



Government Efforts Towards Land Restoration for Sustainable Development

Ridho Mubarak

Doctoral Program in Law, Universitas Sumatera Utara
Jalan Abdul Hakim No. 4, Padang Bulan, Medan, Sumatera Utara Indonesia
ridhomubarak@students.usu.ac.id

Alvi Syahrin

Doctoral Program in Law, Universitas Sumatera Utara
Jalan Abdul Hakim No. 4, Padang Bulan, Medan, Sumatera Utara, Indonesia
alviprof@gmail.com

Elwi Dani

Doctoral Program in Law, Universitas Andalas
Jalan Pancasila No.10 Belakang Tangsi, Kec. Padang bar., Padang, Sumatera barat, Indonesia
elwidanil@law.unand.ac.id

Marlina Marlina

Doctoral Program In Law, Universitas Sumatera Utara
Jalan Abdul Hakim No. 4, Padang Bulan, Medan, Sumatera Utara Indonesia
marlina@usu.ac.id

Abstract,- Land fires are a significant problem that endangers ecosystems and the environment. Their environmental conditions affect the survival of humans and other living things. Everyone has the right to a respectful and healthy living environment as part of human rights. Land fires are a snapshot of how the Indonesian government has neglected the human rights of its people, especially the right to a hygienic and safe environment. The purpose of this article is to discuss how the government is addressing the issue of restoring land damaged by fires. Data for this study were collected through literature research. The government has made laws for environmental management and restoration in the context of environmental protection and management, as stated in paragraphs 53 and 54 of the Environmental Protection and Management Law. Sources of pollution are closed, remediation, rehabilitation, restoration, or other techniques that follow scientific and technological developments are used to achieve recovery. Countermeasures can also be done by isolating, stopping sources of pollution, or using other tactics based on the development of science and technology.

Keywords- Government Efforts, Environmental Restoration, Land Fires

I. INTRODUCTION

Man is the gift of God Almighty, and the land must be used, preserved, and cared for. It also provides the State of Indonesia with the means of survival in terms of environmental problems. In Indonesia, forest and land fires often result in environmental damage. There were reports of forest fires and land fires covering 204,894 hectares (ha) in Indonesia between January and December 2022. based on data from the Ministry of Forestry and Environment (KLHK). East Nusa Tenggara is the province with the largest fires, burning 70,637 hectares. West Nusa Tenggara, which is home to 30,567 hectares of forest and land fires. West Kalimantan, covering an area of 21,836 hectares, is next in line. Meanwhile, 9,832 hectares in Maluku and 14,954 hectares in West Sumatra have experienced land fires. [1]

Intentional and unintentional man-made factors are the cause of fires in Indonesia. The influence of El Niño is one of the natural processes that causes prolonged droughts that dry out plants; Dry plants can become fuel if they come into contact with sparks from coal combustion seen on the surface or from other combustions, whether intentional or unintentional; Extreme heat and UV rays can also dry out plants and cause them to burn. [2]

The deliberate elements of certain operations, including clearing land for plantations, creating industrial timber plantations, or raising large animals, are known as aspects of human activity. There are some very negative effects that can be caused by land fires in the surrounding area. Haze from land fires damages the environment, endangers the health of spectators, and disrupts social activities.[3]

Land fires are a phenomenon caused by human activities or companies that place a low priority on ecological justice, leading to ecological disasters. Encouraging and preserving environmental sustainability is the goal of ecological justice to keep it beautiful and support the balance of ecosystems. [4]

Their environmental conditions affect the survival of humans and other living things. The Indonesian government is responsible not only to safeguard the nation and promote the welfare of its people, but also to respect the human rights of its people, including the right to use land and forest resources freely. Indonesia, a

state that maintains the concept of the welfare state, uses a legal system to regulate, supervise, and ensure the welfare of its citizens. [5]

According to Article 65 Paragraph 1 of Law Number 32 of 2009, it is mandated that every individual possesses the right to a suitable and salubrious environment. This regulation is part of the measures implemented by the Indonesian government to safeguard the environment and prevent pollution and hazards. [6]

Currently, the Riau Regional Police is managing a total of 35 forest and land fires in Riau Province for the year 2023. The Indonesian government's disregard for the human rights of its citizens, specifically the right to a clean and healthy environment, is the primary cause of this fire. Given this circumstance, the Indonesian government is actively striving to mitigate the ecological harm resulting from land fires.

Hence, this article should examine governmental endeavors to restore ecosystems following land and forest fires. The objective of this publication is to examine the government's endeavors in restoring the environment affected by land redistribution within the context of sustainable development.

II. LITERATURE REVIEW

A. Purpose Of Environmental Protection And Management

According to UUPPLH, there are fourteen guiding principles for environmental management and conservation, and they are as follows: (a) accountability on the part of the state, (b) long-term viability, (c) ecological balance, (d) cooperation, and (e) returns on investment. (f). being cautious, (g). being fair, (h) ecoregions, (i). wildlife, and (j) making polluters pay, (k). Participatory, (l) Local wisdom, (m) regional autonomy, (n) administration. Article 3 of the UUPPLH lays out the goals of environmental protection and management. These include: (a) safeguarding the Republic of Indonesia's unitary territory; (b) protecting human safety, health, and life; (c) preserving ecosystems and ensuring the survival of all living things; (d) preserving environmental functions; (e) achieving environmental harmony and balance; (f) ensuring justice for both present and future generations; and (g) protecting and fulfilling environmental rights. (h) exercise prudent management over resource utilization (i) attaining environmentally friendly growth, and (j) foreseeing worldwide ecological crises. Article 2 of the UUPPLH seems to have principles that are consistent with the ideas presented in this purpose. [7]

As a sovereign state and part of the United Nations, Indonesia has the obligation to comply and comply with all international agreements and participate in the Stockholm Conference meeting in 1972. At the conference Indonesia submitted a report entitled "*National Report of Indonesia, Environmental Problem in Indonesia*". Environmental management has the following objectives:

1. achieving harmony between human relations with the environment as the goal of building a whole person;
2. controlled use of resources wisely;
3. the realization of humans as environmental builders;
4. the implementation of environmentally sound development for present and future generations;
5. Protection of the state against the impact of foreign activities that cause damage and pollution to the environment. [8]

Land is a natural resource that is useful for humans and other living things, which provides space, water, plants, animals and various types of ecosystems that support welfare and development so that land is part of the environment that must be protected and managed properly. Environmental management has stages of planning, utilization, control which are divided from Initiation and mitigation and recovery, where environmental management in accordance with what is referred to as a principle or principle is something that can be used as a base / basis, focus, place to lean something to restore something to be explained. [9]

To fulfill the requirement stated in Article 33 Paragraph (3) of the 1945 Constitution, which emphasizes the utilization of natural resources for the benefit of the people, it is imperative to safeguard both the natural resources and the environment. One way to ensure this protection is through the presence of effective legislative regulations. An exemplary law is one that encompasses the principles of universal justice. Furthermore, the law serves as a means to achieve justice when it comes to the utilization of natural resources and the preservation of the environment. The term used to describe this type of justice is environmental justice. [10]

B. Principles Of Sustainable Development

Development is a conscious effort to manage and utilize natural resources to increase the prosperity of the people where the use of natural resources must be in harmony, harmony, balance with the function of the environment. Development principles are based on environmental rights, not on development rights not in conflict with each other, but an integral part that cannot be separated so that environmental protection is an integrated part of planning and implementing decisions. [11]

Sustainable development is a key aspect of environmental awareness as outlined in the 1945 Constitution. It is imperative that environmentally responsible development policies incorporate the principle of sustainable

development. The environment is the fundamental component of sustainable development, and likewise, sustainable development cannot exist without environmental awareness. This involves maximizing the benefits of natural and human resources in a sustainable manner, by aligning human activities with the capacity of the supporting natural resources within a specific geographical area encompassing land, sea, and air. In order to address the problem of land damage caused by fires, it is imperative for the government to effectively implement environmental restoration measures to ensure sustainable growth. [12]

Sustainable principles serve as a fundamental aspect of environmental management, while "environmentally sound development" functions as a method for promoting sustainable development. [13]

- a. Sustainable development is a holistic approach to development that aims to effectively and harmoniously utilize resources, direct investments, guide technological advancements, and implement institutional changes in order to meet the present and future needs and aspirations of the community.
- b. In essence, sustainable development can be understood as a gradual reformation of social, economic, and political frameworks to enhance the assurance of Indonesian citizens in meeting their present needs, while also safeguarding the capacity of future generations to meet their own needs.

The Indonesian country is committed to implementing sustainable and ecologically responsible development in order to enhance welfare and elevate the standard of living for its people. The principle stated in Article 33 Paragraph (3) of the 1945 Constitution is exemplified by the control of the state over the Earth, water, and their natural resources, which are to be utilized for the utmost benefit of the people. The primary significance of societal affluence from a legal standpoint is in the presence of legal safeguards for the socio-economic entitlements of individuals, enabling them to lead dignified lives as members of the community. [14]

III. METHOD

The study known as normative legal research prioritizes the examination of favorable legal provisions and extensive legal principles. Normative legal research refers to the analysis of primary and secondary legal sources. The data collection approach employed in this study is literature research, which involves gathering information from various sources such as books, legislation, journals, and expert opinions on criminal law that are scientifically relevant to the topics addressed in this work. [15]

IV. RESULTS AND DISCUSSION

When there is damage to land, forests, or forest products that cause environmental or economic losses, land and/or forest fires occur. Conserving people, animals, plants, and other items affected by fires is the goal of reducing the consequences of land and/or forest fires. [1]

The government of Rhode Island has an obligation to ensure that its residents live in a clean and healthy environment. Laws and regulations serve as a representation of the government's duty to safeguard the environment and stop its destruction. [8] [9]

The government should do the following, as stated in Article 14 paragraphs (1) and (2) of the UUPPLH, when land and forest fires cause pollution and/or the environment: plan, organize, foster, and supervise the implementation of fair and affordable public health initiatives. In addition, as referred to in paragraph (1), the government's duties are centered on the implementation of public services. In comparison, Articles 15 and 16 of the Law stipulate that the government must also protect the environment, law and order, as well as social and physical health facilities for the community to achieve the highest possible degree of health. [10]

The outbreak of forests and 1.90 hectares of land occurred in Riau Province. The Ministry of Environment and Forestry is working with the Riau Regional Police to end 35 fire incidents that occurred in Riau by 2023. Both civil and criminal law, as well as state administrative law, it can be used to enforce environmental restrictions. In addition, 1,425 hectares of land are said to have suffered fire damage. After being sentenced in these cases, the offender is fined IDR 3,000,000,000 (three billion rupi ah) and faces a further penalty of Rp 545,000,000,000 (five hundred forty-five billion rupiah) for restoration costs for land restoration. Jambi District Court No. 71/Pid.B/LH/2021/Pn.jambi heard the case. [11]

In the event of a fire, the environment can be restored through the application of criminal and civil laws. Restoration after a land fire is a deliberate and planned process that takes into account the surrounding ecosystem. [12] Development sustainable, though based on the idea that environmentally sound development plans should optimize human and natural resources that are sustainable, is one example of environmental knowledge referred to in the 1945 Constitution. [13]

Legislation mandating environmental protection and management efforts strikes a balance between economic interests, social conditions, and the maintenance of environmental functions. [14]

Presidential Instruction Number 11 of 2015, which focuses on enhancing forest and land fire management, also includes measures to govern and oversee land fires. Three activities employed to enforce fire control policies and manage wildfires include: [15]

- a. Forest and land fire prevention;

- b. Forest and land fire suppression; and
- c. Forest and land management/restoration post-fire.

The Ministry of Environment and Forestry (KLHK) is working with various partners to control forest and land fires (karhutla) as directed by President Joko Widodo. According to the MoEF, Director of Forest Fires and Land Control, cooperation between central and regional ministries and agencies is still being used to make efforts to avoid forest and land fires. The provincial task force, TNI, POLRI, BNPB, and KLHK work together synergistically.

The purpose of prevention is to avoid the formation of hot spots and reduce the risk of forest and land fires, especially in vulnerable areas of Kalimantan and Sumatra. Weather Modification Technology (TMC), water bombing, artificial rain generation, emergency status enhancement, integra patrols, and ground operations, such as autonomous patrols and early extinguishment.

Communities and relevant stakeholders participate in the management of forest and land fires, which are carried out in coordination with various relevant ministries or organizations. In addition, community involvement increases police enforcement. Relevant government ministries or agencies.

MoEF policy calls for increasing the quantity and quality of mango agnei as well as improving infrastructure and facilities for fire control and forest protection to combat land and forest fires. Agni mango was developed by the Ministry of Forestry in accordance with Law Number 47 of 1999 concerning Forestry. [16]

In the context of environmental protection and management, the government has regulated procedures for environmental management and restoration, as stated in Articles 53 and 54 of the UUPPLH. Countermeasures can also be done by isolating, stopping sources of pollution, or using other tactics based on the development of science and technology. While eliminating sources of pollution is the main way to achieve recovery, other approaches that stay up to date with scientific and technological advances can also be used, such as remediation, rehabilitation, or restoration. "Remedial, rehabilitation, and restoration" means the following, according to the definition of UUPPLH article 54 paragraph (2) letter b: restoration is the process of restoring environment, or certain components of the living environment, to its pre-destructive state. Improving environmental quality is known as remediation. [17] [18] [19]

Regarding revenue standards and alternative payment mechanisms, UUPPLH includes several clauses that refer to funding, recovery, and minimizing environmental damage. The UUPPLH calls on the government to use economic instruments, such as environmental funds and systems that offer incentives or disincentives, as stated in Article 42. As referred to in Article 43 paragraph (2), the environmental fund system consists of grants or assistance, mitigation funds, and temporary recovery guarantee funds. Another point that Indonesia's environmental compensation system may be concerned about is Law Number 24 of 2007 on Disaster Management, which defines disasters as more than natural disasters but also [20] man-made disasters, which certainly include disasters caused by environmental pollution.

The UUPPLH enables state and local governments with environmental responsibilities to seek compensation and take legal measures against companies or activities that contaminate the environment or cause ecological harm, leading to environmental losses. [17] [20]

To reduce environmental pollution, the Indonesian government should also actively promote No-Burn Land Clearing (PLTB) and modify the actions of individuals participating in it. Along with socialization and training, other possibilities for land clearing are presented. In addition, full access to land fire monitoring and control systems is required in areas where fires are likely to occur. The growth of the Environmental Quality index shows that socialization and training are expected to increase the use of environmental conservation and natural resources in development to improve the quality of life. [21]

V. CONCLUSION

Leading government recovery operations, the Ministry of Environment and Forestry works with law enforcement, communities, and other stakeholders. Another path to recovery is the civil and criminal enforcement of environmental standards. To address the unresolved problem of land fires, the government must pressure people who burn land in Sumatra (Riau and Jambi provinces) to restore it immediately. Holding national coordination meetings, utilizing satellite surveillance, and enforcing stronger regulations against companies that fuel land fires are just some of the strategies the Indonesian government has tried to control and contain land fires. However, these measures have not been able to contain or extinguish land fires. The government carries out recovery through the replanting and rehabilitation of damaged or polluted land, but this approach is not ideal for realizing development that is not capable with environmental knowledge. To overcome the problem of land fires, strong and effective law enforcement is needed. Land restoration is a prerequisite for sustainable development, which is essential for protecting ecosystems and the environment. Cooperation between central and regional ministries and organizations is still needed to avoid forest and land fires. To reduce the risk of fires and prevent the formation of hotspots, collaboration between the Ministry of Environment and

Forestry, TNI, Polri, BNPB, and provincial task teams was implemented, especially in vulnerable provinces in Sumatra and Kalimantan. Some of the fire prevention measures that have been implemented include increased state of emergency, integrated patrols, water bombardment, artificial rainmaking/Weather Modification Technology (TMC), and ground operations— independent patrols and early suppression.

REFERENCE:

- [1] Yulia Qamariyanti, Rachmadi Usman, Diana Rahmawati, Peatland and Fire Prevention and Management, *Journal of Environmental Sciences*, volume 21, issue 1, 2023;
- [2] Febriana Sulistya Pratiwi, Forest and Land Fire Area in Indonesia Decreases in 2022, dataindonesia.id;
- [3] Fachmi Rasyid, Problems and Impact of Forest Fires, *Journal of Lingkar Widya Swara*, Problems and Impact of Forest Fires, Edition 1 No. 4, October – December 2014;
- [4] Aji Prasetyo, Pujiyono, Amiek Soemarmi, Law Enforcement of Forest Burning in East Kotawaringin Regency, *Diponegoro Law Review*, Volume 1, Number 2, Year 2013;
- [5] Alboin Samosir, Ecological Justice and Sustainable Development, PT. Indonesian Pyramid Media;
- [6] Wartinarsih, Forest Crime Involvement and Accountability of Forest Policy Organizers, Malang: Setara Press, 2014;
- [7] Law Number 32 of 2009 concerning Environmental Protection and Management;
- [8] Soerjono Soekanto, Introduction to Legal Research, UI-Press, Jakarta, 1986;
- [9] Yunus Wahid, Introduction to Environmental Law, Jakarta : Kencana, 2008;
- [10] Moh Fadli, et al, Environmental Law and Policy, Malang : UB Press, 2016;
- [11] Abdullah Akbar, Understanding and Solutions to Forest Fire Problems in Indonesia, Bogor : Forda Press, 2016;
- [12] Directorate of the Supreme Court of the Republic of Indonesia;
- [13] Budiman, principle of sustainable development, jakarta, astra grafinfo, 2001.
- [14] Evi Purnama Wati, Environmental Protection and Management in Sustainable Development, *Journal of Environmental Law*, Volume 3, Number 1;
- [15] Soerjono Soekanto, Introduction to Legal Research, UI-Press, Jakarta, 1986;
- [16] Muklish and Mustafa Lutfi, State Ecology: Between Reconstruction, Investment or Exploitation on behalf of the Republic of Indonesia, *Journal of the Constitution*, Volume 8, Number 3, 2011;
- [17] Alvi Syahrin, Martono Anggusti, Abdu Azis Alsa, Environmental Law in Indonesia, Prenadamedia Group, Jakarta, 2018;
- [18] Government Regulation No.4 of 2001 concerning Control of Environmental Damage and/or Pollution related to Forests and Forest Fires;
- [19] Presidential Instruction Number 11 of 2015 concerning Improving Forest and Land Fire Control;
- [20] Directorate General of Climate Change Control;
- [21] Gamiyel Siouw Josephia Sumoked, Muhammad Hero Soepeno and Godlieb N. Mamahit, Government Fire Responsibility Forest and Land, *Lex Administratum*, Volume 8, Number 3, 2020;
- [22] Andri G. Wibisana, Environmental Law Enforcement: Through Civil Responsibility, Depok: BP-FHUI, 2018;
- [23] Article 14 of PermenLHK Number 16 of 2017 concerning Technical Guidelines for Peatland Ecosystem Function Restoration;
- [24] Hamdi, Civil Environmental Court (Socialization of Peatland Restoration Damaged by Fire), East Jakarta : Rayyana Komunikasindo.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

