

INFORMALITY AND ILLEGAL LOGGING: CASE STUDY OF ILLEGAL LAND CLEARING IN RIAU INDONESIA

*(Informalitas dan Pembalakan Liar: Studi Kasus Pembukaan Lahan Secara Ilegal
di Riau Indonesia)*

Edo A. Kasla.¹, Arron F. G. Benadeta², Naufal F. D. Laksana³, Anisa N. F. Sholihah⁴, & Septyanto G.
Prakoso^{5,6}

^{1,2,3,4,5} International Relations, Universitas Sebelas Maret,
Jl. Ir. Sutami No.36, Jebres, Kec. Jebres, Kota Surakarta, Jawa Tengah 57126
e-mail: edoartimakasla@student.uns.ac.id, arronfarrel@student.uns.ac.id, fauzandeva@student.uns.ac.id,
anisanurulanfs@student.uns.ac.id

⁶Institute of Political Science, National Sun Yat-sen University,
804201 No. 70 Lianhai Road, Drum Mountain, Kaohsiung City, Taiwan
e-mail: septyantogalan@staff.uns.ac.id;

Diterima 24 Desember 2022, direvisi 29 Januari 2023, disetujui 2 Juli 2024

ABSTRAK

Deforestasi meningkat drastis akibat aktivitas illegal logging para elite ekonomi dan politisi korup yang berakibat pada kelestarian hutan. Tulisan ini menyajikan analisis tentang pelanggaran oleh PT MPL yang sejak 2016 telah divonis atas isu perusakan lingkungan. Penelitian ini dilakukan dengan menggunakan metode kualitatif eksplanatori dengan pendekatan teori informalitas. Penulisan ini dirasa perlu mengingat penebangan liar dan perusakan lingkungan yang dilakukan oleh perusahaan ini dapat terjadi karena lemahnya fungsi pengawasan dari instansi terkait serta informalitas yang terjadi antara PT MPL dengan Dinas Kehutanan Pelalawan Riau. Oleh karena itu, dirasa penting untuk turut menganalisis aspek sosial dan tidak hanya terbatas pada aspek lingkungan. Hasil dari penelitian ini menunjukkan perlunya intensifikasi dan akuntabilitas dalam pengawasan sistem operasional penebangan hutan di Indonesia oleh perusahaan swasta. Temuan tambahan juga menunjukkan bahwa hubungan informal antara PT MPL dan lembaga pemerintah dapat digunakan untuk melewati birokrasi terkait dan melakukan hal-hal yang tidak mungkin dilakukan dengan izin biasa.

Keywords: Kerusakan lingkungan, penebangan liar, informalitas, Riau.

ABSTRACT

Deforestation is increasing dramatically due to the illegal logging activities of the economic elites and corrupt politicians that result in forest sustainability. This article analyzes the violation done by PT MPL, which since 2016 has been given a verdict over the issue of environmental destruction. This study used a qualitative explanatory method with the Informality theory approach. This writing is deemed necessary considering that illegal logging and environmental destruction carried out by this company can occur due to the weak monitoring function of the relevant agencies and the informality that occurs between PT MPL and the Pelalawan Riau Forestry Service. Therefore, it is important to analyze social aspects and not just limit them to environmental ones. This research shows the need for intensification and accountability in monitoring the operational system of forest logging in Indonesia by private companies. Additional findings also show that informal connections between PT MPL and the governmental agencies could be used to bypass the relevant bureaucracies and do things that would not be possible with usual permits.

Kata kunci: Environmental damage, illegal logging, informality, Riau.

I. INTRODUCTION

The complexity of illegal logging results in multiple definitions, the activity itself refers to all forms of illegal timber-utilizing processes. According to FAO, illegal logging includes the actions of harvesting and transporting, selling or processing, exporting, and importing timber illegally (Laumonier & Nasi, 2018). The result of illegal logging is high deforestation rates and threats to biodiversity ecosystems. Also, because it is carried out illegally thus can affect the tax revenue and the country's GDP (Bösch, 2021). Global land areas of more than 30% are covered with forest, and this number has decreased every year. Over 400 million hectares of forest since 1990 are estimated to have changed to other land uses (FAO and UNEP, 2020). As a tropical country with more than a hundred million hectares of forest area, Indonesia has long been known as a producer of high-quality timber. Since the 1990s illegal logging has been the focus of the government, but until now is still common due to the high market demand for timber from Indonesia. As an archipelago state, Indonesia's forests are spread within every island over it (Laumonier & Nasi, 2018). Deforestation occurs in almost every region in Indonesia, and some of them are illegal logging activities (Nugroho & Prasetyo, 2019). This case also happens in Riau one of the provinces in Indonesia that has a lot of potential related to the forestry sector. Even in practice, some programs focused on optimizing the output of the forest including the strategy of releasing non-productive conversion areas for other programs (Nugroho *et al.*, 2021).

This paper focuses on the Riau province which according to data in 2019-2020 has the largest total deforestation in Indonesia or mostly has the highest percentage for each period. During the period of the last five years, from 462,428.5 hectares of total deforestation in Indonesia around 145,011.1 hectares, or 30 percent of them occurred in Riau (Statistics Indonesia, 2022a). Cases like this often occur in areas such as the Tesso

Nillo National Park, Kampar Peninsula, Bukit Betabuh Protected Forest, Rimbang Baling Protected Forest, and forest area in Pelalawan district (Bintang, 2021). The capital of Riau Province, Pekanbaru is also one of the areas in Riau Province that is experiencing rapid deforestation. The forests in Pekanbaru City are only located in the suburban areas and the Taman Hutan Raya area. Local consumption due to the proliferation of wood-based housing properties has become one of the causes of deforestation in Pekanbaru (Sibarani *et al.*, 2019). Besides the high deforestation, there were also cases of illegal logging involving local elites which makes the case settlement process take longer and more complicated. Principally, these illegal logging cases and the involvement of local elites are worsening because of the increasing demand for the materials used by pulp and paper companies in Indonesia, which directly deteriorates the environmental conditions in Riau because of the amount of the trees being (Ardiyanto & Rahmadan, 2020).

PT MPL was one of 14 companies suspected of illegal logging by the Riau Police, led by Brigadier General SH in 2007. The unlawful acts that have been carried out by PT MPL include the first to cut forest outside the location of the Business Permit for Utilization of Plantation Forest Timber Products (*Izin Usaha Pengelolaan Hasil Hutan Kayu Hutan Tanaman* or IUPHHK-HT in short). The land that was granted permission was 5,590 hectares based on the Regent's Decree No. 522.21/IUPHHKHT/XII/2002/04 dated 17 December 2002, but in reality, they occupied an area of 7,466 hectares based on 2004, 2005, and 2006 Annual Work Plans (RKT). According to the data, the difference with the IUPHHK HT is 1,873 hectares and causes a total loss of due to environmental destruction outside the IUPHHK HT of Rp 4 trillion (Nurhidayah *et al.*, 2017). Of the 5,590 hectares of land, 400 hectares are logged and the remaining 5,190 are primary forests or natural forests. The total loss due

to environmental destruction in the IUPHHK-HT area of 5,590 hectares is at least Rp 12 trillion (Syadat *et al.*, 2019). The total loss due to environmental destruction carried out by PT MPL by cutting down natural forests inside and outside the IUPHHK-HT and RKT amounting to at least Rp. 16 trillion throughout 2004, 2005, and 2006 in Pelalawan. This is quite ironic that a forest area that should be monitored intensively and managed using suitable mechanisms such as regional special planning for the area is experiencing huge losses instead (Syadat *et al.*, 2019).

On December 22, 2008, the new Riau Police Chief terminated the case with an Investigation Termination Order (SP3). However, before the enactment of SP3, Brigadier GS had reported this case to the Corruption Eradication Commission (KPK). In 2007, the ex-Regent of Pelalawan TAJ was named a suspect by the KPK for issuing IUPHHK-HT over the natural forest to 14 corporations, including PT MPL (Indonesia Corruption Watch, 2008). KPK also named Siak Regent AAS as a suspect in issuing IUPHHK-HT over the natural forest for 5 HTI corporations. The total loss to the state as a result of the actions of regional heads and heads of offices that issued IUPHHK-HT/RTK for these companies based on court decisions reached more than IDR 3 trillion (Indonesia Corruption Watch, 2008).

On September 26, 2013, the Ministry of Environment filed a lawsuit against PT MPL regarding environmental damage. The Panel of Judges of the Pekanbaru City District Court, Riau, rejected the Ministry of Environment (KLH) lawsuit against PT MPL which was deemed to have harmed the state of Rp. 16 trillion for the logging case in the Pekanbaru District Court decision number 157/Pdt.G/ 2013/Pn.Pbr. KLH filed an appeal to the high court in Riau, where the result was the same, namely a rejection of the KLH lawsuit in the PT Pekanbaru decision number 79/PDT/2014/PTR which confirmed the

previous decision (Melia, 2016). Then in the end the Ministry of Environment and Forestry (KLHK) won a civil lawsuit against PT MPL (MPL) at the Cassation level in the Supreme Court (MA) of the Republic of Indonesia. The HTI company was defeated by a decision that it was obliged to pay a fine of Rp16.2 trillion (Kurniawansyah, 2019). This case serves as one of the examples of the complicated nature of environmental problems created by a certain company's operation and the lack of awareness of similar crimes by the stakeholders involved. Despite having laws and regulations to stop these kinds of crimes from happening, they still repeatedly occur all over the country.

Therefore, this study is done to find the reason why these crimes are continuing to happen with a focus on the case of PT MPL in Riau Province. The things that differentiate this article from other similar forestry and logging-related issue studies is that this study also aims to stress the lesson learned from this case while at the same time focusing on the importance of observing and analyzing the element of informal connection between companies and government to raise awareness so that there will be no more similar cases happening in Indonesia.

II. RESEARCH METHODS

This paper uses a qualitative approach with library and literature research to obtain the data. More on this paper, the Informality theory approach and a qualitative explanatory methodology were used to write this paper. This approach was chosen because it could help the author discover the factors that allowed PT MPL to engage in illegal logging through a literature review of government laws affecting the informal sector. Qualitative research serves more on observing phenomena and researching more into the substance of the meaning of these phenomena (Harahap, 2020). With this study methodology, we use evidence and current theory as justification. This author

utilizes qualitative research to examine the phenomenon of PT MPL's unlawful logging. In this research, the existence of informal relations that result in attitudes and behaviors that lead to dependence on relationships between individuals or between individuals and organizations or institutions is determined using the informality approach (Berenschot & Klinken, 2018). Informality is a phrase to explain a general term for various unregulated human activities that go under the radar, are above or outside the law, or evade the law through certain loopholes to benefit the perpetrators (Polese, 2023). According to Sindzingre, (kin) informality can be measured using an institutional perspective. For instance, if there are patterns of certain inclination between individuals in a certain institution for economic and monetary purposes, and these activities are being ignored by their peers since it is considered normal in social norms, it means that there is a certain degree of informality (Sindzingre, 2006). In addition, informality also refers to unwritten rules and hidden practices in getting things done. In the case of illegal logging, especially that carried out by PT MPL in the province of Riau, the key people of the company have close relationships with government figures and also relevant agencies dealing with forestry and environmental issues (Fitria, 2019). Given the closeness between several parties, the informality theory is a suitable theory to analyze the influence of the closeness of PT MPL with both the Riau provincial government and the forestry and environmental services concerning why this illegal logging case could occur and how the relationship between the parties related to the reasons for the occurrence of the case.

Based on the theories and the approaches to analyze the case, this study projects that informal connection between private companies and government agencies could result in abuse of power that leads to a crime that damages the environment. This projection also serves as a hypothesis in this research.

III. RESULTS AND DISCUSSION

A. Involved Actors

The massive illegal logging performed by PT MPL certainly had influential actors that worked behind the scenes to make the crime successfully executed which is very complicated and structured. The actors that we focus on are different from the previous studies, in which they revolve around the local citizens that live in poverty because poverty causes people to have low education, and limited skills, paired with non-existent venture capital and very few job opportunities make them choose to become illegal (Basuki *et al.*, 2013). The actors that we focus on are the officials and the company itself. This decision maker, which is the ex-Governor of Riau, HMRZ, was one of the most important figures in giving PT MPL the legal foundation to be able to cut the trees irresponsibly. At the beginning of his administration, he passed seven *Rencana Kerja Tahunan-Bagan Kerja IUPHHK-HT* or Annual Work Plan and Work Charts regarding IUPHHK-HT in Riau. These permits allow companies including PT MPL to exploit the forests (*Jaringan Kerja Penyelamat Hutan Riau*, 2018). As mentioned previously, the actors are structured because PT MPL got its permit from the ex-Regent of Pelalawan, TAJ, through *Keputusan Bupati Pelalawan Numb. 522.21/IUPHHKHT/XII/2002/004* which means the company had the authorization to utilize 2.634 hectares of land but they cut the trees more than what was stated which was 2.949.26 hectares area. With TAJ's permit, PT MPL could amplify the deforestation further to exploit its timber (*Jaringan Kerja Penyelamat Hutan Riau*, 2018).

However, without the governor's permission, the regulation wouldn't be able to pass. Furthermore, the ex-Head of the Forestry Office of the Riau Province, AR was also involved in this case since he issued IUPHHK-HT despite knowing that these companies including PT MPL wanted to do

the deforestation. These companies were giving AR money as a form of bribe which accounted for Rp904 million (Ali, 2014). The indirect connection between PT MPL and AG could also be translated as that AG backed this company even though they were not under AG but one of their suppliers until February 2015 which was mentioned in their Press Release back in 2016 when PT MPL was found guilty for doing illegal logging. AG is a very well-known pulp and paper producer under one of the biggest integrated industrial groups in the world, RGE, which was founded by ST (APRIL Group, 2016). As mentioned in AG's statement, PT MPL was one of their suppliers. Therefore, R, the ex-General Manager for Forestry of PT RAPP, which is a business unit of AG in Riau could also be said to have been involved in supporting PT MPL doing the illegal logging. Based on the indictment of TAJ, R was also found guilty because R was the main key to the takeover process of all 7 IUPHHK-HT and he also covered the management fee of the Annual Work Plan of the Forestry Office of Riau Province (Fitria, 2020). These inseparable connections can be translated as shown in Figure 1.0.

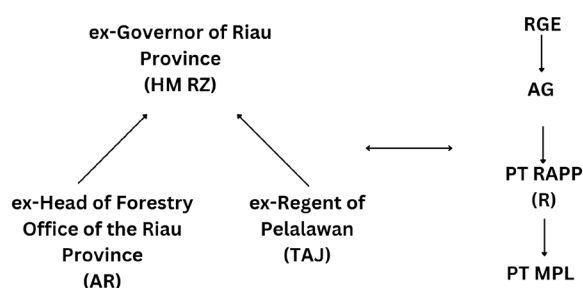


Figure 1. Relationship between actors involved in PT MPL Case

Gambar 1. Hubungan antar aktor terlibat di kasus PT MPL

TAJ and AR surely needed approval from HMRZ as the Governor, so for the action to work PT MPL needed to bribe three of them to be successful. These decision-makers were given money as a form of bribe to make them willing to cooperate and issued permits for

companies, including PT MPL, to cut the trees. However, this bribe, which is the main method to do illegal logging, wouldn't be possible if the informal connection between actors were non-existent (Noor *et al.*, 2020). This connection between PT MPL, powerful companies such as RGE, AG, and PT RAPP, and these decision-makers are inseparable in allowing the company to perform illegal logging successfully. Therefore, it is safe to say that the informal connections between these actors allow money and the interests of parties to come into place. Collusive corruption is a kind of bribe in which one's giving money to make illegal activity become legal which was what PT MPL did (Piabuo *et al.*, 2021). The decision-makers need more money while PT MPL has an interest in cutting the trees for their production.

B. Loopholes Within the Policies

In the daily lives of people in developing countries, including Indonesia, it is common to find informal relationships that seem to have become the key to the daily interactions between society and state institutions. In the theory of informality written by Ward Berenschot & Gerry van Klinken, the existence of this informal relationship then raises attitudes and behaviors that lead to dependence on the connections that are owned between individuals and individuals or individuals with an organization or institution (Berenschot & Klinken, 2018). In the context of building informal relations with state institutions, maintaining good relations with important figures in these state institutions is very important. In short, invoking family ties, portraying oneself as an "underling" (anak buah), or being obsessively socialized with bureaucrats are all effective strategies used by underprivileged communities to protect their interests (Hearman, 2018). Those with stronger connections to key figures in a constitution have, in practice, more complete 'rights of citizenship' and enjoy a stronger capacity to realize those rights of citizens

(Berenschot & Klinken, 2018). The capacity of citizens to obtain their rights as citizens also depends on the quality and closeness of the personal relationship they have with the institutions concerned, the closer and deeper the relationship one has, the more privileges the individual concerned can obtain.

With the privileges obtained from the closeness they have with important figures in a constitution, related individuals have more 'freedom', especially in terms of their interests. Things like this then usually lead to crimes. When related to the main problem that we raised in this study, the closeness of important figures from PT MPL with people in the government and related agencies was able to give rise to a very massive act of illegal logging and of course, caused a huge financial loss to the country. Apart from relying on the closeness of the existing connections between these parties, this crime can occur because the 'profit sharing' of the crime reaches a fantastic value. This is what makes this case difficult to dismantle and takes a long time to reach the court because the money from the 'profit sharing' has been evenly distributed among the central figures in the institutions authorized to handle this case in the region. This was proven by the issuance of an Investigation Termination Warrant (*Surat Perintah Penghentian Penyidikan* or *SP3* in short) for illegal logging cases conducted by 14 timber companies in Riau (Friatna, 2022). The release of *SP3* from the case then raised a lot of suspicion from various parties. There were strong indications of an informal relationship between the companies and law enforcement officials (police and public prosecutors) who wanted to acquit these 14 companies because of insufficient evidence and only based on the testimony of expert witnesses from the government (Ministry of Environment and Ministry of Forestry). This was corroborated by the investigators ignoring and not taking into account the testimony of expert witnesses from academics from the IPB, who stated that there was environmental

damage and licensing errors. Meanwhile, there is *Keputusan Menteri Kehutanan* (Minister of Forestry Decree) No. 541/2002 and *Peraturan Pemerintah* (Government Regulation) No. 34/2002 which abolished the authority of governors and regents to issue IUPHHK-HT). An irregularity was later discovered because there were 34 IUPHHK in Riau with a total area of 378,299.50 hectares which were issued after the permit was valid. This means that there has been a violation of regulations.

Meanwhile, when viewed from the land criteria, the land that is allowed for Industrial Plantation Forest should be empty, with grasslands and shrubs, not on natural forest land with a timber potential of under 5 cubic meters per hectare. However, in reality, from the permits issued, it was found that 34 IUPHHK-HT were granted over the natural forest. This shows that the permit issued by the regent violated the rules and was an act against the law. This could happen because there was no reliable system, such as an independent commission, that could oversee and control all the activities of the government itself.

C. International Regime

One of the problems that arise from the criminal act of illegal logging is deforestation. Deforestation is the clearing of forests that causes forest land to be used for agricultural, urban, and animal husbandry and exploits nature for individual interests (Mutolib *et al.*, 2020). Illegal logging is considered to be one of the biggest causes of deforestation. Deforestation at present has increased dramatically due to illegal logging activities by economic elites and corrupt politicians which have resulted in forests (Ji *et al.*, 2017). In Indonesia itself, the regulation of illegal logging is stated in UU No 18 Tahun 2013 concerning the Prevention and Eradication of Forest Destruction which states that forest destruction has become a crime with extraordinary, organized, and cross-country

impacts carried out with a sophisticated modus operandi (Amil & Rachman, 2019). This threatens the survival of the community, therefore illegal logging is also included in the transnational crime. The practice of illegal logging is of course not only causing losses to the state but will also harm present and future generations. In this case, PT MPL, together with people in the government and related agencies, was able to cause massive illegal logging and of course, caused enormous financial losses to the state. The actions taken caused environmental damage and there were licensing errors in the process. This shows that the permit issued by the government violates the rules and constitutes an illegal act. As is well known that illegal logging is a transnational crime, therefore the actions taken by PT MPL constitute a transnational crime (Nguyen & Cao, 2020). This statement is not only supported by regulations in UU No 18 Tahun 2013 concerning the Prevention and Eradication of Forest Destruction but also the fact that illegal logging is a transnational crime is also supported by the contents of several international agreements.

Illegal logging is strongly considered a transnational crime, as shown in the Kyoto Protocol which is an international agreement regarding the commitment of various countries to play a role in dealing with climate change and reducing greenhouse gas emissions (Mugadza, 2022). Illegal logging practices carried out by PT MPL certainly cause changes in land use and forestry or deforestation which causes a change in the cover of an area from forested to non-forested. The role of forests is to store large carbon reserves and be able to absorb excess carbon dioxide in the air and convert it into oxygen through the process of photosynthesis which can store carbon. So deforestation has a very big effect on climate change and causes increased greenhouse gas emissions (Hall, 2012). Therefore, the practice of illegal logging by PT MPL indirectly violates the agreement in the Kyoto Protocol. In this case, the Indonesian government failed

to implement policies that could support the contents of the Kyoto Protocol to reduce greenhouse gas emissions by allowing illegal logging practices by PT MPL to exist. As a response to this matter, especially regarding PT MPL's operation, there is a court held up until the level of the Supreme Court. After consideration by the judges, the result of the case was marked by the Supreme Court's decision, 460 K/Pdt/2016, dated August 18, 2016. The decision also annulled the decision of the Court at the first instance, the Pekanbaru District Court, and at the appeal level, the Pekanbaru High Court. In the decision, the judge assessed that PT MPL had violated the provisions of the applicable laws and regulations. PT MPL's act of logging outside the IUPHHK-HT location was declared a violation of the law. Furthermore, the Judge also sentenced PT MPL to compensate for environmental losses of Rp16.2 trillion to the country through the Ministry of Environment and Forestry of the Republic of Indonesia (Kurniawansyah, 2019).

Illegal logging crime also violates the contents of the Paris Agreement. The Paris Agreement aims to stop global warming by no more than 2 degrees Celsius. Each country needs to include a commitment regarding how much carbon dioxide emissions will be reduced (Sasaki *et al.*, 2021). Almost similar to the Kyoto Protocol, the Paris Agreement also has the main objective of reducing the level of greenhouse gas emissions and global climate change (Jayaraman, 2015). Therefore, the Paris Agreement states that all countries are required to have and set their emission reduction targets, this target will be reviewed every five years, to increase the ambition to eradicate climate change. In the context of Indonesia, the Government of Indonesia signed the Paris Agreement on 22 April 2016 and ratified it into UU No 16 Tahun 2016 (Sari & Multazam, 2021). In addition, Indonesia has sent an NDC (The Nationally Determined Contributions) with a commitment to reduce greenhouse gas emissions by up to 29%

without conditions and up to 41 % subject to business as usual (BAU) emissions per 2030 (Herawan & Redi, 2022). The success of NDC implementation cannot be borne solely by the government but also involves non-state actors, including corporations (Tacconi & Muttaqin, 2019). The involvement of corporations as actors who are also responsible for the realization of this commitment is considered reasonable, considering that companies make a significant contribution to climate change (Dahlmann *et al.*, 2019). In this case, the act of illegal logging carried out by PT MPL certainly has an impact on increasing greenhouse gas emissions and climate change, so this undermines the contents of the Paris Agreement. Even the government and corporations that are supposed to work together in harmonizing the implementation of the NDC are violating and committing illegal acts by launching illegal logging practices.

IV. CONCLUSION AND RECOMMENDATIONS

A. Conclusion

The illegal logging performed by PT MPL was a complicated and structured process. Informality established by these companies and the decision-makers allows them to perform illegal logging by giving money to bribe. With the issuance of warrants to stop investigations into illegal logging cases committed by 14 timber companies in Riau and also irregularities found in 34 IUPHHKs in Riau with a total area of 378,299.50 hectares issued following regulations not allowing regents and governors to issue permits to use the land in force, which means that there has been a violation of regulations and there is a strong indication of an informal relationship that has occurred between the company and law enforcement officials. The Indonesian government failed to implement policies allowing illegal logging by PT MPL. However, even with the implementation of binding regulations, criminals are always

seeking legal loopholes to get more personal gain. The challenge is to design related policies to end the perpetual illegal logging activity involving elite governments with transparent management practices and raise awareness of the whole community. Central elite intervention could be the way to help eradicate crime.

We can conclude that the relations between companies and local authorities should be in good condition to ensure a good forestry industry practice. However, a certain degree of informality can cause problems and even crime cases. In this case, PT MPL used bribery towards the local governmental agents at Pelalawan in the sense of cutting the trees irresponsibly in the forest at Pelalawan by manipulating the local laws.

B. Recommendations

Recovery of forests needs intervention to make the mechanism strategies practically exist thus decreasing crime significantly, but the decentralization in Indonesia can negatively lead to privileged use to manipulate the implementation of state policies by bureaucratic and local elites (Berenschot & Klinken, 2018). With centralized control, the government gets wider access to monitor the logging activity and ensure the enforced policy implementation. However, this also requires extra time considering Indonesia's forest area is quite extensive, and the average annual deforestation is around four hundred thousand hectares (Statistics Indonesia, 2022b). The government should monitor the logging process, even just by remote sensing. Additionally, it is necessary to mark the boundary lines on the logging area, the measurement of these boundaries needs to be done before and after the logging process and documented as a report's attachment to the government. The Indonesian government has a *Sistem Monitoring Hutan Nasional* (SIMONTANA) managed by the Ministry of Environment and Forestry that can be used to ensure the accuracy of the data reported.

Besides the implementation of strict regulations and monitoring processes, consumer awareness to eradicate illegal logging is needed to end illegal timber distribution. In addressing illegal logging everybody can play an important role, in maintaining and building honest and ethical work steps and operations (Thompson & Magrath, 2021). In addition, the market consumers need to ensure that they buy legal timber and the campaign for boycotting illegal timber products. Indonesia has implemented the timber legality verification system (SVLK) to maintain local timber legal credibility, and the verification system has also been internationally recognized by European Unions (EU) (Lubis *et al.*, 2018). Then, support local communities and environmental-based Non-Governmental Organizations (NGOs) as a representation of the society and be able to help monitor illegal activities specifically in their region. The illegal Logging case of PT MPL can not be separated with the help of NGOs who brought this case to court, it shows how NGOs create a better implementation of policies. However, nowadays it has been found that some NGOs lost their neutrality because they received funds from the government, and this led to an unavoidable bond relationship among them (Suyitno *et al.*, 2018). The challenge is to maintain the existence of NGOs that are independent of being ridden by certain elites.

Nevertheless, the fight against illegal logging must be done with collaborations from all elements. The centralized control could also be implemented by establishing an independent commission in which the members can involve people from the government itself, companies operating in the pulp and paper industry, scientists, media, and the citizens to create diverse points of view and layered controls. Altogether, this independent commission can be used to oversee all the companies and their activities with local governments to maintain the

accountability of each agent involved. Despite the recommendations above, this study realizes that there are still limited resources and synchronization with other similar research, mainly as a result of the obscurity of the data and the scarcity of the cases. Hence, the authors of this article hope that this study may become a checkpoint regarding research on informal connections in forestry and environmental studies.

ACKNOWLEDGMENTS

We would like to express our gratitude to the officials of Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia (KLHK RI) and previous researchers whose works are being cited. Without the support, we wouldn't be able to publish our research.

REFERENCES

- Ali, M. (2014, February 22). Korupsi Kehutanan: Mantan Gubernur Riau Dituntut 17 Tahun Penjara. Mongabay. <https://www.mongabay.co.id/2014/02/22/korupsi-kehutanan-mantan-gubernur-riau-dituntut-17-tahun-penjara>.
- Amil, A., & Rachman, T. (2019). Implementasi Undang-Undang No.18 Tahun 2013 Tentang Pencegahan dan Pemberantasan Perusakan Hutan (Studi Kasus Tentang Faktor-Faktor yang Mempengaruhi Masyarakat Melakukan Perambahan Hutan di Desa Lunyuk Ode Kecamatan Lunyuk Kabupaten Sumbawa Besar). *JIAP (Jurnal Ilmu Administrasi Publik)*, 6(2), 152. <https://doi.org/10.31764/jiap.v6i2.653>.
- APRIL Group. (2016). *APRIL Statement on PT. Merbau Pelalawan Lestari*. April Group. file:///Users/andreaquez/Downloads/guia-plan-de-mejora-institucional.pdf%0Ahttp://salud.tabasco.gob.mx/content/revista%0Ahttp://www.revistaalad.com/pdfs/Guias_ALAD_11_Nov_2013.pdf%0Ahttp://dx.doi.org/10.15446/revfacmed.v6n3.60060.%0Ahttp://www.cenetec.
- Ardiyanto, S. Y., & Rahmadan, D. (2020). Law Enforcement Pattern on Illegal Logging in Order to Maintain the Sustainability of Forest in Riau, Indonesia. *Proceedings of the Riau Annual Meeting on Law and Social Sciences (RAMLAS 2019)*. <https://doi.org/10.2991/assehr.k.200529.268>.

- Basuki, K., Mursyid, A., Kurnain, A., & Suyanto. (2013). Analisis Faktor Penyebab dan Strategi Pencegahan Pembalakan Liar (Illegal Logging) di Kabupaten Tabalong. *Enviro Scientiae*, 9, 27–43. <https://doi.org/http://dx.doi.org/10.20527/es.v9i1.1983>.
- Berenschot, W., & Klinken, G. K. (2018). Informality and citizenship: the everyday state in Indonesia. *Citizenship Studies*, 22(2), 95–111. <https://doi.org/10.1080/13621025.2018.1445494>.
- Bintang. (2021, November 16). Illegal Logging di Dua Daerah Ini masih Masif, Kapolda Riau. *Cakaplah.Com*. <https://www.cakaplah.com/berita/baca/77734/2021/11/16/illegal-logging-di-dua-daerah-ini-masih-masif-kapolda-riau-hutan-alam-perlu-ditolong#sthash.3gecuReV.68ug734y.dpbs>.
- Bösch, M. (2021). Institutional quality, economic development, and illegal logging: a quantitative cross-national analysis. *European Journal of Forest Research*, 140(5), 1049–1064. <https://doi.org/10.1007/s10342-021-01382-z>.
- Dahlmann, F., Branicki, L., & Brammer, S. (2019). Managing Carbon Aspirations: The Influence of Corporate Climate Change Targets on Environmental Performance. *Journal of Business Ethics*, 158(1), 1–24. <https://doi.org/10.1007/s10551-017-3731-z>.
- FAO and UNEP. (2020). *The State of the World's Forests 2020*. FAO and UNEP. <https://doi.org/10.4060/ca8642en>.
- Fitria, N. (2019). *Putusan PK PT Merbau Pelalawan Lestari; Menunggu Keberanian KPK, Kapolri Idham Aziz dan Menteri LHK Siti Nurbaya*. Jaringan Kerja Penyelamat Hutan Riau. <https://jikalahari.or.id/kabar/putusan-pk-pt-merbau-pelalawan-lestari-menunggu-keberanian-kpk-kapolri-idham-aziz-dan-menteri-lhk-siti-nurbaya/%0A>.
- Fitria, N. (2020). *Menantang Ketua KPK, Firli Bahuri Menangkap Buronan Ir Rosman, GM Forestry PT RAPP*. Jaringan Kerja Penyelamat Hutan Riau (Jikalahari); Jaringan Kerja Penyelamat Hutan Riau (Jikalahari). <https://jikalahari.or.id/kabar/menantang-ketua-kpk-firli-bahuri-menangkap-buronan-ir-rosman-gm-forestry-pt-rapp/>
- Friatna, A. (2022, August 23). *Kapolri Ditantang Buka SP3 Kasus Illegal Logging dan Karhutlah di Riau*. Beritabarur. Co. <https://riau.beritabarur.co/kapolri-ditantang-buka-sp3-kasus-illegal-logging-dan-karhutlah-di-riau/%0A>
- Hall, A. (2012). Forests and Climate Change. In *Global Forest Goals United Nations Forum on Forest*. Edward Elgar Publishing. <https://doi.org/10.4337/9781849806114>
- Harahap, N. (2020). Penelitian Kualitatif (H. Sazali (ed.); First edit). Wal Ashri Publishing. <https://www.ptonline.com/articles/how-to-get-better-mfi-results>
- Hearman, V. (2018). Between citizenship and human rights: the struggle for justice after Indonesia's 1965 mass violence. *Citizenship Studies*, 22(2), 175–190. <https://doi.org/10.1080/13621025.2018.1445492>.
- Herawan, H., & Redi, A. (2022). Indonesia's Commitment to The Paris Agreement Based on Law Number 21 of 2014 Regarding Geothermal Heat. *3rd Tarumanagara International Conference on the Applications of Social Sciences and Humanities (TICASH 2021)*, 655(21), 144–149. <https://doi.org/10.2991/assehr.k.220404.023>.
- Indonesia Corruption Watch. (2008). *Bupati Pelalawan Dituntut 12 Tahun Penjara*. <https://antikorupsi.org/id/article/bupati-pelalawan-dituntut-12-tahun-penjara>
- Jaringan Kerja Penyelamat Hutan Riau. (2018). Menghentikan Deforestasi Hutan Alam di Kawasan Hutan Produksi (Studi Kasus Kebijakan Gubernur Riau terhadap pemberian Rencana Kerja Tahunan (RKT) dan Bagan Kerja (BK) pada sejumlah Hutan Tanaman Industri Tahun 2004). In *Center for International Forestry Research (CIFOR)* (Issue November). http://www.cifor.org/ilea/Database/instrumen/Jikalahari_project_ILEA201108.pdf
- Jayaraman, T. (2015). The Paris Agreement on Climate Change: Background, Analysis, and Implications. *Review of Agrarian Studies*, 5(2).
- Ji, Y., Ranjan, R., & Truong, C. (2017). Determinants of illegal logging in Indonesia: An empirical analysis for the period 1996–2010. *Journal of Sustainable Forestry*, 37(2), 197–220. <https://doi.org/10.1080/10549811.2017.1369436>.
- Kurniawansyah, R. (2019). *Eksekusi Rp16,2 T Denda PT MPL Tertahan Aanmaning*. Media Indonesia. <https://mediaindonesia.com/humaniora/249499/eksekusi-rp162-t-denda-pt-mpl-tertahan-aanmaning>
- Laumonier, Y., & Nasi, R. (2018). The last natural seasonal forests of Indonesia: Implications for forest management and conservation. *Applied Vegetation Science*, 21(3), 461–476. <https://doi.org/10.1111/avsc.12377>.
- Lubis, M., Suharjo, B., Nurmalina, R., & Purnomo, H. (2018). Effect of Forest Law Enforcement Governance and Trade License on the competitiveness of Indonesian wooden furniture in the European Union market. *International Journal of Management and Economics Invention*, 04(09), 1936–1942. <https://doi.org/10.31142/ijmei/v4i9.05>

- Melia, P. E. (2016). *Perbuatan Melawan Hukum dalam Pelanggaran Perizinan di Bidang Kehutanan Studi Kasus Terhadap Putusan PT Pekanbaru Nomor 79/PDT/2014/PTR*. Universitas Kristen Satya Wacana Salatiga.
- Mugadza, A. A. (2022). The Disastrous Effects of Deforestation and Forest Degradation in the Climate Vulnerability Era. *CIFILE Journal of International Law*, 3(6), 12–40. <https://doi.org/https://doi.org/10.30489/cifj.2022.324393.1049>.
- Mutolib, A., Yonariza, Y., & Anam, K. (2020). Ulayat Forest Management By Indigenous People and Its Effects On Deforestation In Dharmasraya Production Forest In West Sumatra Province. *Jurnal Analisis Kebijakan Kehutanan*, 17(1), 17–31. <https://doi.org/10.20886/jakk.2020.17.1.17-31>.
- Nguyen, H. N., & Cao, N. A. (2020). An Alternative Approach to Classify Illegal Logging: The Case in Vietnam. *International Journal for Crime, Justice and Social Democracy*, 9(3), 130–143. <https://doi.org/10.5204/ijcjsd.v9i3.1336>.
- Noor, M. N. H. M., Kadir, R., & Muhamad, S. (2020). Illegal Logging And Forest Offences In Peninsular Malaysia: Perceived Opportunity Factors. *Journal of Nusantara Studies (JONUS)*, 5(2), 86–102. <https://doi.org/10.24200/jonus.vol5iss2pp86-102>.
- Nugroho, I. A., Basuni, S., Junaedi, G., Ponco Kusumah, A., Hardjasasmita, K., Kusumawinata, A., Djuwita, D., Rahmawati, K., Juniandri, A., Ardesianto, A., B Bangun, F., Fadhli, M., Murpratiwi, L., & Muniati, S. (2021). Strategi On Releasing Non-Productive Forest Conversion Area for the Tora Program In Riau Province. *Jurnal Analisis Kebijakan Kehutanan*, 18(1), 1–16. <https://doi.org/10.20886/jakk.2021.18.1.1-16>.
- Nugroho, W., & Prasetyo, M. S. E. (2019). Forest Management and Environmental Law Enforcement Policy Against Illegal Logging In Indonesia. *International Journal of Management*, 10(6), 317–323. <https://doi.org/10.34218/IJM.10.6.2019.030>.
- Piabuo, S. M., Minang, P. A., Tieguhong, C. J., Foundjem-Tita, D., & Nghobuoche, F. (2021). Illegal logging, governance effectiveness, and carbon dioxide emission in the timber-producing countries of Congo Basin and Asia. *Environment, Development and Sustainability*, 23(10), 14176–14196. <https://doi.org/10.1007/s10668-021-01257-8>.
- Polese, A. (2023). What is informality? (Mapping) “the art of bypassing the state” in Eurasian spaces - and beyond. *Eurasian Geography and Economics*, 64(3), 322–364. <https://doi.org/10.1080/15387216.2021.1992791>.
- Sari, C. A., & Multazam, M. T. (2021). The Government of Indonesia’s Accountability Against Forest Degradation Due to Deforestation Based on the Paris Agreement to the United Nations Framework Convention on Climate Change. *Rechtsidee*, 8, 8–11. <https://doi.org/10.21070/jihr.2021.8.719>.
- Sasaki, N., Myint, Y. Y., Abe, I., & Venkatappa, M. (2021). Predicting carbon emissions, emissions reductions, and carbon removal due to deforestation and plantation forests in Southeast Asia. *Journal of Cleaner Production*, 312(June), 127728. <https://doi.org/10.1016/j.jclepro.2021.127728>.
- Sibarani, A., Arifin, S., & Siregar, T. (2019). Analisis Hukum Pidana Terhadap Penanggulangan Kejahatan Illegal Logging Di Provinsi Riau (Studi Kasus di Pengadilan Negeri Pekanbaru). *ARBITER: Jurnal Ilmiah Magister Hukum*, 1(1), 19–30. <https://doi.org/10.31289/arbiter.v1i1.101>.
- Sindzingre, A. (2006). The relevance of the concepts of formality and informality: a theoretical appraisal. In *Linking the Formal and Informal Economy* (pp. 58–74). Oxford University PressOxford. <https://doi.org/10.1093/0199204764.003.0004>
- Statistics Indonesia. (2022a). Deforestation Rate (Netto) in Indonesia. In *Statistics Indonesia*. <https://www.bps.go.id/statictable/2019/11/25/2081>.
- Statistics Indonesia. (2022b). Deforestation Rate (Netto) in Indonesia In Inside and Outside Forest Area 2013-2020 (Ha/year). *Statistics Indonesia*. <https://www.bps.go.id/statictable/2019/11/25/2081>.
- Suyitno, Effendi, D., Yudiantmaja, W. E., Ghani, N. A., & Wahab, M. A. A. (2018). Peranan dan Kontribusi Lembaga Swadaya Masyarakat Dalam Agenda Pemberantasan Korupsi di Indonesia: Studi Di Kota Tanjungpinang, Kepulauan Riau, Indonesia. *Asian People Journal (APJ)*, 1(2), 146–161. www.journal.unisza.edu.my/apj/.
- Syadat, E., Suryandari, E. Y., & Kurniawan, A. S. (2019). Kajian Strategi Penataan Ruang Wilayah Pada Kawasan Hutan. 16(2), 89–104.
- Tacconi, L., & Muttaqin, M. Z. (2019). Reducing emissions from land use change in Indonesia: An overview. *Forest Policy and Economics*, 108, 101979. <https://doi.org/10.1016/j.forpol.2019.101979>.
- Thompson, S. T., & Magrath, W. B. (2021). Preventing illegal logging. *Forest Policy and Economics*, 128(April), 102479. <https://doi.org/10.1016/j.forpol.2021.102479>.