Dealing with land and forest fires through improvement of regulations

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Abstract. One of the root causes of the forest and land fires is the regulatory problem. In this case there are two regulatory problems that cause the forest and land fires to continue to recur and ultimately have the potential to be transactional (corrupt). The first problem is that the regulations that still exist today, both at the national level such as Law No. 32/2009 on Environmental Protection and Management (PPLH) and Law No. 41/1999 on forestry and at the regional level (Local Regulations) still allow communities to clear land by burning land. The Constitutional Justice explained in the minutes of the preliminary examination of the Constitutional Court number 25/PUU-XV/2017 states that clearing land by burning land by the community is part of local wisdom that must be protected. The second problem is the responsibility of strict liability which is imposed on corporations by referring to article 88 of the PPLH Law, although as described, that responsibility of strict liability is not rightly imposed on forest and land fires. In essence, the responsibility of strict liability is imposed immediately, this is then inappropriate if it is imposed in the case of forest and land fire, the applicable legal principle is the polluter pays principle.

1. Introduction

Forest and land fires become a disaster that occurs in Indonesia almost every year, even land fires tend to occur in the same location or region. Many people are of the view that the palm oil industry is one of the causes of forest and land fires in Indonesia. In this case the causes of forest and land fires are divided into two namely, natural factors and human factors [1].

Prolonged drought and heat (el-nino) are the examples of weather factors causing the forest and land fires. The Indonesia’s Meteorological, Climatological and Geophysical Agency (BMKG) stated in its release in October 2019 that the longest dry season has occurred in Indonesia over the past 140 years [2]. The long-lasting drought has an adverse effect such as forest and land fires occurring in 2019.

Another factor that causes forest and land fires is the human factor. CIFOR’s research states that human factors that cause forest and land fires are divided into two parts, namely due to negligence and willful misconduct [3]. The habit of the oil palm plantation workers who often throw cigarette cutters in plantation concession areas is one example of negligence causing the forest and land fires, while example of forest and land fires caused by human behavior is land clearing by burning land or land burning for other economic purposes.

The focus of this paper is to outline the root causes of forest and land fires and how to deal with the disaster. In this case forest and land fires that occur due to natural factors and are caused by human
factors should have different consequences. The problem is that in Indonesian law, we do not recognize the distinction, the legal system in Indonesia does not recognize the distinction of causes, but the Article 88 of Law Number 32 of 2009 concerning Environmental Protection and Management knows the principle of strict liability.

The principle of strict liability as regulated in Article 88 of Law Number 32 of 2009 does not distinguish the causes, but rather regulates the effects. The responsibility of strict liability is imposed on the owner of the land where the forest and land fires occur. The Article 88 states that strict liability is the responsibility based on the effects, instead of responsibility based on the cause of a fire.

In this context, the existing regulations are more inclined to the aspect of law enforcement when compared to the aspect of preventing the occurrence of forest and land fires, so that is why forest and land fires always recur. The aspect of prevention in Law Number 32 of 2009 is considered sufficient with the existence of Article 88. The hope of lawmakers with the existence of strict liability responsibilities is that the owners of oil palm plantation concessions will maintain their respective concessions, including making efforts to prevent forest and land fires.

Conflicting regulatory aspects also contribute to recurring forest and land fires. In this case, on the one hand the government is seriously handling forest and land fires, but on the other hand the government is allowing the clearing of people’s oil palm lands by burning, only with the consideration of ‘local wisdom’. Even the Law Number 32 of 2009 through local regulations still provides a legal basis for land clearing by burning.

The problem is that the regulations do not give an obligation to the people who clear land by burning to equip them with forest and land fire prevention facilities. Rules that allow the people to clear land by burning land without the means and skills of preventing forest fires are also a cause of the recurring land and forest fires.

1.1 Purpose
The purpose of this study is to find a solution through regulation of the problem of recurrent forest and land fires.

2. Method
The method used in this paper is a normative juridical research method. To achieve the above purpose, literature study is used, using legal material to answer the problem formulation. In this case, court decisions, laws and regulations, doctrines and supporting literature that be divided into primary, secondary and tertiary legal materials.

This paper uses a normative legal research approach by doing an abstraction of the process of deduction from the prevailing positive legal norms, namely examining the law as a positive norm using deductive thinking and based on coherent truth, where the truth in this study has been declared credible without having to go through a testing or verification.

The data intended in this study are materials or facts or may also be interpreted as a source of information. While the legal material intended in this study consists of primary legal material and secondary legal material. Primary legal material is an authoritative legal material which means that it has regulatory authority, minutes or official records, and court decisions. Whereas what is meant by secondary legal materials are books (expert opinion), journals, and everything that can provide guidance for researcher.

3. Discussion
3.1 Evaluation of Regulatory Aspects
As described by Friedman [4] that one of the factors determining law enforcement is the legal substance. Without the legal regulations that can synergize with each other, the laws will not be able to bring a better human life. Roscoe Pound [5] defines law as a tool of social engineering, which means that law is an engineering tool for community behavior.
This means that the legal substance will greatly affect human behavior, including in this case human behavior related to forest and land fires. The forest and land fires that continue to recur in this case are caused by regulatory consistency issues related to forest and land fire prevention. The Law Number 32 of 2009 on the one hand provides protection for environmental management, while on the other hand it opens opportunities for land clearing by burning. Although permission to clear land by burning is in the name of local wisdom, but it still has the potential to pose a threat of forest and land fires which has a greater impact.

In this case Samuel Effe's research [6] shows that local wisdom should actually create a positive impact on community civilization, so in this case the existence of land clearing permit by burning should be revoked. The problem is that the Law Number 32 of 2009 becomes the legal basis for regions to allow land clearing by burning through local regulations.

The conclusions in the 2018 ICEL study show that regions that experience recurring forest and land fires in significant extents are the regions that have local regulations that allow land clearing by burning land such as Jambi and Central Kalimantan as well as several other regions. In the context of state administrative law, the meaning of a permit is the permissibility of activities that should be prohibited [7].

In this case, land clearing by burning should be prohibited by environmental conservation considerations. However, if the government exempts local people, then when issuing local regulations, it is necessary for the government to regulate fire control issues. The large forest and land fires are often caused by ‘fire jumps’ or fires that spread to wider concessions, including in this case the weather, such as wind direction and wind speed which is also a cause of widening and spreading of fire resulting in forest and land fire.

In view of the fact that forest and land fires often occur due to the spread of fire from concessions managed by the community, so the government needs to reconsider the issues related to the granting of land clearing permit by burning. This means that in this case the government needs to evaluate the provisions on land clearing by burning as permitted through Law Number 32 of 2009, where such provisions become the basis for the enactment of local regulations in a number of regions where frequent, massive and recurring forest and land fires occur.

The paradigm related to dealing with forest and land fires in Indonesia needs to be changed, given the Constitutional Court judge Suhartoyo in the minutes of the case hearing No. 25/PUU-XV/2017 states that the wisdom of the community to clear land by burning needs to be protected. By looking at the fact of the recurring forest and land fires in Indonesia, this view needs to be changed with a new perspective that is paradigm of prevention.

If indeed the government still gives permission to clear land by burning with consideration of local wisdom, then in this case what needs to be considered is how the implementation of the local wisdom does not cause a negative impact on people’s lives. In this case the government needs to include the terms of fire prevention and fire control prior to the granting of permission to clear land by burning to the community.

The government has two options in this regard, namely revoking the provisions that allow communities to clear land by burning in Law Number 32 of 2009, so that the local regulations that allow land clearing by burning are also revoked, bearing in mind the legal basis has been declared null and void. If this option is taken, then in addition to the local wisdom issue, a policy prohibiting land clearing by burning will cause socio-economic problems.

The problem is that prohibition to open land by burning will cause economic problems for the people who do gardening. The land clearing costs will be very expensive if done without burning, for example using heavy equipment. Robert Postner [8] in economic analysis of law theory explains that the government needs to consider the economic impact of a policy or regulation to be issued.

In this case if the government prohibits land clearing by burning, then how much loss or costs must be suffered as a result of the policy. In addition, it also needs to consider the costs incurred by the government if forest and land fires occur. If in the end the government bans land clearing by burning, then in order to avoid socio-economic problems, the government needs to provide solutions to the
impact of the policy, such as providing subsidies or fostering through plantation savings and loan cooperatives.

The second alternative is that the government does not revoke land clearing permit by burning as regulated in Law Number 32 of 2009 or local regulations related to land clearing permit by burning, but instead provides conditions for the issuance of land clearing permit by burning. This means that there are certain qualifications before the permit is issued.

As explained by Hadjon [9] that what is meant by qualification in state administrative law is that there are conditions that must be met before a permit is issued by an authorized official. In the context of preventing forest and land fires, if the government concludes that clearing land by burning is part of local wisdom that must be preserved and the government does not revoke the relevant legal rules, then the government in this regard needs to improve the legal rules.

The government in this regard needs to formulate conditions that must be fulfilled before the issuance of land clearing permit by burning. In the paradigm of prevention, it is necessary to formulate conditions that must be met in order that the activities of clearing land by burning do not cause catastrophic forest and land fires or environmental damage, such as damage to high conservation values or cause other environmental problems.

If it refers to the annual report of the National Agency for Disaster Management in the period of 2014 to 2018 that forest and land fires occurred due to widespread and uncontrolled fire in the concessions of communities that open land by burning. The communities could not control the fire in their concessions because they did not have firefighting equipment and also the communities did not have the knowledge and ability to extinguish the expanding fire.

This means that in this regard if the government does not revoke the regulation that allows land clearing by burning, the government must improve the legislation primarily related to land clearing by burning. The government must include an obligation to have a fire extinguisher to deal with fires covering at least the area permitted.

In addition to the obligation to have a fire extinguisher, the government also needs to ensure that the community has the knowledge and skills related to fire fighting at least in concessions that are given permit to open by burning. With the current conditions, if this condition is given to people who want to clear land by burning, there will be technical problems. Technical problems occur because the community’s understanding is not optimal in relation to the fire control and use of firefighting equipment.

If this option is chosen by the government, then the government should provide training related to the control and suppression of forest and land fires so that the community has the skills to put out fires. In this option the task of the government is not just to add conditions to the legislation, but the government also needs to play a role as a guide in efforts to prevent forest and land fires. The role of government guiding is not only for the communities that manage the concessions, but also to the concessions managed by the corporations to ensure the zero burning policy is applied in every corporation managing the concessions.

Eventually the government needs to revise Law Number 32 of 2009 to make room for improvement options to be taken by the government. It is important to realize that the recurrence of land and forest fires in Indonesia is also caused by inefficient regulations. In the context of regulation improvement, it is important for the government to prioritize aspects of forest and land fire prevention; otherwise the focus of existing laws and regulations is now on aspects of law enforcement and environmental restoration.

If the emphasis of rules is on law enforcement and environmental restoration, the fires will possibly continue to recur and the government will continue to pay the costs of environmental restoration due to forest and land fires. The Supreme Court Decision related to forest and land fires, namely Decision number 3555 K/PDT/2018 dated July 16, 2019, states that the government has committed illegal acts because it does not take preventative actions against forest and land fires resulting in sufferers and environmental damage.
Referring to the decision, the government in this regard must improve regulations related to environmental protection and management by placing the aspect of prevention as the focus of improving regulations to avoid forest and land fires. In the Supreme Court Decision number 3555 K/PDT/2018 dated July 16, 2019, definition of protecting citizens in this case is to prevent forest and land fires.

With the paradigm of prevention, forest and land fires that harm the community and place the community as a sufferer will not occur or at least can be minimized. This is affirmed by economic and environmental losses due to forest and land fires, the direction of environmental protection and management regulations is to emphasize the aspect of prevention, in this case the aspects of environmental restoration and law enforcement become supportive aspects.

Eventually, returning to the legal function namely ‘law as a tool of social engineering’, with legal rules that are paradigmatic in preventing forest and land fires, community behavior will also be formed from these laws and regulations. In this case, it is expected that awareness of forest and land fire prevention will be formed so that forest and land fires will not occur every year.

3.2 Law Enforcement Related to Forest and Land Fires
In addition to regulatory issues, another issue that is related to forest and land fires in Indonesia is the law enforcement issue. The problem is when forest and land fires occur, mainly involving corporate concessions, the handling is not centralized and often results in contradictory results so that the legal certainty aspects related to dealing with forest and land fire cases are ignored. For example the conclusions of a field investigation by local police may be different from the conclusions of the Ministry of Environment and Forestry’s law enforcement (Gakkum) team.

Likewise, law enforcement aspect related to forest and land fires is indeed still carried out by means of ‘transactional’. Corrupt behavior of law enforcement officials in carrying out law enforcement related to forest and land fire cases also becomes the homework of the government and the national natural resources movement team (GNPSDA) of the Corruption Eradication Commission (KPK) in overseeing law enforcement in forest and land fire cases to avoid them from corrupt behaviors.

Empirically, by using supervisory authority when forest and land fires occur, especially those occurring on concessions managed by corporations, almost all agencies conduct field visits such as the plantation department, forestry department, district government, provincial government, police and other agencies. Uncoordinated handling of forest and land fires causes the direction of handling and mitigation to be ineffective so that forest and land fires continue to recur.

The fact that law enforcement in the field of forest and land fires is still very corrupt is confirmed during a hearing between Commission III of the Indonesian House of Representatives and the heads of the regional police (Kapolda). It is firmly acknowledged that in some areas such as Riau, warrant for termination of investigation (SP3) is issued incorrectly. The facts presented at the hearing are considered odd by expert witnesses.

Dealing with forest and land fires requires progressive law enforcement, as described by Satjipto Raharjo [10] that progressive law enforcement is to make fundamental breakthroughs to achieve the objectives of the law itself. By looking at the evaluation of law enforcement in forest and land fire cases, the authority of a special agency for handling forest and land fires is currently required, including its authority of law enforcement.

The entire authority of law enforcement will be carried out by this agency, so that the law enforcement process related to forest and land fires is not confusing or corrupt. Personnel of this agency can be drawn from across agencies including the corruption eradication commission. This institutional arrangement is important and urgent for the government, bearing in mind that almost every year the law enforcement related to forest and land fires ends up being anti-climactic. In addition to the issue of law enforcement culture that is still corrupt, another issue related to law enforcement in forest and land fire cases is the paradigm related to the responsible parties.
Law Number 32 of 2009 applies the principle of strict liability responsibilities. In the implementation, the strict liability responsibilities do not find the causes of the forest and land fires, but the responsibilities are placed on the owner of the concession where the fire is occurring. These responsibilities are seen as actually causing injustice. The problem is that both in civil law and criminal law, strict liability responsibilities are used for actions which are summarily proven.

Hartiwiningsih [11] states that the strict liability responsibilities cannot be applied to land and forest fire cases which are complicately proven and requires scientific proof. This strict liability responsibility paradigm never actually reveals the material truth of forest and land fire cases, because the proof at the trial only focuses on the existence of fire in the concession in question. Whereas in terms of material disclosure, especially in order to end recurring forest and land fires, law enforcement is required that is able to uncover the root causes of forest and land fires themselves.

In the context of identifying the root causes of the issues, law enforcement needs to be directed at the responsibilities inherent in the perpetrators who burn forests and the disclosure of their motives. Given the possibility in forest and land fire cases it is indeed that there are no perpetrators who burn, for example fires caused by dry weather. This means that in this case the strict liability responsibility model will only result in the criminalization of many parties and the law enforcement process will not be able to identify the real land fire issues.

It is important to uncover the actual events in the law enforcement process. In a preventive perspective, uncovering the actual events can be used as a basis for countermeasures so that forest and land fire incidents do not recur. Law enforcement on forest and land fire cases that has been carried out is not effective because it cannot reveal the actual material events. In forest and land fire cases, the strict liability responsibilities are actually contrary to the legal certainty itself.

Soesilo [12] explains that in criminal cases related to the environment the evidentiary model used is ‘Conditio Sine Qua Non’ which is proof of cause and effect. This evidentiary model is used to find material truth in cases that require complicated and scientific evidences such as forest and land fire cases. The government in this regard needs to change the model of responsibility paradigm in forest and land fire cases.

An alternative model of responsibility that can be used by the government is the polluter pays principle. In this principle, whoever causes the fires must provide compensation and bear the costs of environmental restoration related to the fires generated [13]. This means that in this case the law enforcement process will find material truth related to the perpetrators causing the forest and land fires. With the disclosure of the perpetrators, the law enforcement process will be able to find the motives of the perpetrators.

In the polluter pays principle paradigm with the found motives of the perpetrators causing forest and land fires, the government agencies and law enforcement authorities will be able to take steps to prevent crimes that cause forest and land fires from being repeated. The polluter pays principle paradigm is an attempt to find the actual facts related to the background, motives and goals of the forest and land burning perpetrators.

On the other hand, the strict liability responsibility paradigm does not reach the background, motives and goals of the perpetrators so that law enforcement cannot be used as a basis for corrective steps for dealing with forest and land fires that continue to recur. In this case in reference to the law enforcement process mainly in the last five years, Article 88 of Law Number 32 of 2009 regarding strict liability responsibilities needs to be re-evaluated.

Law enforcement is indeed inseparable from the legal substance, so that in the context of law enforcement it is absolutely necessary to revise Law Number 32 of 2009. The revision is expected to have a positive influence on dealing with forest and land fire cases, bearing in mind that the strict liability responsibility model is seen as not having a deterrent effect on the actual perpetrators.

The strict liability responsibility model in Article 88 of Law Number 32 of 2009 absolutely needs to be replaced with the polluter pays principle responsibility model paradigm, with law enforcement that reaches out and imposes responsibilities on the actual perpetrators, so that the polluter pays
principle responsibility model is seen to further create a deterrent effect and legal certainty, because those who commit or cause forest fires are the responsible parties.

In the polluter pays principle, the most adequate facts will be found and this is useful for further handling and preventive actions, so that the occurrence of forest and land fires will be minimized. This means that the government in this regard absolutely needs to revise the formulation of Article 88 of Law Number 32 of 2009 because the strict liability paradigm on the contrary contributes to the non-optimal law enforcement related to dealing with forest and land fire cases in Indonesia.

4. Conclusion

The government needs to conduct an evaluation related to regulations and law enforcement to avoid recurrent forest and land fires in the coming years. The Supreme Court Decision number 3555 K/PDT/2018 dated July 16, 2019 needs to be used as a legal basis and momentum to revise Law Number 32 of 2009 so that in this case the environmental protection and management regulations emphasize more on preventive aspects.

The paradigm that must be instilled in regulations related to environmental protection and management is to prevent the occurrence of forest and land fires. Law enforcement will not prevent sufferers and material damage, including the expenses for environmental restoration by the country. In terms of conservation, it can also be understood that environmental restoration requires time and money. Even though it has been restored, the environmental potential in the burnt area will not necessarily return to the conditions when there were no forest and land fires.

In the economic analysis of law perspective, it also shows that the paradigm of prevention is more beneficial than the paradigm of restoration. This can be seen from the economic impact and other social impacts on human life. In the concept of restoration, there have been sufferers and negative impacts caused by forest and land fires. The focus of this concept is not on avoiding forest and land fires, but on restoring the effects of these forest and land fires.

On the contrary, the paradigm of prevention as required in the Supreme Court Decision number 3555 K/PDT/2018 dated July 16, 2019 will have an impact on maximum efforts to avoid forest and land fires, so that the effects of forest and land fires can be avoided. By avoiding forest and land fires through preventive efforts, both sufferers and material losses can also be avoided. This is what urges to immediately strengthen the existing regulations with the paradigm of prevention.

Evaluation related to law enforcement culture that is still corrupt and uncoordinated needs to be a serious concern for the government in forming institutions that deal with forest and land fires with high integrity in order to avoid the negative impacts of recurrent forest and land fires. Finally, the strict liability responsibility aspect in Law Number 32 of 2009 needs to be replaced with the polluter pays principle responsibility model.

The essence of the paradigm shift is that the process of law enforcement can be a means of controlling human behaviors, especially related to land burning. Changes to the rules are absolutely necessary to create maximum law enforcement. Eventually, the synergy between adequate regulations and good law enforcement with high integrity will be able to solve the issues of recurring forest and land fires.

References
[1] Anthony, S. (2010) Forest Fire History. 1st edition Mc Graw Hill Publishing USA, 75
[2] BMKG. (2019) Laporan BMKG. October 2019, 3
[3] CIFOR. (2018) Research on Forest Fire in Indonesia, 45
[4] Friedman, W. (1991) Legal Theory (original title) title translation: Teori & Filsafat Hukum: Idealisme Filosofis dan Problematika Keadilan. 1st edition Rajawali Press Publishing Jakarta Indonesia, 76
[5] Raharjo, S. (1980) Roscoe Pound defines Law at Ilmu Hukum. Angkasa Publishing Bandung Indonesia, 52
[6] Samuel Effe. (2016) Forest Conservation with Local Wisdom. Sorbone Law Journal No. 40
Vol. 2, 98

[7] Lotulung, P. E. (1991) Hukum Tata Usaha Negara dan Kekuasaan. 1st edition Salemba Humanika Jakarta Indonesia, 103

[8] Postner, R. (1994) Economic Analysis of Law. Little Brown and Company Publisher Boston USA, 57

[9] Hadjon, P. (1990) Dasar-dasar Hukum Administrasi Negara. 1st edition Liberty Yogyakarta Indonesia, 57

[10] Raharjo, S. (2006) Penegakan Hukum Progresif. 1st edition Genta Publishing, 45

[11] Hartiwiningsih. (2018) Kontroversi Penerapan Strict Liability dalam Perkara Kebakaran Hutan dan Lahan. Paper presented at Seminar Nasional Dampak Kebakaran Hutan terhadap Ekosistem Gambut Bogor dated 25th October 2018, 5

[12] Soesilo, R. (1992) Delik Pidana. 3rd edition Ghalia Indah Jakarta Indonesia, 59

[13] Muhdar Muhamad. (2009) Pertanggungjawaban Kerusakan Lingkungan berdasarkan Polluter Pay Principles. Jurnal Mimbar Hukum Universitas Gadjah Mada Vol. 40 (2) 2009, 13

**Court Decision**
Putusan Mahkamah Agung number 3555/K/Pdt/2018 dated 16th July 2019
Putusan Mahkamah Konstitusi number 25/PUU-XV/2017 dated 29th May 2017