

RESEARCH ARTICLE

HOW CAN THE LAW PROTECT THE FOREST?

Implementation of Forest Protection through Law No. 18 of 2013 on Forest Destruction and Burning

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ABSTRACT

Forest area is a living environment that must be preserved. Therefore, forest protection is done through law no 18 of 2013 on the prevention and eradication of forest destruction. Although there is normative forest protection, forest fire and destruction cases are still common. So that the implementation of environmental law enforcement in Indonesia needs assessment has been appropriate or not with the law. Then if there is any inconsistency with the applicable regulations, it is necessary evaluation and solution to answer the problem. So that the goal of protecting the forest can be realized. Given the impact of forest fires and forest destruction is not only felt by people in the country but also the world community.

Keywords: *Forest Protection; Burning; Destruction; Environmental Protection*

INTRODUCTION

Forest is a unity of ecosystem in the form of land containing biological natural resources that cannot be separated from one another ([Inswiasri, Kasnodihardjo, Nainggolan, Mardiana, & Manalu, 2011](#)). Indonesia is a tropical country with a forest area of 133,300,543.98 ha. These include natural reserves, protection forests, and production forests. Some islands in Indonesia have a large forest of which is the island of Sumatra is one of the areas in Indonesia who always experience forest fire/land every year. In the event of climate drift causing drought, the number of incidents of forest fires/land becomes significantly increased ([Zubaidah, Dirgahayu, & Sariwulan, 2005](#)).

Wildfire is a state of uncontrolled fire occurring in rural areas or large areas. The spread of fire may change direction unexpectedly ([Faisal, Yunus, & Harahap, 2013](#)). There are two types of fires: ground fire and surface fire. The two types of fires damage the bushes and underbrush to the organic material beneath the litter layer such as humus, peat, tree roots or decaying wood. If slowly handled by fire may occur extensively resulting in a crown fire where the fire damages the tree canopy. However, this last type of fire can occur also because of the presence of lightning.

Forest fires in Indonesia always occur during the dry season, i.e., in August, September, and October, or in transitional periods. Potentially burning forest areas in Indonesia are in Sumatera Island (Riau, Jambi, North Sumatra, and South Sumatra) and Kalimantan (Kalbar, East Kalimantan, and South Kalimantan). The causes of forest and land fires in Indonesia are generally caused by two factors. Firstly, it is due to human negligence factor that is carrying out its activities in the forest. Second, because of intentional factors, namely the human intentions that open the land and plantation by burning. Wildfires due to human negligence factor are much smaller than the deliberate factor of burning the forest. Land clearing by burning is done at the opening of new land or for the rejuvenation of industrial crops in the forest area ([Zuhud, Hikmat, & Kosmaryandi, 2016](#); [Widyaningsih & Sembiring, 2021](#); [Handayani, Sulistiyono, Leonard, Gunardi, & Najicha, 2018](#)).

Land clearance by forest burning is cheap, but this method is irresponsible and has a huge impact. Losses are also very large. Forest and Land fires cause environmental damage. Forest fire can harm public health and cause infectious diseases in respiratory (breath) and transportation smoothness due to poor visibility ([Perwitasari & Sukana, 2008](#)). Large Forest fires can disrupt the people

of neighboring countries, and if not resolved soon lead to negative public assessment international to the Indonesian government.

Destruction of forests in general can be defined as activities in the form of illegally occupying and/or using forest areas, encroaching illegal logging (logging), logging, transporting, and selling of illegally or unauthorized timber from local authorities, conducting exploration or exploitation minerals in the forest area without valid authorization and issuing, carrying and transporting unregulated wild plants and animals originating from the forest area without authorization from the competent authority (Riyadi, Alhamda, Airlambang, Anggreiny, & Anggara, 2020; Purwendah, Periani, & Pudyastiwi, 2021; Rosana, 2018).

METHOD

The research method used normative research, by using approach of legislation and analytical and conceptual approach. The statutory approach and the analytical approach are based on legal material collected namely the primary law used as the main legal ingredients, such as the Laws and Regulations, from the highest level to the lower-level regulations. In addition to primary legal materials are also equipped with secondary legal materials, namely legal materials that can provide explanations of primary legal materials (Barus, 2013), such as books written by experts, legal doctrines, legal journals, and so on, and coupled with tertiary legal material, which is legal material that can give guidance or explanation of primary and secondary legal materials, among others: legal dictionaries, encyclopedias about the law, and so forth.

Data used in this research is secondary data that is primary law material starting from UUD 1945, Law Number 32 Year 2009 about Environmental Protection and Management and Law Number 18 Year 2013 about Prevention and Eradication of Forest Destruction, secondary law material in the form of journals, previous studies and relevant reference and books. The method of legal research, according to Soerjono Soekanto is a scientific activity, which is based on methods, systematics, and certain thoughts, which aims to study one or several specific legal phenomena, by analyzing them.

FOREST FIRES AND AIR POLLUTION

Definition of Forest Fire according to SK. Menhut. No. 195 / Kpts-II / 1996 is a situation where the forest is hit by fire causing the destruction of forest and forest products causing economic and environmental losses. Forest fires are one of the effects of increasing levels of pressure on forest resources. The impacts associated with forest or land fires are environmental damage and pollution, such as damage to flora and fauna, soil, and water. Forest and land fires in Indonesia occur almost every year even though the frequency, intensity and extent of their area are different.

Negative impacts on the physical environment include air quality degradation due to the concentration of smoke that shortens visibility, interferes with transportation, alters the physics-chemical and biological properties of the soil, alters the microclimate due to loss of plants, even in the global environment contributes to the greenhouse effect (Bahri, 2002). Impacts on the biological environment include decreasing biodiversity levels, disruption of natural successions, disruption of organic material production and decomposition process.

Impact on health is the occurrence of smoke that interfere with public health, especially the poor, elderly, pregnant women, and children under five such as acute respiratory infections (ISPA), bronchial asthma, bronchitis, pneumonia, eye, and skin irritation. Social impacts are loss of livelihood, security, and harmony of local community (Office of State minister L.H., 1998). In addition, it is suspected that these forest fires can produce toxins of dioxins, which can cause cancer and infertility for women (Tempo, June 27, 1999).

While the economic impacts include the canceling of land-air and air transport schedules, loss of vegetation, especially high economic value, community medical expenses, decline in industrial and office production, and the drop in tourism business Project in Southeast Asia (EEPSEA) the value of losses caused by forest fires in 1997/1998 covered by 3 (three) countries (Indonesia, Malaysia and Singapore) reached 1.45 billion dollars (US) (Putra, 2015). This figure is almost equal to the total loss due to the Bhopal tragedy (leaking installation of Union Carbide plant in India in 1984) and Exxon Valdez (spilling millions of tons of oil from a tanker in Alaska, USA in 1989), or equal to about 2, 5 percent of Indonesia's GNP before the monetary crisis (Tempo, 28 December 1998).

In general, forest fires occurring in Indonesia are caused by three main factors namely the condition of fuel, weather, and socio-cultural society. Fuel conditions that are prone to fire hazards are abundant in the forest floor,

relatively low water content (dry), and the availability of sustainable fuel. Climatic factors such as temperature, humidity, wind, and rainfall also determine the fire vulnerability. High temperatures due to direct sun irradiation cause the fuel to dry and flammable, high humidity (in forests with dense vegetation) reduces the chances of forest fire, the wind also affects the process of fuel drying and the speed of fire spreading while the rainfall affects the size water contained in the fuel.

Socio-cultural factors of society have the greatest contribution to the existence of forest fires (Rasyid, 2014). Some factors that cause forest fires include:

1. The use of fire in land preparation activities.

Communities around forest areas often use fire for land preparation, both for making farmland and plantations such as coffee and cocoa. The high difference in production costs is a factor driving the use of fire in land preparation activities. The method of fire use in land preparation activities is done because it is cheap in terms of cost and effective in terms of time and the results achieved quite satisfactory.

2. Disappointment of the forest management system.

Various social conflicts often arise in the communities surrounding the forest area. The conflicts are mainly conflicts over forest management systems that do not provide economic benefits to the community. The discontentment of some communities over the management of forests can lead people to act anarchically without considering existing conservation and legal rules. Limited community education and lack of community knowledge of the functions and benefits of forests are very influential on their actions in managing destructive forests.

3. Illegal logging.

Illegal logging activities produce more critical lands with high fire vulnerability. Often, uncontrolled fires easily propagate into the area of critical forests. Illegal logging activities often leave fuel (leaves, branches, and branches) that are increasingly accumulating and accumulate in forest areas that in the dry season will dry up and are very potentially harmful to forest fires.

4. The Need for Forage of Animal Feed (HMT)

Community life around the forest area is not separated from livestock and grazing. Livestock (especially cattle) is one form of side business to meet the needs of family life. The need for HMT and grazing areas is one of the things that must be met. To get grass with good quality and has a high level of palatability is usually the community burned the pasture areas that are not productive. After

the area of grassland grass will grow a new grass of better quality and high nutritional content.

5. Forest encroachment

Another factor that is not less important as the cause of forest fires is the migration of people in forest areas (forest encroachers). It is realized or not that the longer the community's living needs will increase as the number of families increases and the more complex the necessities of life. It demands the population to increase the extent of their cultivated land so that their agricultural produce can meet their daily needs.

6. Another reason

Another causes that could trigger the occurrence of fire is the lack of public awareness of the dangers of fire. Usually, the form of activity that is the cause is the accident of the perpetrator. For example, people have a high interaction with forests. One form of such interaction is the habit of residents taking rattan that usually while working they light a cigarette. Unconsciously they throw cigarette butts in forest areas that have abundant fuel potential to allow fires to occur.

Air pollution is defined as the presence of one or more pollutants entering the open atmospheric air, which may be formed as dust, vapor, gas, fog, odor, smoke, or moisture characterized by their number, nature, and duration (Suratmo, 1995). Air pollution caused by forest fires is against the principles of international environmental law. One principle is "*Sic utere tuo alienum al laedes*" which dictates that a State is prohibited from conducting or permitting any activity which could harm the State (Starke, 1999), and the principle of good neighborliness. [11] In essence the principle says the sovereignty of a country's territory should not be disturbed by other countries. The principles of international law for other environmental protection are the general prohibition to the principle, the duty to prevent principle, the duty to the principle of negotiation and cooperation principle, the intergenerational equity principle (Samekto, 2009).

ILLEGAL LOGGING AND FOREST DESTRUCTION

Criminal acts in the forestry sector include 15 types of criminal acts that can be classified into 3 groups, namely: (1) a ban on damaging facilities and infrastructure of forest protection; (2) a ban on forest destruction; and (3) administrative restrictions but criminal sanctions (Salim, 2004). One form of crime in the field of forestry is timber theft or logging. Grammatically the notion

of illegal logging is the cutting of wood to then bring to the place of saw which is done unlawfully, contrary to law or illegally according to law (Sukardi, 2005).

Illegal logging is a sequence of logging activities and transporting timber to the processing site to illegally export timber exports because they do not have permission from the authorities. Such an act is contrary to applicable law and is seen as an act which may damage the forest. Thus, can also be said that illegal logging including deeds of forest destruction that impact on the loss of both the economic, ecological, and socio-cultural aspects.

Illegal logging is a crime because the impact is very broad covering the economic, socio-cultural, and environmental aspects. This crime poses a potential threat to social order and can create tensions and conflicts in various dimensions, so that forestry crimes are factually deviating from the norms underlying life and social order (Basir, 2016). The impact of forest destruction caused by illegal logging is not only perceived by the people around the forest but also perceived nationally, regionally, and internationally, since the forest not only belongs to a particular society or country but belongs to the universal community as the lungs of the world.

Factors that cause Illegal logging are Lack of personnel of the forestry apparatus causing weak supervision, availability of employment and the poverty factor of the citizens, the weakness of legal payments so that the government must be able to fix the illegal logging activities do not occur, in line with the results of the study according to Dudley as quoted by Nurdjana, there are three factors that cause fertile wild at the local level where the three factors interact, support each other and complement each other (Akhmaddhian, 2016; Purniawati, Kasana, & Rodiyah, 2020). This factor also allows illegal logging extends rapidly as follows:

- (a) Community value factors and population situations. Community values and situations of forest villages are factors that influence illegal logging due to some elements, as are the following elements:
1. Employment and income needs
 2. The influence of other workers who have been working illegally
 3. Local dissatisfaction with central forest policy
 4. Support for sustainable forest management.
- (b) Economic factors of supply the economic problems of supply and normal demand related to the logging industry or now better known as illegal logging occur due to several things, namely: (1) The capacity needs of the domestic timber industry and demand for overseas timber. (2) Wood supply

capability and timber harvesting policy. (3) High profits from timber companies.

The large capacity of the timber industry in the region will lead to increased demand for timber supply leading to excessive timber harvesting. The ability of timber supply and the capability of providing legal timber industry that is not proportional to the high demand for timber within and outside the country, resulting in imbalances between inventory and demand then generating additional demand for timber extracted from illegal logging.

(c) The entrepreneur factor and its effect. The linkage of the entrepreneurs to collusion with local officials is also a factor in illegal logging. It is influenced by several elements such as: (1) Proficiency obtained by timber entrepreneurs; (2) The magnitude of the effect of timber entrepreneurs and logging bosses on local officials; (3) The amount of participation of local officials in illegal activities.

A. Law enforcement as implementation of Law no 18 of 2013

The objective of forest protection is to preserve the forest's function and function, as well as to maintain the quality, value, and usefulness of forest products. Furthermore, Article 46 of Law No. 41 of 1999 stated that the purpose of forest protection is that forest functions covering protected functions, conservation functions and production functions can be achieved (Al Husein, 2015). Thus, forest protection is an attempt to prevent forest degradation.

Criminal acts in the forestry sector include 15 types of criminal acts that can be classified into 3 groups, namely: (1) a ban on damaging facilities and infrastructure of forest protection; (2) a ban on forest destruction; and (3) administrative restrictions but criminal sanctions. The first and third classes are formal crimes (formal offenses); while the second group, is a material offense (material offense) which requires the occurrence of forest damage. The third category of criminal offense in the forestry field is an administrative provision that causes a result (forest destruction) because it is addressed to the recipient of a forestry business license (permit for the utilization of the area, the utilization of environmental services, the utilization of timber and non-timber forest products, timber, and non-timber forest).

The effort to eradicate illegal logging The form of authority possessed by local government is limited authority, because even though Indonesia has changed the system of government from a centralized system of government to decentralization, still in the case of the transfer of authority from the central government to the regional government is a limited authority. The authority of local governments in efforts to eradicate illegal logging that occurred in the

region can be divided into 5 categories based on the authority of the regional government as regulated in the relevant laws and regulations of both forestry laws and local government legislation. The authority of local governments in efforts to eliminate illegal logging that occurred in the area is as follows: (1) License granting, (2) Establishment of local regulations, (3) Supervision, (4) In cooperation with related institutions, (5) Firm and critics in granting and lifting of forest licenses.

Even though some efforts have been made in the handling of illegal logging and forest burning, there are still some obstacles. The juridical obstacles that accompany law enforcement performance against forestry crime may come from its legal substance factor and its law enforcement officers ([Runtukahu, 2014](#)). In terms of legal substance there are several issues that interfere with the performance of law enforcement against criminal acts in the field of forestry, namely:

1. The provisions of the Forest Criminal Law cannot Touch the Intellectual Actors.
2. The Difficult Proof of Forestry Crime.
3. The scope of the formulation of Delict and Criminal Sanctions is still narrow.
4. Not Specified to Replace Ecological Losses.
5. Not Established by Special Judicial Institution of Forest Crime

As long as law No 18 of 2013 on prevention and eradication of forest destruction in practice encountered obstacles related to limited local government authority. Human resources in the framework of minimal forest monitoring so that cases of illegal logging easily pass. The practice of collusion of officials of local government passing permits of illegal logging, and the deliberate destruction of forests by unscrupulous elements are irresponsible. In this case of course the number of forest destruction is not much decreased. It is necessary to guarantee certainty both juridically and implementatively to protect the forest.

CONCLUSION

Forests have a very important function and role in the social and economic life of a country; therefore, the state is obliged to provide forest protection from any activity or deed that can cause forest destruction, including from criminal acts committed against forests. Crimes in forestry have been regulated in Law No. 18 of 2013 on Prevention and Eradication of Forest Destruction, including illegal logging. It's just that the regulation on forestry crime is still there some

weaknesses, namely the formulation of delict is still unclear, has not been able to touch the perpetrators who are corporate, intellectual actors and proof has not given access to check the bank account of forest crime perpetrators. The process of investigation of crimes in the field of forestry is specifically regulated, i.e., conducted by Civil Service Investigator Officials within the Ministry / Forest Service at both the central and regional levels. In addition to the special investigators there are other law enforcement officials who also have the authority to conduct criminal investigations in the field of forestry, namely investigators from the Police, Attorney and the Indonesian Navy. In practice, sometimes there is a clash of authorities among the investigators so that the investigation performance does not work well. The process of prosecution and examination in the trial of criminal offenses in the field of forestry done in general by using the provisions of procedural law contained in the Criminal Procedure Code. Law enforcement of forest crime is experienced some good juridical obstacles stemming from forestry legislation, the formulation of forest offense cannot reach the intellectual perpetrators of crime in the field of forestry, difficult proof, the scope of the formulation of the offense is still narrow, not compensated for ecological damages, and not a special court of justice established in forestry crime. While non-juridical obstacles include weak coordination among law enforcement agencies, regulation of confiscation processes treated equally with other general criminal acts, limited human resources, funds, facilities and infrastructure in law enforcement of forest crime.

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