



INTEGRATION OF ECO-THEOLOGY AND ENVIRONMENTAL LAW: PERSISTENCE OF FOREST AND LAND FIRE IN SOUTH SUMATRA 2026

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Abstract

Forest and Land Fires (KARHUTLA) in South Sumatra are an ongoing ecological-social crisis driven primarily by land clearing for the expansion of oil palm plantations. This phenomenon fundamentally contradicts the principles of environmental theology regarding the integrity of creation and the responsibility of human stewardship. This study examines two main questions: (1) How can forest and land fires in South Sumatra be conceptualized as an ongoing ecological-social crisis? and (2) How can the implementation of criminal sanctions for forest fires in South Sumatra be strengthened through eco-theological education? The method used is a qualitative study with a library research approach, through secondary literature analysis in the form of environmental theology literature, South Sumatran environmental policies and regulations; and a 2026 report from the Regional Disaster Management Agency (BPBD) documenting 1,723 forest and land fire incidents. The analysis was conducted using content analysis techniques. The results of the study indicate that current legal sanctions remain ineffective without being accompanied by a simultaneous spiritual transformation of the community. The study concludes that a holistic solution to forest and land fires requires an integrated approach encompassing three dimensions: strong legal enforcement, sustainable economic support mechanisms, and spiritual transformation of the South Sumatran community through eco-theological education.

Keywords *Karhutla, Eco-Theology, Fire, Forest, South Sumatra*

INTRODUCTION

During this period of changing dry weather, various environmental issues, both local, regional, and global, are becoming increasingly concerning. Global warming is causing an imbalance in the Earth's climate system, which is impacting the uncertainty of seasonal patterns.(Yuliani, 2023). In some parts of the world, heavy rainfall causes flooding and land erosion, while in others, prolonged droughts occur. This extreme climate imbalance is creating an ecological crisis that threatens the sustainability of ecosystems and the lives of people worldwide. Therefore, climate change requires all elements of society to take concrete action to preserve the environment and promote ecological awareness.

Damage to natural resources (land, water and air), deforestation, forest degradation and forest fires are occurring more frequently (Arif, nd). The extinction of various biological species, rising sea levels, the sinking of several islands, and the spread of various types of diseases are some manifestations of the environmental crisis that demand immediate solutions. These negative impacts on the environment are predominantly and significantly derived from anthropocentric behavior, a view that places humans as the center of the universe. Thus, the anthropocentric paradigm has resulted in irresponsible

exploitation of nature and ignored the principles of ecological sustainability, thus requiring a fundamental transformation in the way humans understand and interact with nature.

Indonesia, as the world's most populous country, its unique geographical location as an archipelagic nation with a vast territory, combined with abundant natural resources and diverse cultures and religious traditions, makes it an ideal setting for developing complex and innovative social and ecological intervention models. In this regard, Indonesia can serve as a socio-ecological laboratory experimenting with sustainable solutions. However, this strategic position also presents serious challenges. Indonesia faces high vulnerability to the negative impacts of global climate change, which manifest themselves in the form of periodic flooding, prolonged droughts, coastal erosion, and intensifying forest fires.(Amri et al., 2024).

In recent weeks, Indonesia has been faced with a severe forest and land fire crisis (karhutla), particularly in South Sumatra. This phenomenon has not only caused massive ecological damage but also produced haze that disrupts the ecosystem and negatively impacts community activities in the long term. The public and the government are under increasing pressure to find effective solutions to this crisis. However, efforts to address karhutla have tended to focus solely on regulations, sanctions, and technology, neglecting the more fundamental dimensions of transforming awareness and spiritual ethics. In fact, the root of the karhutla problem lies in an anthropocentric paradigm that views nature solely as an economic resource for the expansion of oil palm plantations, without considering the intrinsic value of ecosystems and human moral responsibility. In this context, an eco-theological perspective is crucial for reinterpreting the human-nature relationship through the lens of theological ethics, particularly the concepts of caliphate and stewardship in religious traditions, thus producing holistic solutions that integrate legal regulations, sustainable economic support, and spiritual transformation of society.(Silaen, 2026).

According to a report from the Regional Disaster Management Agency of Sumatra Province, 1,723 fire incidents were recorded throughout 2026. This phenomenon is ironic amidst the widespread discourse on religious moderation promoted by the Ministry of Religious Affairs. Despite calls from the Minister of Religious Affairs regarding the importance of a religious approach that cares about the environment, reality shows that there are still individuals who deliberately carry out forest fires, without considering the environmental damage caused by these actions. Therefore, the contradiction between the campaign for religious moderation and the rise in forest and land fires shows that religious communities as moral leaders have not fully actualized theological teachings on stewardship and caliphate in environmental protection, thus requiring spiritual empowerment and concrete eco-praxis practices.(Tata et al., 2024).

Etymologically, eco-theology is a synthesis of two fundamental concepts: "eco" which refers to ecology (the study of the relationship between living things and their environment), and "theology" (deep reflection on the nature of God and religious teachings).(Ginting et al., 2023). In the Islamic perspective,(Widiastuty & Anwar, 2025)Ecotheology functions as a framework of thought that integrates the teachings of monotheism and the principles of Islamic ethics with human responsibility in preserving

the environment.(Mappanyompa et al., 2023)The Qur'an refers to the earth as a sign of God's power (the Kauniyah verses) and emphasizes the prohibition of causing damage on the earth (QS. Al-A'raf: 56). The hadith of the Prophet Muhammad also teaches the principles of sustainable living, such as the prohibition of cutting down trees without a valid reason and the recommendation to plant crops even if the apocalypse arrives.(Jamal, 2025)Saying Islamic Ecotheology emphasizes that the universe and all its contents are creations, signs of power (verses), and mandates from Allah SWT whose sustainability must be maintained by humans, therefore Islamic ecotheology emphasizes that the universe and all its contents are not only God's creations, but also function as verses (signs of power) and mandates (trust) from Allah SWT which must be maintained and cared for with full responsibility by humans. Thus, this ecotheological concept invites all religious communities to carry out a spiritual transformation that makes ecological awareness an integral part of religious practice so that every environmental conservation action is understood not only as an environmental obligation, but as worship and a concrete manifestation of monotheism.(Yovilangtus & Agus, 2022).

Several previous studies discussing forest and land fires have been divided into two separate streams. First, studies(Salmah et al., 2025)eco-theology which focuses on the normative foundations of the environment in the Qur'an and Islamic teachings, but does not connect theological principles with the imperatives of positive law.(Utami et al., 2025)Second, studies of environmental policy and law enforcement that analyze the gap between regulation and implementation ignore the spiritual dimension underlying legal legitimacy. Thus, this gap creates a void of ideas; there is no systematic effort to use eco-theology as a moral foundation for strengthening legal sanctions for forest fires.

The fact that local communities and businesses continue to burn forests despite regulations demonstrates that the problem lies not only in the legal mechanism, but also in a lack of deep theological awareness that forest burning is a violation of spiritual ethics and responsibilities as God's vicegerent and trustee. In Islamic tradition, the concepts of caliph (steward) and amanah (trust) are fundamental.(Arsyad & Hasanah, 2025), and istislah (sustainable welfare) have a profound moral force that goes beyond the mere threat of criminal punishment. Therefore, a reinterpretation of eco-theology that connects theological principles with the imperatives of law enforcement can create spiritual legitimacy that supports the effectiveness of legal sanctions.

Based on the description above, this research will analyze and construct eco-theology as a theological reinterpretation that provides a moral foundation for strengthening legal sanctions for forest fires in South Sumatra. Through a qualitative approach based on the analysis of eco-theology literature, environmental policy, and forest and land fire data, this research will: (1) identify the moral-spiritual crisis behind the persistence of forest and land fires (2) construct a reinterpretation of environmental theology that makes forest fires a violation of theological ethics and (3) formulate a conceptual framework that connects theological awareness with the justification for strengthening legal sanctions. It is hoped that this research can provide a spiritual-moral foundation for a more effective reformulation of environmental policies, while also offering a new paradigm in

environmental law enforcement that integrates the spiritual dimension with law enforcement in the contemporary era.

METHOD

This study uses a qualitative descriptive analytical approach through library research with a report on forest and land fires in South Sumatra in 2026. The research location focuses on South Sumatra Province. Primary data sources include Secondary data sources include national environmental policies (Law No. 32 of 2009, PP concerning Environmental Law Enforcement, Regional Disaster Management Agency of Sumatra Province in 2026, Data collection was carried out through a systematic search of literature in the Google Scholar digital database and libraries with the keywords "eco-theology", forest and land fires in South Sumatra Regulation and Law Enforcement (policy, implementation gap, effectiveness of sanctions), (5) Causes and Impacts of Forest and Land Fires (economic factors, praxis, ecological-social impacts).

The analysis was conducted using theological content analysis, policy discourse analysis, and comparative legal analysis. The integration of these three methods connects the reinterpretation of eco-theology with practical implications for strengthening law enforcement regarding forest and land fires.

RESULTS

Rationale and Analysis Design

This study applies a qualitative-descriptive content analysis design to three groups of data that function as "conceptual experimental units": (1) the 2026 disaster report of the South Sumatra Provincial BPBD as quantitative-empirical data on the distribution of forest and land fires in South Sumatra in 2026, (2) environmental regulations (Law No. 32 of 2009 and its derivative regulations) as normative juridical data, and (3) eco-theology literature (the concepts of caliph, amanah, and istislah) as normative-theological data.

These three data sets were processed through a thematic search into five categories: data and distribution of forest and land fires; regulation and law enforcement; causes and impacts of forest and land fires; environmental theological frameworks; and solutions and recommendations. These were then cross-read using three analytical lenses: integrity of creation (to assess the scale of ecosystem damage), stewardship theology (to assess the relationship between humans and nature as a trust), and the ecological repentance model (to formulate a path to spiritual-ecological awareness recovery). The triangulation of these three lenses serves as the rationale for all the findings presented in the following section.

Results of Analysis of the Distribution and Scale of Forest and Land Fire Incidents

Analysis of the 2026 South Sumatra Provincial BPBD data produced the following distribution of incidents.

Table 1. Distribution of Forest and Land Fire Incidents per Regency/City in South Sumatra in 2026 (processed from the South Sumatra Province BPBD report)

No	Regency/City	Number of Events	Status
1	Ogan Komering Ilir (OKI)	292	Red zone
2	Musi Banyuasin (Muba)	214	Red zone
3	Ogan Ilir	201	Red zone
4	Banyuasin	200	Red zone
5	Muara Enim	170	Red zone
6	Palembang	135	Red zone
7	PALI	131	Red zone
8	Prabumulih	70	Red zone
9	East OKU	65	Red zone
10	OKU	61	Red zone
11	Muratarra	61	Red zone
12	Musi Rawas (Mura)	55	Red zone
13	Other areas (non-red zone)	68	Below the threshold
Total		1,723	12 districts/cities in the red zone

The area of land burned by forest and land fires reached 1,926.2 hectares as of July 2026. The five districts with the highest number of incidents OKI, Muba, Ogan Ilir, Banyuasin, and Muara Enim geographically represent the province's largest concentration of peatlands and oil palm plantations. Therefore, this spatial analysis indicates a correlation between forest and land fire intensity and the distribution of large-scale monoculture plantations, not solely due to natural climate factors.

The forest and land fires (Karhutla) in South Sumatra have not only destroyed the ecosystem but also created a profound social crisis. The impact of the haze has spread to major cities like Palembang, forcing all work and learning activities indoors. This situation has resulted in a decline in economic productivity, massive respiratory health problems, and the disruption of access to normal education, especially for children. Paradoxically, despite the clear and massive impact, the regulatory response and law enforcement still lag behind the urgency of the crisis. The Karhutla crisis is not merely a technical issue of natural resource management, but rather an indicator of the failure of the environmental ethics system. The gap between existing regulations and destructive practices on the ground reflects a normative void in a shared understanding of moral responsibility for creation integrity. Therefore, without a profound reinterpretation of the relationship between humans and nature through a theological perspective, efforts to prevent and

address Karhutla will continue to be merely reactive responses that fail to address the roots of the crisis.



Figure 1. The Impact of Forest and Land Fires on the Haze Disaster in Palembang City
Source: Antara Foto/Nova Wahyudi/WSJ. August 26, 2026

Multi Level Impact Identification Results

A search for the category "Causes and Impacts of Forest and Land Fires" results in a mapping of impacts in two ecological and social dimensions, each layered over a short-term to long-term time span, as summarized in the table below.

Table 2. Mapping the Multi-Level Impacts of Forest and Land Fires in South Sumatra

Dimensions	Aspect		Key Findings
Ecological (short term)	Vegetation and habitat		Vegetation is destroyed in a matter of hours; soil loses its organic layer; wildlife habitat is drastically disrupted.
Ecological (medium term)	Peatland hydrology		Excessive drainage changes soil structure and reduces regional water storage capacity.
Ecological (long term)	Carbon emissions and climate		Massive carbon emissions exacerbate drought and the risk of recurring fires in subsequent years.
Social – Health	ISPA, asthma	bronchitis,	Surge in patients at red zone health facilities; risk of impaired lung development in children due to chronic exposure
Social Education	–	School closure	Loss of regular school hours; greater impact on students from low-income families

Dimensions	Aspect	Key Findings
Social Economic	– Agriculture, tourism, fishing, transportation	Declining harvests and tourist visits; disrupted fish migration; increased logistics costs

These findings confirm that the forest and land fire crisis is multi layered: damage at the ecosystem level occurs simultaneously with pressure at the level of everyday socio-economic life, and these two layers of the crisis reinforce each other from year to year.

Results of the Reconstruction of the Conceptual Framework of Eco-Theology

The triangulation of the regulatory-legal enforcement categories and the environmental theology framework produces a three-stage causal chain model that links theological awareness with the strengthening of the legitimacy of legal sanctions, as visualized in the figure below.

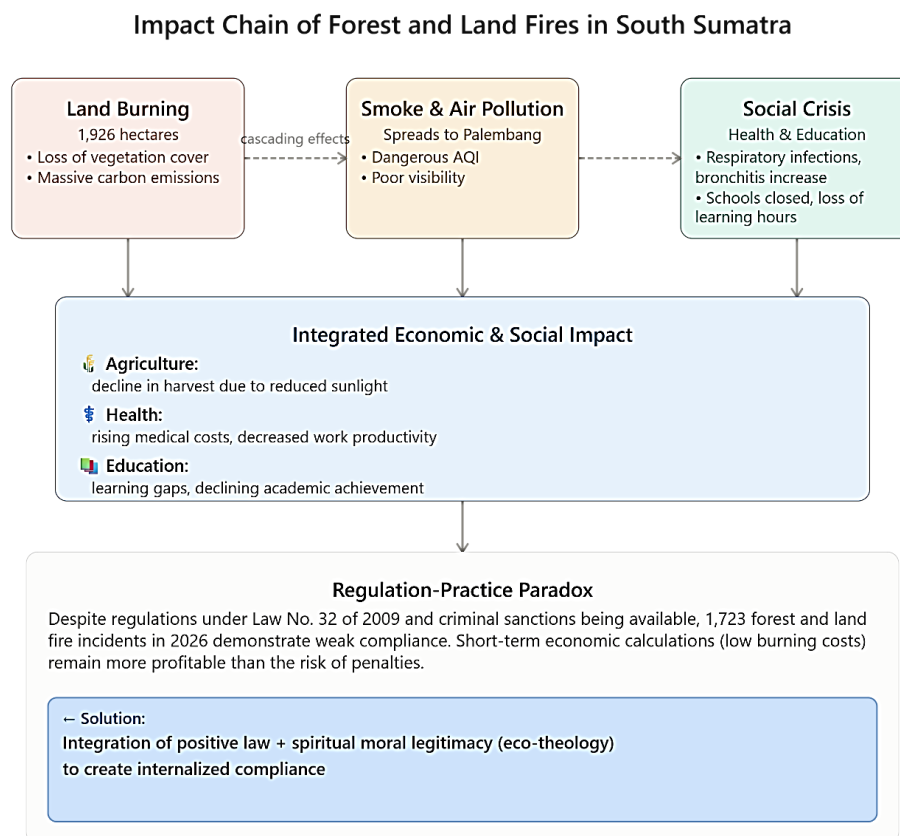


Figure 2. Conceptual Framework of the Causal Chain of Eco-Theology's Reinterpretation of Strengthening Legal Sanctions for Forest and Land Fires

From the image above, this model shows that the effectiveness of law enforcement no longer relies solely on the supervisory capacity of the apparatus, but is also supported by social control mechanisms based on religious values that work at the community level

so that legal sanctions receive the dual pressure of formal state pressure and moral pressure from the community.

RESULTS

In summary, the analysis reveals three key findings. First, forest and land fires in South Sumatra in 2026 were systematic and recurring, with 1,723 incidents concentrated in peatland and oil palm areas, causing damage to 1,926.2 hectares. Second, the impacts were layered across ecological (short- to long-term) and social (health, education, and economic) dimensions. Third, the reinterpretation of eco-theology through the concepts of khalifah, amanah, and istislah resulted in a three-stage causal chain framework that has the potential to strengthen the moral legitimacy of enforcing legal sanctions for forest fires, complementing formal coercive mechanisms that have so far worked alone and proven inadequate to reduce the number of incidents.

Discussion

1. Data and Distribution of Forest and Land Fire Incidents in South Sumatra

Data compiled from the 2026 report by the Regional Disaster Management Agency (BPBD) of South Sumatra Province shows the scale of the forest and land fire crisis, which cannot be viewed as an incidental event, but rather as a systematic and recurring pattern of ecological damage. Throughout 2026, 1,723 forest and land fire incidents were recorded, with red zone status, a category given to areas with more than 30 incidents spread across 12 districts/cities. This distribution indicates that forest and land fires are no longer a local phenomenon isolated to one or two regions, but rather a regional crisis that has reached almost half of South Sumatra's administrative area. The highest concentration of incidents was in Ogan Komering Ilir (OKI) Regency with 292 incidents, followed by Musi Banyuasin (Muba) with 214 incidents, Ogan Ilir with 201 incidents, Banyuasin with 200 incidents, and Muara Enim with 170 incidents. This pattern is interesting to observe: the five regions with the highest incidence are geographically the areas with the largest concentration of peatlands and oil palm plantations in the province.

Top 5 districts with highest forest and land fire incidents
South Sumatra 2026 (1,723 total incidents)

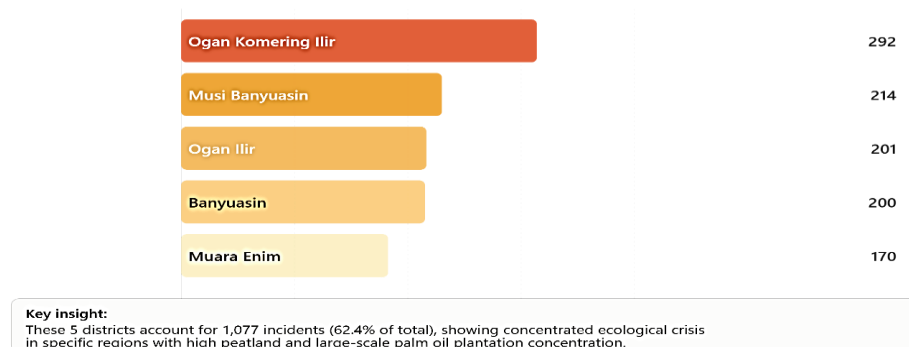


Figure 3. The data of affected districts with highest forest and land fire incidents

This pattern is interesting to observe: the five regions with the highest incidence of fires geographically represent the areas with the largest concentration of peatlands and oil palm plantations in the province. The spatial correlation between the intensity of forest and land fires and the distribution of large-scale monoculture plantations is an early indication that the fires are not entirely natural, but rather closely related to deliberate land-clearing practices. Meanwhile, urban areas such as Palembang (135 incidents) and Prabumulih (70 incidents) were also affected, indicating that the impact of forest and land fires, especially haze, is not limited to the fire source area but extends to population centers. Cumulatively, the area of land burned by forest and land fires until July 2026 reached 1,926.2 hectares. This figure represents a significant loss of ecological land function, both in the form of loss of vegetation cover, disruption of the hydrological cycle in peatlands, and the release of large amounts of carbon emissions into the atmosphere. From the perspective of the integrity of creation, this damage is not merely an economic loss that can be measured in rupiah, but rather a disruption of the chain of ecosystem balance that has been formed over a long period. According to (Amri et al., 2024) The impact of forest and land fires extends beyond the physical damage to the land. The resulting haze disrupts community activities for a long period, from respiratory health issues to disruptions to education and economic activities, to disruptions to air and land transportation. Thus, the forest and land fires in South Sumatra exhibit a multi-layered crisis: an ecological crisis at the ecosystem level, and a social crisis at the level of everyday life. These two layers of crisis reinforce each other, as the annual recurrence of environmental damage hinders ecosystem recovery and normalizes haze as an "annual season" passively accepted by the community.

The root cause of the persistence of forest and land fires, as identified in the "Causes and Impacts of Forest and Land Fires" coding category, stems from short-term economic considerations that dominate the perspectives of some business actors and the community on land. Burning is chosen because it is considered the cheapest and quickest method of land clearing compared to mechanical methods, particularly for the expansion of oil palm plantations. It is important to emphasize that the pattern of forest and land fires in 2026 is repeated despite long-standing regulations and the threat of criminal sanctions for forest fires. The fact that business actors and some local communities still choose to burn land even though the threat of criminal sanctions is available shows that the compliance mechanisms that have been working so far are purely external coercive, not internal-spiritual.

Threats to Ecosystem Integrity

From an ecological perspective, forest and land fires in South Sumatra threaten ecosystem integrity on several levels simultaneously. Forest fires cause brutal short term damage: vegetation that has been building up for years is destroyed in a matter of hours, the soil loses its organic layer, and the habitat of wildlife that depends on these ecosystems is drastically disrupted. (Novitasari et al., 2024) But the damage from forest and land fires doesn't stop there. At the medium term level, peatland burning causes profound hydrological degradation: excessive peatland drainage alters soil structure, reduces

groundwater storage capacity, and threatens the regional water balance that is the lifeblood of thousands of local communities.

On a long term level, forest burning produces massive carbon emissions that contribute to global climate change and create local extreme weather conditions that exacerbate drought and fire phenomena in subsequent years.(Qamariyanti et al., 2023) Burned lands become more susceptible to erosion, the soil becomes less productive, and the recovery of native vegetation is significantly slower due to altered soil conditions. Thus, forest fires not only destroy nature but also create conditions that prolong the ecosystem's vulnerability to similar disasters in the future a destructive cycle that is difficult to break without strategic intervention.

The peatlands that are the focus of the burning in South Sumatra are one of the most biodiverse ecosystems in Indonesia.(Pinem, 2016)Peatland burning causes habitat loss for various species found only in the region, including Sumatran orangutans, Sumatran elephants, and various endemic plant species. From an ecosystem services perspective, this damage means the loss of carbon storage (which is important for mitigating global climate change), the loss of groundwater production (which is important for local clean water availability), and the loss of water absorption functions that prevent flooding during the rainy season. Damage to these ecosystem services has broad economic implications but is often not included in cost-benefit analyses of forest burning, including the loss of potential sustainable forest product production (timber, non-timber forest products), the loss of ecotourism value, the reduced environmental carrying capacity for sustainable agriculture, and the increased risk of natural disasters (floods, droughts) affecting local communities in subsequent years.

Impact on Community Life

The haze from forest and land fires has created a massive and ongoing public health crisis. During the burning season, air pollutant concentrations in various regions of South Sumatra exceed government-set air quality standards. The public, especially vulnerable groups such as children, the elderly, and those with lung disease, experience significant respiratory problems. Clinics and hospitals in red zone areas are experiencing a surge in patients with upper respiratory tract infections, bronchitis, and asthma. This health burden not only increases individual medical costs for poor families but also strains the already limited capacity of the public health system. Respiratory health problems are long term, even for short term exposure: children exposed to heavy haze for several weeks each year have a higher risk of impaired lung development and reduced respiratory capacity in adulthood. With the recurring pattern of forest and land fires every year, communities in red zones experience cumulative chronic exposure, creating a growing public health burden year after year without adequate recovery opportunities.

The impact of forest and land fires goes beyond physical health and touches the fabric of people's socio-economic lives.(Mokodompit & Husamah, 2025). Educational disruption is one of the most noticeable impacts: when haze reaches hazardous concentrations, schools in red zone areas often close temporarily to protect students. The loss of regular school hours disrupts the continuity of learning, especially for students from

low-income families who lack access to adequate distance learning. Teachers struggle to adapt their curriculum to this unexpected loss of learning time, resulting in a more pronounced decline in academic achievement for students from the most affected communities.

Economic disruptions are also significant and multi-layered. Local farmers experience reduced crop yields due to reduced sunlight intensity caused by the haze, as well as disruptions to the life cycles of pollinating insects and soil organisms essential for land productivity. The tourism sector experiences a drastic decline in tourist visits, falling significantly during the haze season due to the adverse conditions and health risks. Land and air transportation are disrupted, reducing economic mobility and extending distribution times, thus increasing logistics costs and commodity prices for local consumers. Thus, the impact of forest and land fires can lead to declines in all elements.

2. Reinterpretation of Eco-Theology as the Foundation of Legal Legitimacy

The legal framework for forest and land fire management in Indonesia is actually adequately textually available, as reflected in Law No. 32 of 2009 concerning Environmental Protection and Management and its derivative government regulations on environmental law enforcement. This regulation provides administrative and criminal sanctions for perpetrators of forest and land fires. However, as outlined in point 3.2, data from 1,723 forest and land fire incidents throughout 2026 shows that the mere availability of regulations does not automatically result in compliance. A regulation-sanctions approach that operates purely through the logic of deterrence through the threat of punishment has structural limitations: it is only effective as long as the probability of detection and the risk of sanctions are perceived to outweigh the economic benefits of land clearing through burning.

This limitation becomes even more apparent given that short-term economic calculations of cost efficiency are often considered profitable despite the risk of sanctions, particularly when law enforcement on the ground is inconsistent or oversight capacity is limited to cover an area as large as 12 red zone districts/cities. Thus, a purely regulatory-sanctions approach without a spiritual dimension tends to produce fragile and conditional compliance, rather than compliance that is internalized as a belief. The reinterpretation of eco-theology, built around the concepts of caliph and mandate, offers a qualitatively different basis for legitimacy than that of positive law alone. When forest fires are reinterpreted not merely as an administrative violation of Law No. 32 of 2009, but as a betrayal of a trust entrusted to Allah SWT, the legal sanctions imposed gain additional moral justification derived from transcendent authority, not solely from the state. This layered legitimacy is particularly important in a religious society like South Sumatra, where adherence to religious values often has a stronger binding force than adherence to formal legal institutions alone.

The concept of *istislah* (sustainable welfare) further strengthens this argument by justifying that the enforcement of sanctions against forest fire perpetrators is not merely a punitive measure, but rather an effort to safeguard the long-term collective welfare, one

of the highest objectives of sharia (*maqashid al-syariah*). Within the *istislah* framework, legal sanctions can be understood by the public not as a form of state repression, but as an instrument aligned with the religious goal of simultaneously maintaining human and environmental welfare. This reinterpretation directly addresses the third research question, namely how criminal sanctions for forest and land fires can be strengthened through a deeper moral legitimacy than the mere threat of punishment. Based on the above description, this study constructs an integration model that positions positive law and theological ethics not as two competing systems, but as a complementary dual enforcement mechanism. Positive law provides a formal-coercive framework with clear procedures, sanctions, and enforcement authority. Theological ethics, through the concepts of *khalifah*, *amanah*, and *istislah*, provides an internal-spiritual framework that builds awareness that compliance with the prohibition on forest burning is not only a legal obligation, but also a religious obligation inherent in one's faith identity. In this model, the effectiveness of law enforcement no longer relies solely on the realistically limited supervisory capacity of the apparatus to consistently reach all 12 red zone districts/cities but is also supported by social control mechanisms based on religious values that operate at the community level. When these two mechanisms work simultaneously, legal sanctions gain double pressure: formal pressure from the state and moral pressure from the religious community itself. This integrated model will then be synthesized into a complete conceptual framework in the next point, which connects all the pillars of eco-theology with their implications for forest and land fire prevention policies in South Sumatra.

Conceptual Framework: Bridging Theology and Environmental Law

The conceptual framework built from the synthesis of these three pillars can be described as a three-stage causal chain. First, instilling the understanding that forest burning is a violation of trust, not merely an administrative violation. Second, this awareness, if internalized collectively through eco-praxis movements involving religious communities as moral leaders, encourages behavioral changes at the individual and group levels, particularly in red zone areas such as OKI, Muba, and Ogan Ilir. Third, behavioral changes based on this spiritual awareness produce moral legitimacy that supports the effectiveness of law enforcement: criminal sanctions for forest burning are no longer simply obeyed out of fear of external authority, but because they are internalized as a logical consequence of violating God's trust.

This model directly addresses the third research question, namely how criminal sanctions for forest fires in South Sumatra can be strengthened through environmental theological education and the transformation of spiritual awareness. This framework emphasizes that positive law and theological ethics are not competing domains, but rather mutually reinforcing mechanisms: law provides minimal coercive limits, while theological awareness provides internal resilience that ensures compliance does not depend solely on official oversight. (Asteriniah & Sutina, 2018) The conceptual framework above has concrete policy implications, in line with the three holistic solutions projected in this research abstract. First, environmental theology education needs to be mainstreamed as a sustainable program involving formal and informal religious institutions in forest and land

fire-prone areas, not merely as an annual ceremonial activity before the dry season. Second, strengthening legal sanctions for forest fires needs to be accompanied by an explicit narrative of spiritual legitimacy, for example through contextual fatwas or da'wah materials that directly link forest and land fire data to the concept of breach of trust, so that legal and moral sanctions work in parallel. Third, sustainable economic support for communities and businesses in forest and land fire-prone areas is a structural prerequisite so that the transformation of spiritual awareness does not clash with the pressing economic needs that have so far driven the practice of burning as the cheapest method of land clearing. These three implications demonstrate that the solution to the forest and land fire crisis in South Sumatra cannot be reduced to a single issue, whether it is merely regulatory, purely economic, or purely spiritual, but rather requires an approach that simultaneously integrates all three.

Filling the Gap between Normative Eco-Theology Studies and Policy/Law Enforcement Studies

As identified in the introductory section, previous studies on forest and land fires (karhutla) and eco-theology tend to be divided into two separate streams of inquiry. The first stream focuses on the normative foundations of environmental protection in the Qur'an and Islamic teachings (Nur et al., 2025). However, it falls short of connecting these theological principles with the imperativeness of positive law, resulting in studies that tend to remain at the level of religious discourse without clear operational implications for law enforcement. The second stream concentrates on environmental policy and law enforcement studies that analyze the gap between regulation and implementation, yet overlooks the spiritual dimension that actually underlies the legitimacy of law in the eyes of religiously observant communities. The original contribution of this research lies in repositioning eco-theology from merely a normative and descriptive-theological discourse to an argumentative framework that actively supports the legitimacy of strengthened legal sanctions. In conventional studies (Widiastuty & Anwar, 2025), principles of khalifah (stewardship) and amanah (trusteeship), these are typically discussed as ideal values that religious communities should uphold, without mechanistic explanation of how such values can influence the effectiveness of environmental law enforcement in practice. Accordingly, the findings and conceptual framework of this research offer a new paradigm for environmental law enforcement in South Sumatra specifically, and Indonesia generally namely, that the effectiveness of environmental law is not solely determined by the strength of regulations and the magnitude of sanctions, but also by the extent to which law can rest upon the spiritual legitimacy that lives in the consciousness of religiously committed communities, a dimension that has hitherto been overlooked in conventional environmental policy studies.

CONCLUSION

Based on the results of the analysis and discussion presented, this research asserts that forest and land fires in South Sumatra are not incidental events, but rather a systematic and recurring ecological social crisis. Throughout 2026, 1,723 forest and land fire incidents

were recorded, spread across 12 districts/municipalities designated as red-zone status, with a total burned area of 1,926.2 hectares, and its distribution pattern shows strong correlation with the concentration of peatland and large-scale palm oil plantations. These findings confirm the answer to the first research question: forest and land fires constitute a multi-layered crisis that disrupts ecosystem integrity while simultaneously pressuring the socio-economic life of communities ranging from respiratory health disturbances, educational disruptions, to losses in the agricultural, tourism, and transportation sectors and these two layers of crisis reinforce each other from year to year. This study also confirms that the persistence of forest and land fires, despite long-standing regulations and threats of criminal sanctions, proves that the sanctions that have been created are not yet effective. The reinterpretation of eco-theology through the concepts of *khalifah*, *amanah*, and *istislah* offers a qualitatively different basis of legitimacy: forest fires are reinterpreted not only as administrative violations, but as a betrayal of God's mandate, so that legal sanctions gain additional moral justification derived from transcendent authority. The three-stage causal chain framework constructed in this study from theological reinterpretation, collective internalization through eco-praxis, to moral legitimacy for sanction enforcement shows that positive law and theological ethics are two complementary enforcement mechanisms, not two competing realms.

This research explains that a holistic solution to the forest and land fire crisis in South Sumatra cannot be reduced to a mere legal regulation issue, but rather demands an integral transformation that integrates three pillars simultaneously and hierarchically:

1. Ecological Repentance through Sustainable Environmental Theology Education. Forest fires violate the mandate of the caliphate in Islamic tradition. Therefore, ongoing and contextual mainstreaming of environmental theology education is necessary, not just an annual ceremonial activity. This is to foster a deeper awareness that environmental destruction is a violation of spiritual ethics.

2. Strengthening Leaders' Awareness as the Basis for Moral Legitimacy for Law. Awareness of the role of leaders on earth as responsible caliphs within religious traditions is an essential moral pillar for the effectiveness of legal sanctions. This can be activated through: (a) contextual fatwas from religious institutions that qualify forest burning as a theological violation; (b) *da'wah* materials that integrate eco-theology into spiritual narratives; and (c) capacity building of religious and social leaders at the local level. These pillars provide a strong spiritual justification for why communities must obey the law, not simply out of fear of punishment.

3. Optimizing Legal Sanctions Supported by Sustainable Economic Incentives. Law enforcement against forest fires must be strengthened through: (a) strengthening legal deterrence (criminal and civil); (b) sustainable economic incentives for communities and businesses in areas prone to forest and land fires (paid reforestation programs, sustainable agricultural certification, alternative subsidies). This pillar ensures that the transformation of spiritual and moral awareness does not conflict with urgent economic needs.

These three pillars emphasize the original contribution of this research, namely shifting the position of eco-theology from merely a descriptive normative discourse to an argumentative framework that actively supports the legitimacy of strengthening legal

sanctions, thus offering a new paradigm for environmental law enforcement in South Sumatra in particular, and in Indonesia. In general, the effectiveness of environmental law depends not only on the strength of regulations and the magnitude of sanctions, but also on the extent to which the law is able to rely on spiritual legitimacy that lives in the consciousness of religious communities.

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