss audits conducted by environmental experts constitutes a key means of ensuring that intellectual actors do not escape legal accountability.

CONCLUSION

1. Law enforcement has not yet been optimal due to weak coordination among agencies, lengthy judicial processes, and insufficient understanding among law enforcement officials concerning environmental crimes. Perpetrators may be prosecuted under specific criminal provisions such as the Forestry Law (Article 50 paragraph (3) in conjunction with Article 78) and the Environmental Protection and Management Law (UU PPLH), which strictly prohibits land clearing by burning.
2. Effective forest-fire prevention requires a holistic and integrative approach involving various stakeholders and combining technology, education, regulation, and community participation. With strong commitment and cooperation, forest fires and their impacts on the environment in Indonesia can be significantly reduced. Forest-fire prevention is not solely the responsibility of the government but also requires active participation from communities, the private sector, and non-governmental organizations. Collaboration and synergy among these parties are expected to produce effective and sustainable solutions to protect Indonesia's forests from the threat of fire and preserve the environment for future generations.

Effective forest-fire prevention requires a holistic and integrative approach involving various stakeholders and combining technology, education, regulation, and community participation. With strong commitment and cooperation, forest fires and their impacts on the environment in Indonesia can be significantly reduced. Forest-fire prevention is not solely the responsibility of the government but also requires active participation from communities, the private sector, and non-governmental organizations. Collaboration and synergy among these parties are expected to produce effective and sustainable solutions to protect Indonesia's forests from the threat of fire and preserve the environment for future generations.

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