

Law Enforcement on Illegal Logging in Indonesia: Problems and Challenges in Present and the Future

Erla Sari Dekiawati*

Yayasan Konservasi Alam Nusantara

(Archipelago Nature Conservation Foundation)

Jakarta, Indonesia



ABSTRACT: Implementation of environmental protection in juridical forest area has been regulated in Law No. 18 of 2013, on the prevention and eradication of forest destruction. In fact, the implementation of laws on the prevention and eradication of forest destruction is still at issue. Problems about efficiency and effectiveness of enforcement provided by the government. Through the methodology, it can answer the understanding of society and philosophical basis of legislation on the prevention and eradication of forest destruction and can improve the quality of enforcement of the law as well as the role given by the government. This study is expected to provide evaluation and enhancement of law enforcement in forest area protection.

KEYWORDS: Illegal Logging, Environmental Protection, Law Enforcement, Forest Protection



Copyright © 2022 by Author(s). This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License. All writings published in this journal are personal views of the authors and do not represent the views of this journal and the author's affiliated institutions.

How to cite:

Dekiawati, Erla Sari. "Law Enforcement on Illegal Logging in Indonesia: Problems and Challenges in Present and the Future". *Indonesian Journal of Environmental Law and Sustainable Development* 1, No. 1 (2022): 47-68. <https://doi.org/10.15294/ijel.v1i1.56777>

* Corresponding author's email: erlasari_d@yahoo.com

Submitted: 11/10/2021 Reviewed: 25/10/2021 Revised: 11/12/2021 Accepted: 08/01/2022

I. INTRODUCTION

The extent of forest areas in Indonesia is believed to be the source of life for about 20 percent of the total population of Indonesia living in and around the forest area. Indonesia's forest area ranks third after Brazil and Zaire.¹ According to the latest official calculations of the

¹ Supriadi Supriadi, *Hukum Kehutanan dan Hukum Perkebunan di Indonesia*. (Jakarta: Sinar Grafika, 2011). It is also emphasized that forests of Indonesia are the third largest tropical forests in the world and one of the greatest biodiversity hotspots on Earth. Indonesia is home to 10% to 15% of all known plants, mammals, and birds on the planet. From the orangutans to Sumatran tigers to the incredible birds of paradise, rare species threatened with extinction can only be found in Indonesia's forests. As recently as the 1960s, about 80 percent of Indonesia was forested. Since then, however, demand for commodities like pulp, paper, plywood and palm oil has combined with corruption, political cronyism, uncertainty about land rights and poorly enforced policies to create the conditions for a massive land and resource grab by large corporate interests. This profit driven resource rush is moving across the island chain, clear cutting rainforests, destroying critical habitat for endangered species, and sowing social conflict with communities that depend on the forests for their livelihoods. Sadly, Indonesia has one of the highest deforestation rates in the world, and just under half of the country's original forest cover now remains. Although estimates vary widely, conservative studies suggest more than a million hectares (2.4 million acres) of Indonesian rainforest is cleared and lost each year, with about 70% occurring in forests on mineral soils and 30% on carbon-rich peatland forests. See also Mark E. Harrison, Susan E. Page, and Suwido H. Limin. "The global impact of Indonesian forest fires." *Biologist* 56, No. 3 (2009): 156-163; Fitri Nurfatriani, et al. "Redesigning Indonesian Forest fiscal policy to support forest conservation." *Forest Policy and Economics* 61, No. 1 (2015): 39-50; Michael Eilenberg, "Shades of green and REDD: Local and global contestations over the value of forest versus plantation development on the Indonesian forest frontier." *Asia Pacific Viewpoint* 56, No. 1 (2015): 48-61; Rebecca A. Riggs, et al. "Governance challenges in an Eastern Indonesian Forest

Forestry Planology Board, 120 million hectares or about 63 percent of Indonesia's land area is forested. Given the vastness of Indonesia's forested land, it can be imagined that the country's revenues from the forestry sector are also large. This is evidenced by the large foreign exchange earnings that go into the development process, which recorded 7 to 8 billion per year entered in the coffers of the country. This is the second largest number of non-oil and gas sectors after textiles.

Even the international world recognizes the existence of Indonesia's forest resources as one of the most important parts for the realization of the ecosystem balance of the planet across generations through its function to absorb the emissions of various gases and toxic pollutants that are responsible for the increasing greenhouse effect and the increasingly deflated ozone layer.

However, ironically, forests that provide benefits in the form of large contributions to social and economic welfare are generated without considering the sustainability of forests. Forests in Indonesia suffered considerable damage. This is proven by FAO data in the Global Forest Resource Assessment in 2016 indicating that Indonesia's forests are in the order of five as the country with the most severe damage.

TABLE 1. Data of Forest Destruction

No	Country	Forest Area
1	Rusia	41 million hectares
2	Brazil	38 million hectares

landscape." *Sustainability* 10, No. 1 (2018): 169-184; Irfan Kemal Putra, Bambang Hero Saharjo, and Basuki Wasis. "Analysis of Indonesian Forest and Land Fire Controlling Operational Policies. Case Study: Siak Regency, Riau Province." *IOP Conference Series: Earth and Environmental Science* 363, No. 1 (2019).

3	Kanada	31 million hectares
4	Amerika	29 million hectares
5	Indonesia	18,5 million hectares

The high rate of forest destruction is caused by activities such as forest encroachment, conversion for mining and plantation, timber smuggling to illegal logging problems.² Logging activities are the

² M. Hamdan, *Tindak Pidana Pencemaran Lingkungan Hidup*. (Bandung: Mandar Maju, 2000). In the further context, the problem of illegal logging, especially in Indonesia, is a serious problem that can threaten forest sustainability. A serious effort is needed to overcome the problem of illegal logging, namely through preventive efforts, one of which is by making efforts to raise public awareness. In addition, there needs to be a responsibility from the relevant government in dealing with the problem of illegal logging that occurs, and the most important thing is law enforcement efforts. So that the perpetrators get a deterrent effect from the actions they have taken. In carrying out illegal logging activities, there are several parties who are always present and directly involved, namely the owners of capital, unscrupulous government officials and the community, both local people and immigrants. The definition of the crime of illegal logging is not explicitly formulated and is not found in the Articles of Law Number 41 of 1999 concerning Forestry, but illegal logging can be identified with actions or actions that result in forest destruction, for that regarding forest destruction this is confirmed in the Law Number 41 of 1999 Article 50 paragraph (2) concerning Forestry, it is stated that: "Everyone who is granted a business permit for the use of the area, a business permit for the use of environmental services, a business permit for the utilization of wood and non-timber forest products, as well as a permit for the collection of wood and non-timber forest products. non-timber, it is prohibited to carry out activities that cause forest damage" [*Setiap orang yang diberikan izin usaha pemanfaatan kawasan, izin usaha pemanfaatan jasa lingkungan, izin usaha pemanfaatan hasil hutan kayu dan bukan kayu, serta izin pemungutan hasil hutan kayu dan bukan kayu, dilarang melakukan kegiatan yang menimbulkan kerusakan hutan*]. See also Ram Ranjan Yaoyao Ji, and Chi Truong. "Determinants of illegal logging in Indonesia: An empirical analysis for the period 1996–2010." *Journal of Sustainable Forestry* 37, No. 2 (2018): 197-220; Wahyu Nugroho, and Mas Subagyo Eko Prasetyo. "Forest Management and Environmental Law

most dominant cause in forest management practices in Indonesia, because almost every news about forestry always talks about illegal logging activities. In the UNEP report with Interpol, it is also revealed that between 50 to 90 percent of the world's illegal logging is done by organized crime, and worth between 30 and 100 billion US dollars per year. This amount is about 15 to 30 percent of the total world timber trade. The main target of this timber trade is China, Japan, EU, and USA.

In illegal logging, the entrepreneurs are logging in their former land area and logging outside the cut rations and manipulating the contents of the SKSHH certificate documents or by purchasing the Legal Certificate of Forest Products (SKSHH) to legalize the timber derived from the practice of illegal logging.³

Wahana Lingkungan Hidup Indonesia (WALHI) stated that every minute of Indonesia's 7.2 hectares of forest is destroyed by destructive logging. The Ministry of Forestry states that losses due to illegal logging and forest products are worth 30.42 trillion rupiah per year. To protect the forest area from illegal logging activities, it is necessary to enforce the law to prevent environmental damage. Law enforcement is an attempt to make law a code of conduct in every legal act, the point being that it is adhered to as a guide and as a sort of filter for behavior in managing the environment. Where such law

Enforcement Policy against Illegal Logging in Indonesia." *International Journal of Management* 10, No. 6 (2019); Pieter Agustinus Mikael Rondo, "Quo Vadis Penegakan Hukum: Kewenangan Pemerintah Terhadap Lingkungan Hidup dalam Kasus Illegal Logging di Indonesia." *Jurnal Syntax Transformation* 3, No. 4 (2022): 532-537.

³ Winarno Budyatmojo, "Penegakkan Hukum Tindak Pidana Illegal Logging (Antara Harapan dan Kenyataan)." *Yustisia Jurnal Hukum* 2, No. 2 (2013): 91-100.

enforcement should refer to the protection of society or individuals. That is, not merely to enforce the law without considering the interests of development. So, there must be a balance between protecting the environment, society, and the interests of development as a basis for sustainable development.⁴

II. METHODS

Research method is basically a scientific way to get data with a specific purpose and usefulness. Based on it there are four key words to note are the scientific way, data, purpose, and usefulness.⁵ Research method is a scientific way to get data with purpose of certain purpose. Scientific means means that research activities are based on scientific features that are rational, empirical, and systematic.⁶ This type of research is Normative research, with conceptual approach that is legal research looking for principles, doctrines and legal sources in the juridical philosophical sense.⁷ This study also examines generally accepted principles or called philosophical research on norms, rules and rules of law.⁸ Normative Juridical is a legal research conducted by examining library materials or secondary data as a basic material to be investigated by conducting a search on the rules related to the above problems.⁹ This research

⁴ H. Joni, *Hukum Lingkungan Kehutanan*. (Yogyakarta: Pustaka Pelajar, 2015).

⁵ Sugiyono Sugiyono. *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. (Bandung: Alfabeta, 2013).

⁶ Darmadi Hamid. *Metode Penelitian Pendidikan dan Sosial*. (Bandung: Alfabeta, 2013).

⁷ Mukti Fajar and Yulianto Achmad, *Dualisme Penelitian Hukum Normatif & Empiris*. (Yogyakarta: Pustaka Pelajar, 2013).

⁸ Suharsimi Arikunto. *Prosedur Penelitian Suatu Pendekatan Praktek*. (Jakarta: Rineka Cipta, 2002).

⁹ Soerjono Soekanto and Sri Mamudji. *Penelitian Hukum Nornatuf: Suatu Tinjauan Singkat*. (Jakarta: Rajawali Pres, 2001).

uses normative juridical research. This method was chosen because the author conducted a discussion of the legal regulations in law enforcement efforts against illegal logging. The approach taken is a qualification approach by gathering information, formulating related questions, and relating to existing theories and principles. Normative juridical research method is done through literature study that is the study of documents, regulations and books and other literature. Then based on the data obtained qualitative analysis of the theories about Illegal Logging crime.¹⁰

III. LAW ENFORCEMENT AGAINST ILLEGAL LOGGING IN INDONESIA (IMPLEMENTATION OF LAW NUMBER 18 OF 2013 ON PREVENTION & ERADICATION OF FOREST DESTRUCTION)

Illegal logging is a very complex crime, so early prevention efforts are needed in both penal form (penal law) and non penal (outside of criminal law). This is deemed necessary because the impacts of illegal logging are not only bad for the economic sector but in the destruction of ecosystems can have long-term consequences. Therefore, illegal logging is a special crime which is in the category of criminal law whose actions are specific, that is for forest offenses concerning timber forest product management. Root Problems in Illegal Logging, there are at least 4 (four) kinds: *first*, Forest Management System in Indonesia that opens space for illegal logging practices. *Second*, Level of welfare (salary) officials, officers and communities around the

¹⁰ Sugiyono Sugiyono. *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. (Bandung: Alfabeta, 2010).

forest is low. *Third*, Mentality is not good. *Forth*, Weak controls, both instances of control and social control.¹¹

In various legal literatures, the crime of illegal logging is a criminal crime that has the character of extraordinary crime (extra ordinary crime). Illegal logging is classified as a crime that directly violates Law No.32 of 2009 on Environmental Protection and Management.

The elements contained in the crime of illegal logging include: the existence of an activity, cutting timber, transporting wood, wood processing, timber sales, purchasing wood, can damage the forest, there is a law that prohibits and contrary to the rule of law. Illegal logging is a series of activities in the field of forestry in the framework of utilization and management of timber forest products that conflict with the rule of law applicable and or potentially damage the forest.¹²

To address this matter, the government issued Law No. 18 of 2013 on Prevention and Eradication of Forest Destruction. Where in this law suggests that in enforcing the law or giving a law against the practice of forest destruction without discriminating status. This is where the role of law as a social control where the products produced by the legislature as a legal certainty in community life, in the sense of legal products produced actually executed by the ruler and law enforcement.¹³ In this law everyone is prohibited from logging trees

¹¹ Bambang Tri Bawono, and Anis Mashdurohatun. "Penegakan Hukum Pidana di Bidang Illegal Logging Bagi Kelestarian Lingkungan Hidup dan Upaya Penanggulangannya." *Jurnal Hukum* 26, No. 2 (2022): 590-611.

¹² Fransiska Novita Eleanora, "Tindak Pidana Illegal Logging Menurut Undang-Undang Nomor 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup." *ADIL: Jurnal Hukum* 3, No. 2 (2012): 217-238.

¹³ Yahya Ahmad Zein, and Arif Rohman. "Problematisa Penetapan Kawasan Hutan di Wilayah Masyarakat Adat dalam Rangka Pembangunan

in forest areas that are not licensed or even not authorized to use forest from authorized officers, loading, dismantling, issuing, transporting, controlling and / or harvesting in the forest area without permit, transport, possess, or possess wood forest products that are not accompanied by validity certificates of forest products, carry commonly used tools for cutting, carrying heavy equipment and / or other apparatus which are customary or reasonably suspected is used to transport forest products within a forest area without the authorization of an authorized official, utilizing timber forest products suspected to be derived from illegal logging. Efforts to eradicate forest destruction through the law are implemented by promoting justice and legal certainty, sustainability, state responsibility, community participation, accountability, priorities, and integration and coordination. This P3H Act is valid since its enactment on 6 August 2013.

The P3H Act consisting of 12 Chapters and 114 of this Article is emphasized on the eradication of organized forest destruction, i.e., activities carried out by a structured group consisting of two or more persons and acting jointly on a certain time with the aim of destroying forests, but not including those who practice traditional agriculture. Exceptions to traditional shifting activities are given to communities who have lived for generations within the forest area and have engaged in swidden activities following the rotation tradition established by their group.

The provisions of criminal sanctions and sanctions against illegal logging activities according to Law No.18 of 2013 are as contained in

Berkelanjutan di Kota Tarakan." *Pandecta Research Law Journal* 9, No. 1 (2014): 137-141.

Article 84 states that, "whoever carries the tools commonly used to cut, cut or split trees in a forest area will be punished 2- 15 years in prison and a fine of Rp 1 billion to Rp 7.5 billion ". If those who bring the people around the forest are sentenced to 3 months-10 years in prison and a fine of Rp 0.5 billion-Rp 5 billion.

As an example of a case that occurred in Blora Regency in 2014 lali, where the defendant an. Sumarno bin Samidin was charged with the intention of transporting, possessing, or possessing teak wood products that were not equipped with a valid certificate of forest products. The defendant was arrested by Perhutani officers who were on patrol such as Agus Dwi Susanto bin Lasidi and Suyatmin bin Satimin and when arrested the defendant was still carrying a tool in the form of a dikul used to cut down the teak tree. Therefore, on the indictment referred to Sumarno bin Samidin, MA impose five months imprisonment with a fine of Rp200,000, - (two hundred thousand rupiah) on the condition that the fine is not paid, then it is replaced with imprisonment for 1 month.

IV. LAW ENFORCEMENT FACTORS ILLEGAL LOGGING IN INDONESIA

The low law enforcement on illegal logging crimes, especially in Indonesia due to several factors, namely:

1. Laws and Regulations

Currently the law used is Law No. 18 of 2013 on Prevention and Eradication of Forest Destruction replacing Law No. 41 of 1999 on Forestry which is considered still has many shortcomings or weaknesses. However, the current law also still has weaknesses

which in Law No.18 of 2013 is more about illegal logging and illegal logging. Out of a total of 58 types of criminal acts regulated therein, only 9 concern the criminal act of mining and / or plantations damaging forests. Out of a total of 12 articles regulating criminal provisions, 2 articles only add punishment mechanisms, 1 article on corporate crime, and 7 articles governing the crimes of direct deeds. In the article on corporate crime is not as expected because the sanctions are represented to the board and the absence of sanctioned compensation for the recovery of ecosystems that already damaged. It appears that Law No.18 of 2013 is not for the master mind, but only direct actors who are generally the lowest chains in organized crime or single actors who are usually poor local communities.

2. Law Enforcement Officials

In the context of law enforcement by government agencies, at least there are some institutions and state agencies that determine the efforts to eradicate illegal logging, namely the Ministry of Forestry, Ministry of Industry and Trade, Ministry of Transportation, Directorate General of Customs and Excise, Ministry of Finance, Army, Navy, POLRI, Prosecutors, courts, and local governments both provincial and district. To combat illegal logging, the Ministry of Forestry decides to formally cooperate with TNI and POLRI to operate in vulnerable areas (e.g., borders with other countries). However, such cooperation appears to be less effective because of the limited personnel and area.

Meanwhile, other complex issues concerning illegal logging faced by the forestry sector, which in addition involve many actors also often come into contact with power. This is a disease and culture that has penetrated deeper, namely corruption, collusion, and nepotism. Corruption within the police and

military has increased illegal logging destroying much of the country's forests. Through his business network, you military conduct illegal logging and operate a wood refinery to pay for the daily expenses of the soldiers.¹⁴ So, it is with the law and the judiciary. As a criminal law applicant, it often uses his profession and position to use "*opportunities in a narrow manner*" in order to gain personal gain. The dirty cooperation is done between law enforcement with illegal logging actors or captured timber entrepreneurs. Allegations of bribery from employers to prosecutors and judges to tamper with the law to be punished lightly and even free of all charges often occur.

3. Related to Community Values

At the community level, the most important is the availability of employment and income in the welfare effort. Community action to work illegally or illegally is strongly influenced by the fact that other members of society are working as well. Another factor is public dissatisfaction with the central government's policy of centralized forest management in the past. Dissatisfaction and resentment are the impact of past central government policies that exploit forests whose output is then brought to the center and very little is returned to the region. This sense of discontent and hatred resulted in a sense of disbelief in the current government policy on forestry.¹⁵

¹⁴ Untung Iskandar and Agung Nugraha, *Politik Pengelolaan Sumber Daya Hutan: Issue dan Agenda Mendesak*. (Yogyakarta: Debut Press, 2004).

¹⁵ Sukardi Sukardi, *Illegal Logging dalam Perspektif Politik Hukum Pidana: Kasus Papua*. (Yogyakarta: Universitas Atmajaya Yogyakarta, 2005).

4. Supply and Demand

Based on the capacity of the timber industry, in the regions will lead to increased demand for wood supply that leads to excessive timber harvesting. Supply capability or supply of wood based on the annual cuts annually set by the government is not proportional to the high demand for timber from the timber industry both domestically and from abroad, resulting in an imbalance between supply and demand which then generates demand additional wood. One way to meet the most efficient and cheapest deficit between supply and demand is through illegal logging.

5. Low Quality of Human Resources (Human Resources)

Criminality that occurs in the field of forestry is done by the community, businessmen and also officials. This is due to the low quality of human resources caused by low education and low awareness. They only think of their own interests and do not want to think about the impact that will happen.

The emotional situation of society within the framework of euphoria of reforms utilized by employers is a form of low public awareness. On the other hand, both the civil and security apparatus tried to take advantage of the condition. This leads to the increasing number of criminals involved, either as looters, receptors, or as buyers. In addition, they are also braver because the other apparatus that should follow overseeing order and security is involved in the crime.

The involvement of these officers can not be separated from the low mentality of the elements. The low mentality causes the authorities to commit acts of corruption or even go directly as perpetrators in crime. The involvement of the apparatus is not limited to the security

apparatus, TNI, POLRI, but more widely involving community leaders such as village heads in granting timber permits or establishing sawmills, forestry department officials in the processing of operating licenses and both production documents and timber transport documents, and even board members. Members of DPRD who should prioritize the interests of the people who are represented instead indicated to be involved in the management of sawmills.

Legal culture in terms of adherence to existing laws and regulations, it is difficult to grow and develop as long as the law itself is unsatisfactory, as long as its law enforcement officers are weak and can be bought, as long as the court is not a place to seek truth and justice. For the people of Indonesia, weak law enforcement by the authorities will determine the perception of whether there is law. If law enforcement by the apparatus is weak, the public will perceive the law as non-existent and as if they are in the jungle.

Conversely, if law enforcement by the apparatus is strong and done consistently, then people perceive the law exists and will submit. In such a context the Indonesian people are still in a society that is "afraid" at the law enforcers and has not yet been described as a "law-abiding" society. In a society that is afraid of the law, society will not be subject to the law if law enforcement is weak, inconsistent, and unreliable. Therefore, strict and authoritative law enforcement in the legal life of Indonesian society is needed[16].¹⁶

¹⁶ Andrew Shandy Utama, "Kepercayaan Masyarakat terhadap Penegakan Hukum di Indonesia." *Jurnal Ensiklopedia Social Review* 1, No. 3 (2019): 306-313.

V. COUNTERMEASURES TO OVERCOME ILLEGAL LOGGING IN INDONESIA

Illegal logging is a fact that is triggered by other factors in the form of several things, such as the enormous need for raw materials for the wood and paper industry. Where the paper industry requires at least 27.71 million cubic meters of timber per year, whereas the industrial plantation for paper is only capable of supplying 29.9 percent of its total needs. This condition certainly triggered the greedy desire of *cukong-cukong* to make illegal logging as one of the ways to extract the potential economic benefits. Even this is exacerbated by the weakness of law enforcement in the settlement of cases of illegal logging due to the proliferation of corruption practices.

Many countries take unilateral action against illegal logging and timber trade which essentially has three manifestation patterns: first, formulating legal norms with binding sanctions to provide strong legal protection. Second, adopt a government procurement policy on the environment to ensure the legitimacy and sustainability of the source. Third, develop a timber legality verification system to ensure the accuracy of timber production and tracking information and maintain the sustainability of sales and export monitoring. As a result, illegal logging is still rife in Indonesia. As for some solutions to overcome illegal logging are as follows:

1. Reforestation or replanting of deforested forests.
2. Implement a selective logging system in cutting down trees.
3. Environmental manipulation and control of pests and diseases can also be done to restore forests in Indonesia.
4. Intensive Forest cultivation is the best option because it can be predicted so that, the need for timber can be calculated without destroying the natural habitat that is still good.

The handling of illegal logging should still be pursued until illegal logging activities stop completely before the expiration of forest resources where there is a forest area but there are no trees inside. Therefore, the government has also tried to prevent illegal logging and timber smuggling by issuing several policies¹⁷, such as:

1. Integrated Forest Protection Team

The practice of timber theft for security personnel is not new, has become one of the fundamental issues related to forest protection. Therefore, based on PP No.28 of 1985 on Forest Protection, an Integrated Forest Protection Team (TPHT) was established. Where TPHT is in the implementation of field operations involving several parties related to forest resource management agencies and law enforcement agencies. The TPHT was then refined by the government within the framework of Wanalaga Operations involving multi stakeholders related to the forest resource management system and law enforcement elements.

2. Operation Wanalaga

Operation Wanalaga was first initiated on December 27, 2001, based on a letter of cooperation agreement between the Director General of Forest Protection and Nature Conservation (PHKA) Ministry of Forestry with Deputy Chief of Police of Operations. Wanalaga operations aim to enforce the law against forestry criminals, take firm action against violators of applicable regulations relating to forest and forest products management, etc.

¹⁷ Supriadi Supriadi, *Hukum Kehutanan dan Hukum Perkebunan di Indonesia*. (Jakarta: Sinar Grafika, 2011).

The handling of illegal logging can be done through a combination of preventive, repressive and monitoring efforts (detection).

1. Detection of illegal logging activities

Detection activities may be currently underway, but although it is known, or suspected illegal logging activities are not real follow-up. However, action to detect illegal logging should continue to be done, but there must be a commitment to follow up with a clear and real law enforcement process in the field. Detection activities can be done through the following activities:

- a) Detect the macro, for example through the air portrait so that there are known illegal logging indicator such as logging line, base camp, etc.
- b) Ground checking and patrol.
- c) Inspection in places suspected of illegal logging.
- d) Detection along the haul roads.
- e) Inspection in IPKH log pond.
- f) Inspection on industrial premises.
- g) Perform timber tracking.
- h) Receiving and following up on information coming from the community.
- i) Inspection of documents (permits, transport and reports) needs to be more intensive, especially reporting documents by scrutinizing reports containing oddities.

2. Preventive measures to prevent illegal logging

Preventive action is a strategic, forward-looking action that is a medium- and long-term plan but should be seen as an urgent action to be implemented. Preventive activities can be done through:

- a) Institutional development (capacity building) concerning software, hardware and human resources including reward and punishment.
- b) Community empowerment, such as providing access to the use of forest resources so that communities can participate in forest preservation and ownership, including approaches to local governments to be more responsible for environmental sustainability.

The socio-economic development of the community is like creating jobs with wage /income levels that exceed the wages of harvesting illegal timber.

- a) For example, the wages of working in oil palm plantations are cultivated higher or equal to logging illegal timber, stock granting and so on.
- b) Increasing the support of facilities and infrastructure to support HR professionalism.
- c) Providing incentives for communities that can provide information that enables perpetrators to be captured.
- d) Development of community empowerment program.
- e) Make stricter selection in official appointments (fit and proper test).
- f) Evaluation and review of legislation.
- g) Improvement of the mechanism of timber auction and / or findings.
- h) Restructuring of the wood processing industry, including termination of HPHH and small-scale logging licenses.

Repressive action is a law enforcement action from investigation, investigation to court. For that there must be a common perception

between each element of law enforcement i.e., investigators (Police and PPNS), prosecutors and judges. Because of the magnitude of the problem of illegal logging, repressive action must be able to cause deterrent effect so that the legal sanction should be appropriate.

Criminal law enforcement in the field of Illegal Logging has not been resolved properly, it is in because some of the problems that arise are:

1. Existing regulations and policies can not solve the problem of environmental crimes.
2. Law No.23 of 1997 jo Law No.32 of 2009 can not be an effective instrument to protect the environment
3. While technological developments are followed by an increasingly sophisticated quality and quantity of crime and often have international, regional and national impacts.¹⁸

VI. CONCLUSION

Criminal law enforcement in the field of illegal logging for the preservation of the environment has not been resolved properly. In fact, the government seems to be actively combating illegal logging, while the courts are keen to free him. Factors that underlie the existing laws and policies can not solve the problem of environmental crimes, and technological developments are followed by the development of quality and quantity, increasingly sophisticated crime and often of international, regional, and national impact.

¹⁸ Bambang Tri Bawono, and Anis Mashdurohatun. "Penegakan Hukum Pidana di Bidang Illegal Logging Bagi Kelestarian Lingkungan Hidup Dan Upaya Penanggulangannya." *Jurnal Hukum* 26, No. 2 (2022): 590-611.

The low law enforcement on illegal logging crimes especially in Indonesia is caused by several factors, such as weak legislation, law enforcement officers, factors related to the culture of the people, which are related to supply and demand and the low quality of human resources. In addition to the low awareness of officers against the environment are often also the occurrence of crime due to low knowledge of the authorities in cracking down on crimes that occurred.

The handling of illegal logging can be done through a combination of preventive, repressive and monitoring efforts (detection). Preventive action is a strategic, forward-looking action that is a medium- and long-term plan but should be seen as an urgent action to be implemented. Repressive action is a law enforcement action from investigation, investigation to court. Repressive action must be able to create a deterrent effect so that legal sanction should be appropriate.

ACKNOWLEDGMENTS

None.

COMPETING INTERESTS

The Authors declared that they have no competing interests.

REFERENCES

Arikunto, Suharsimi. *Prosedur Penelitian Suatu Pendekatan Praktek*. (Jakarta: Rineka Cipta, 2002).

- Bawono, Bambang Tri, and Anis Mashdurohatun. "Penegakan Hukum Pidana di Bidang Illegal Logging Bagi Kelestarian Lingkungan Hidup dan Upaya Penanggulangannya." *Jurnal Hukum* 26, No. 2 (2022): 590-611.
- Budyatmojo, Winarno. "Penegakkan Hukum Tindak Pidana Illegal Logging (Antara Harapan dan Kenyataan)." *Yustisia Jurnal Hukum* 2, No. 2 (2013): 91-100.
- Eilenberg, Michael. "Shades of green and REDD: Local and global contestations over the value of forest versus plantation development on the Indonesian forest frontier." *Asia Pacific Viewpoint* 56, No. 1 (2015): 48-61.
- Eleanora, Fransiska Novita, "Tindak Pidana Illegal Logging Menurut Undang-Undang Nomor 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup." *ADIL: Jurnal Hukum* 3, No. 2 (2012): 217-238.
- Fajar, Mukti, and Yulianto Achmad, *Dualisme Penelitian Hukum Normatif & Empiris*. (Yogyakarta: Pustaka Pelajar, 2013).
- Hamdan, M. *Tindak Pidana Pencemaran Lingkungan Hidup*. (Bandung: Mandar Maju, 2000).
- Hamid, Darmadi. *Metode Penelitian Pendidikan dan Sosial*. (Bandung: Alfabeta, 2013).
- Harrison, Mark E., Susan E. Page, and Suwido H. Limin. "The global impact of Indonesian forest fires." *Biologist* 56, No. 3 (2009): 156-163.
- Iskandar, Untung, and Agung Nugraha, *Politik Pengelolaan Sumber Daya Hutan: Issue dan Agenda Mendesak*. (Yogyakarta: Debut Press, 2004).
- Joni, H. *Hukum Lingkungan Kehutanan*. (Yogyakarta: Pustaka Pelajar, 2015).
- Nugroho, Wahyu, and Mas Subagyo Eko Prasetyo. "Forest Management and Environmental Law Enforcement Policy against Illegal Logging in Indonesia." *International Journal of Management* 10, No. 6 (2019).

- Nurfatriani, Fitri, et al. "Redesigning Indonesian Forest fiscal policy to support forest conservation." *Forest Policy and Economics* 61, No. 1 (2015): 39-50.
- Putra, Irfan Kemal, Bambang Hero Saharjo, and Basuki Wasis. "Analysis of Indonesian Forest and Land Fire Controlling Operational Policies. Case Study: Siak Regency, Riau Province." *IOP Conference Series: Earth and Environmental Science* 363, No. 1 (2019).
- Riggs, Rebecca A., et al. "Governance challenges in an Eastern Indonesian Forest landscape." *Sustainability* 10, No. 1 (2018): 169-184.
- Rondo, Pieter Agustinus Mikael. "Quo Vadis Penegakan Hukum: Kewenangan Pemerintah Terhadap Lingkungan Hidup dalam Kasus Illegal Logging di Indonesia." *Jurnal Syntax Transformation* 3, No. 4 (2022): 532-537.
- Soekanto, Soerjono, and Sri Mamudji. *Penelitian Hukum Normatif: Suatu Tinjauan Singkat*. (Jakarta: Rajawali Pres, 2001).
- Sugiyono, Sugiyono. *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. (Bandung: Alfabeta, 2013).
- Sukardi, Sukardi, *Illegal Logging dalam Perspektif Politik Hukum Pidana: Kasus Papua*. (Yogyakarta: Universitas Atmajaya Yogyakarta, 2005).
- Supriadi, Supriadi, *Hukum Kehutanan dan Hukum Perkebunan di Indonesia*. (Jakarta: Sinar Grafika, 2011).
- Utama, Andrew Shandy. "Kepercayaan Masyarakat terhadap Penegakan Hukum di Indonesia." *Jurnal Ensiklopedia Social Review* 1, No. 3 (2019): 306-313.
- Yaoyao Ji, Ram Ranjan, and Chi Truong. "Determinants of illegal logging in Indonesia: An empirical analysis for the period 1996–2010." *Journal of Sustainable Forestry* 37, No. 2 (2018): 197-220.
- Zein, Yahya Ahmad, and Arif Rohman. "Problematisasi Penetapan Kawasan Hutan di Wilayah Masyarakat Adat dalam Rangka Pembangunan Berkelanjutan di Kota Tarakan." *Pandecta Research Law Journal* 9, No. 1 (2014): 137-141.