

THE IMPORTANCE OF SELF-AWARENESS REGARDING FOREST FIRE TRIGGERERS

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Abstract

Forest fires are events where forests or land burn which results in natural and environmental damage which can cause economic, flora and fauna, socio-cultural, political and climate change losses. This paper uses a qualitative method, namely a method that focuses on in-depth observation of the data and facts that occur. The main factor is the use of land for other purposes, for example; building factories, other plantations, opening roads, etc. But besides all that, there are side effects that arise as a result of forest fires that are set deliberately.

Keywords: Self-Awareness, Wildfire

INTRODUCTION

Forest fires are events where forests or land burn which results in natural and environmental damage which can cause economic, flora and fauna, socio-cultural, political and climate change losses. Forest fires themselves can occur due to human activity or nature itself. Like; Long-term global warming results in dry land and easy forest burning. Apart from that, deforested forests due to forest burning or land burning can result in landslides. The form of imbalance in the ecosystem on earth is the main trigger for global warming, while other factors are the effect of greenhouses, industrial waste, an increase in the average temperature of the atmosphere.

Based on data from BNPB (national disaster management agency) during August 2023, 144 forest or land fires occurred in Indonesia, which constituted 64.29% of the total disasters in August or the majority of disasters that occurred in Bylan.

In Indonesia itself, there are strict legal measures for perpetrators of natural crimes, especially forest burning, whether intentionally or unintentionally. Butane fires are the most frequently occurring natural disasters. Therefore, strict law enforcement and environmental or natural awareness are needed to reduce incidents of irresponsible individuals burning forests.

RESEARCH METHODOLOGY

This paper uses a qualitative method, namely a method that focuses on in-depth observation of the data and facts that occur. Therefore, using qualitative methods for research can produce more thorough and comprehensive studies and phenomena.

RESULTS AND DISCUSSION

Human insensitivity to nature as a trigger for forest or land fires, for example, just a small habit of throwing cigarette butts carelessly in forest areas or dry land can trigger forest fires. Humans often underestimate this. But in fact, quite a few forest fires occur because of this small habit. Apart from that, according to data from the Operational and Fire Investigation Section of the Fire Fighting Sector of the Sleman Regency Civil Service Police Unit, the most common cause of fires is electricity. Electricity is the main trigger for fires, one of which is land fires caused by electrical short circuits which cause sparks to fall on residents' gardens.

The use of fire equipment in flammable areas, including trees, can also trigger forest and land fires. A fire occurred around Mount Bromo on September 6 2023 due to the use of fireworks techniques to take pre-wedding photos. Losses due to fires in the Mount Bromo area are estimated at Rp. 5.4 billion according to the Bromo Tengger Semeru National Park report. This figure includes costs associated with fire suppression, habitat destruction, and ecosystem restoration. In the meantime, perpetrators of arson will be sentenced to five years in prison and a fine of IDR 3.5 billion.

Forest fires can also occur due to deliberate human action. The main factor is the use of the land for other purposes, for example; building factories, other plantations, opening roads, etc. But besides all that, there are side effects that arise as a result of forest fires that are set deliberately. For example; 1). Animals that inhabit forests or land are destroyed. An example is the extinction of a number of rare species in Way Kumbas National Park in East Lampung due to land fires. The 200 hectare land was deliberately burned by poachers; 2). Respiratory diseases such as upper respiratory tract infections, asthma, chronic obstructive pulmonary disease, cardiovascular disease, and eye irritation can be caused by air pollution; 3). Ecosystem damage, forest fires can be caused by natural phenomena and human activities. Earth is considered flammable due to its oxygen-rich atmosphere, carbon-rich vegetation, lightning, and volcanic activity. Various losses are caused by forest fires. Destruction of natural wildlife habitats, exposure to pollution and respiratory diseases, and even destruction of human settlements near forests can contribute to the extinction of organisms and other negative impacts; 4). Burning land or forests is a violation that requires maximum effort from all parties involved. Efforts to provide retribution to perpetrators of forest or land burning, in particular by imposing heavy criminal sanctions including imprisonment and maximum fines, with the aim of providing warnings and providing guidance to perpetrators of this behavior.

In accordance with Law Number 18 of 2013 concerning Prevention and Eradication of Forest Destruction, forest destruction can be triggered by forest fires, whether corporations or individuals commit these violations. The exclusion of forest fires from the classification of criminal acts of forest destruction regulated in this law is still unclear.

CONCLUSION

Forest guards and all Indonesian people are responsible for preventing forest fires. To reduce the possibility of forest fires in Indonesia currently, the following methods can be implemented; 1). Carrying out fire-prone spot analysis, Kalimantan and Sumatra experience an increase in fire hotspots in the dry season, which can result in forest or peatland fires. Hot locations are densely populated areas with flammable materials, including wood, dry plants, and so on. The Keetch Bryam Index method can be used to identify areas that are vulnerable to fire hazards. This approach is used to evaluate the risk of forest fires by calculating the index or severity of drought in an area. With proper analysis, the risk of land fires can be mitigated and control measures taken; 2). Prevent Forest or Land Fires Before They Occur, Forests may still experience fires. Therefore, the community and forest guards must be prepared to face the worst possibility. Even though preventive measures have been implemented, including analysis of fire-prone locations and strict patrols or supervision, this phenomenon still continues to occur. To prevent forest fires, be careful and quick when searching for fire-prone areas; 3). Carrying out outreach and education. Apart from that, the public can also be given regular education about the dangers of forest fires, preventive measures and emergency response procedures. This outreach is intended to increase public awareness regarding forest sustainability. Additionally, outreach can serve as a method to provide practical guidance and instructions on how to manage fires in the field.

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