

Research Article

A Legal Review of Sanctions for Illegal Logging Violations Based on Forestry Law

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Abstract: This study aims to examine the application of sanctions for illegal logging violations based on the Forestry Law, with a case study focused on Kaban Tengah Village, STU Jehe Sub-district, Pakpak Bharat Regency. This research employs an empirical normative legal method using a case study approach. The study was conducted in Kaban Tengah Village, STU Jehe Sub-district, Pakpak Bharat Regency. The data utilized in this research consist of primary and secondary data. Data collection techniques include direct interviews, field observations, and documentation. The data analysis technique used is qualitative, comprising data reduction, data presentation, and data verification or conclusion drawing. The results indicate that illegal logging activities have complex and detrimental impacts on both the community and the environment. These include ecological damage such as increased landslide risk and loss of forest cover, disruption to village infrastructure, particularly main connecting roads, and economic losses due to damaged agricultural land and hampered crop distribution. Based on the findings and legal review of sanctions for illegal logging violations in Kaban Tengah Village, it was found that law enforcement against illegal logging activities has not been effectively implemented as stipulated in the Forestry Law. Law enforcement at the local level remains formalistic and has not addressed the root of the problem due to several challenges, including limited human resources, inadequate monitoring facilities, poor infrastructure, and lengthy and bureaucratic legal processes. Furthermore, the low level of legal awareness among the community and the involvement of local residents in illegal logging practices further complicate enforcement efforts, posing significant challenges for law enforcers in reviewing sanctions against illegal logging perpetrators in Kaban Tengah Village.

Keywords: Forestry, Illegal Logging, Legal Sanctions

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1. Introduction

Currently, various global issues are affecting the world and having a tangible impact on people's lives, both at the local and national levels (Dharma, 2021). One of the main issues faced today is the environmental crisis. Environmental issues have become one of the major challenges for modern societies across nearly all parts of the world (Batu, 2023). In this context, as a country that upholds the rule of law, Indonesia is required to establish a strong and firm legal foundation for the management and conservation of biological natural resources and their ecosystems. This is essential to ensure legal certainty in every effort to preserve biodiversity and sustainably protect the environment (Sihaan & Pika, 2023).

The environment is a place for all human life on Earth. Therefore, humans bear the responsibility as stewards (khalifah) who are obligated to manage various elements of nature—such as water, land, plants, animals, and other natural resources—wisely (Ramadhan & Ridho, 2024). The environment is a valuable asset that can be experienced and utilized by all living beings. However, the value of this blessing will be lost if not properly preserved (Yunita & Purba, 2017). Environmental degradation in Indonesia is worsening by the day, directly threatening human life. The high rate of environmental destruction also increases the

risk of natural disasters. The causes can be categorized into two factors: natural events and human activities (Ramadhan, 2024).

Forests play a vital role in human life, and people depend on forest products. Forests provide protection, shelter, and essential resources necessary for survival (Nugroho, 2017). Environmental ethics also play a crucial role in forest conservation, as such ethics help control human behavior so that their activities continue to consider environmental interests (Ahada, 2020).

The management of natural resources, particularly forests, involves the sustainable administration of forest areas with an emphasis on protection, preservation, and wise utilization—without neglecting environmental sustainability. The primary goal of this management is to ensure the continuity of forest resources and maintain ecosystem balance, thereby promoting community welfare while safeguarding the environment (Rahmadi, 2022).

According to environmental NGOs, forest degradation in Indonesia is estimated at 1.6 to 2 million hectares per year. Greenpeace even reports a higher figure, approximately 3.8 million hectares annually, with most of the destruction caused by illegal logging. This data indicates that Indonesia's forests are in a very alarming condition, requiring urgent and serious action to stop the ongoing deforestation (Negeri, 2021).

In Indonesia, forest sustainability is under serious threat, one of which stems from illegal logging practices. Illegal logging is a major factor behind the widespread destruction and degradation of forests across various regions. In addition to damaging forests, these actions contribute to the overall decline in environmental quality (Riva, 2019). Illegal logging also endangers forest ecosystems, which are natural habitats for many species of flora and fauna. Indonesia's biodiversity, especially wildlife populations, is now facing serious threats, with some species already extinct (Perangin-angin R. B., 2023). One of the contributing factors is forest destruction caused by irresponsible human activities.

Article 1, Paragraph 4 of Law No. 18 of 2013 concerning the Prevention and Eradication of Forest Destruction defines illegal logging as "any utilization of timber forest products carried out illegally and in an organized manner." This includes various activities such as logging, transporting, and trading timber without official permits from the authorities. Organizations involved in illegal logging often operate through extensive networks with minimal capital, driven solely by financial gain without regard for long-term environmental or social consequences.

Illegal logging has adverse effects across multiple dimensions. Uncontrolled tree cutting destroys forest ecosystems, disrupts the habitats of flora and fauna, and reduces biodiversity, ultimately disturbing ecological balance. Furthermore, deforestation increases the risk of natural disasters such as floods, landslides, and soil erosion, all of which can threaten nearby communities. The loss of forest cover also worsens climate change by reducing nature's capacity to absorb carbon dioxide, thus contributing to global warming. Economically, illegal logging results in state revenue loss and hampers efforts to implement sustainable forest management. Moreover, it often involves the exploitation of local communities and sparks social conflicts among stakeholders.

The social impact of illegal logging is complex and affects various aspects of local life. Illegal logging often involves the unfair exploitation of local labor, which harms them economically and socially. It can also lead to conflicts between communities and interested parties such as timber companies or individuals involved in illegal logging, due to competition over forest resources. The loss of forests as a source of livelihood further burdens local communities economically and threatens traditional cultures and customs closely tied to forests. These injustices and damages worsen poverty and social instability in the affected areas.

Indonesia is an agrarian country, where the majority of its population works as farmers. This condition naturally affects land use and other environmental aspects (Nababan et al., 2023), including in Kaban Tengah Village. More than 80% of the village's residents work as farmers. The practice of clearing forest land for agriculture by some residents also contributes to forest ecosystem degradation. The lack of awareness about the dangers of logging trees for land clearing adds further negative impact on wildlife around the village forest. This unregulated land clearing and logging have disrupted the natural habitats of flora and fauna in the forest area near Kaban Tengah. As a result, many wild animals—such as monkeys, wild boars, deer, orangutans, and apes—have lost their natural habitats and are forced to enter residential areas. This situation not only leads to human-wildlife conflict but also causes damage to villagers' farmland.

The series of problems arising from illegal logging in Kaban Tengah Village demonstrates the complexity of its impacts. It not only threatens environmental sustainability and biodiversity but also directly affects the socio-economic conditions of local communities. Therefore, a comprehensive study is needed on the legal aspects and enforcement of sanctions against illegal logging offenders, as well as sustainable forest management strategies that involve active participation from local communities.

Previous studies have identified the gap between theory and practice in forest protection and management as a key factor contributing to the issue of illegal logging. This research will analyze various dimensions of illegal logging, including its ecological, social, economic, and infrastructural impacts, in order to provide a comprehensive understanding of the issue's complexity. In addition, the study specifically identifies types of local timber that are frequently targeted by illegal loggers and traces the distribution chain of illegal timber to processing locations, uncovering the modus operandi of illegal logging in remote areas.

This study contributes new insights by highlighting the extended impacts of illegal logging activities around village forest areas that directly affect various aspects of local life. The study not only explores ecological and social consequences but also evaluates government policies aimed at addressing the problem. It will analyze the extent to which these policies not only focus on punitive sanctions but also include recovery efforts for the resulting damage. In this regard, the concept of restorative justice is a central focus—namely, a legal approach that prioritizes environmental restoration and the economic empowerment of affected communities. This research seeks to explore the potential of applying restorative justice in handling illegal logging cases as a more equitable and sustainable resolution alternative.

The Forestry Law has stipulated strict sanctions for perpetrators of illegal logging. However, its implementation and enforcement in the field still face many challenges. Therefore, a thorough review is needed on the effectiveness of existing sanctions, as well as preventive and enforcement efforts involving various stakeholders, including the government, local communities, and non-governmental organizations.

2. METHOD

This study employs a qualitative design with a normative-empirical legal approach to examine in depth the phenomenon of illegal logging in Kaban Tengah Village, STU Jehe District, Pakpak Bharat Regency. This approach is chosen for its ability to capture empirical realities while simultaneously assessing the application of legal norms in the field. The main focus of this research is a legal review of the sanctions for illegal logging violations based on the Forestry Law, taking into account relevant national and local regulations. The type of research used is a case study, which allows the researcher to understand the specific and complex context of the phenomena occurring on the ground (Muhaimin, 2020; Sugiyono, 2017; Wahyudi et al., 2021).

Data collection techniques include participatory observation, in-depth interviews with key informants, and documentation of relevant policies and regulations. Informants were selected using purposive sampling and consisted of representatives from the Forestry Office, government officials, and members of the community directly affected by illegal logging. The data collected were classified into primary and secondary data, and analyzed using an inductive approach to derive patterns and meanings from field data. Research instruments included interview guides, observation sheets, and documentation structured based on a variable grid (Nasution, 2023; Sahir, 2022; Sugiyono, 2017).

Data analysis was conducted through three stages as proposed by Miles and Huberman: data reduction, data display, and conclusion drawing. Data reduction aimed to filter the most relevant information, while data presentation was done narratively and visually, such as in tables or diagrams, to facilitate interpretation. The final stage involved data verification or drawing tentative conclusions that may be revised based on field findings. Thus, this study not only describes the phenomenon in a descriptive manner but also provides an applied legal understanding of the issue of illegal logging (Miles & Huberman, 1992; Nasution, 2023; Wahyudi et al., 2021).

3. RESULTS AND DISCUSSION

Description of Research Findings

Community Understanding of Sanctions for Illegal Logging Violations

In analyzing the research findings, the researcher presents data based on interviews conducted in April 2025 with residents of Kaban Tengah Village. This study aims to examine the legal perspective on sanctions for illegal logging violations in the area. Based on the interview results, it was found that most community members have a low level of understanding regarding illegal logging activities. Some respondents were even unaware of the existence of legislation that regulates and prohibits such practices. An interview with one resident, Mrs. Mariani Kesogihen, revealed that:

"Community understanding of illegal logging activities is still very limited. The informant stated that she previously did not fully understand what was meant by illegal logging. However, after receiving an explanation from the researcher, she related it to an activity she had personally witnessed—namely, the felling of trees in forest areas followed by the transportation of the logs using trucks. The informant also admitted that she did not realize such actions constituted legal violations as stipulated in national regulations, particularly in the Forestry Law, which outlines sanctions for the illegal exploitation and destruction of forest resources."

(Interview on April 10, 2025, 13:12 WIB with Mrs. Mariani Kesogihen in Kutarimbaru Hamlet)

Additionally, the community expressed that the involvement of some village residents in illegal logging activities is largely driven by economic necessity. The income from their plantation sector is considered insufficient to meet daily needs, prompting some villagers to utilize forest areas that are no longer legally permitted for community use. Economic needs were identified as the primary factor motivating engagement in illegal logging practices. Moreover, uncontrolled land clearing and limited knowledge in managing agricultural yields were also contributing factors. As a result, the community continues to clear new forest land for subsistence farming without considering the long-term environmental and ecological impacts. This was further confirmed by the testimony of another resident, Mr. Jamaluddin Berutu, who stated:

"One of the main factors driving community members to engage in illegal logging is economic pressure. Some villagers are forced to cut down trees because income from agriculture, especially from plantations, is often insufficient to meet their daily needs. This situation worsens when agricultural commodity prices fall or when crop failures occur. Under such circumstances, many people have no other viable source of income, given the limited job opportunities in rural areas. As a result, exploiting forest resources—even illegally—is seen as the only available option for sustaining their family's livelihood."

(Interview on April 10, 2025, 14:20 WIB with Mr. Jamaluddin in Sintebu Hamlet)

The interviews also revealed that, in general, residents were unaware of the legal sanctions imposed on perpetrators of illegal logging. Many did not understand that there are specific laws that govern and impose penalties for such violations. This was reinforced by the statement of another informant, Mrs. Diana Bancin, who said:

"The informant's knowledge of legal sanctions for illegal logging perpetrators is still very limited. She admitted that she still does not clearly understand the types of penalties applicable to illegal logging activities in forest areas. Furthermore, there has never been any outreach, education, or guidance from the authorities regarding existing laws that explicitly

prohibit and sanction illegal logging practices. This indicates a low level of legal information dissemination among rural communities, which impacts their legal awareness of actions considered violations of the Forestry Law."

(Interview on April 11, 2025, with Mrs. Diana Bancin in Sintebu Hamlet)

These statements highlight that community understanding of sanctions for illegal logging violations is critically low. This lack of understanding suggests insufficient outreach from authorities, including law enforcement and relevant agencies such as the local government, regarding the regulations and legal consequences outlined in the Forestry Law. Communities living near forest areas—who should ideally serve as the frontline defenders of environmental sustainability—have yet to fully grasp that illegal logging constitutes a criminal offense subject to legal penalties. This situation may severely undermine the effectiveness of law enforcement and forest conservation efforts, as without adequate awareness, residents are more likely to ignore regulations or even become unwitting participants in illegal logging practices. Therefore, a more intensive and systematic approach is needed in legal education and community empowerment to enable them to take an active role in preventing and reporting illegal logging activities.

Tangible Impacts of Illegal Logging on Community Life and the Environment in Kaban Tengah Village

The interview results reveal that illegal logging activities have a tangible and significant impact on both community life and the environmental conditions in Kaban Tengah Village. From an environmental perspective, illegal logging has led to increased risk of landslides due to the clearing of hillsides to open access roads into forest areas. Additionally, the transportation of processed timber in the form of logs—conducted without regard to the carrying capacity of the infrastructure—has caused severe damage to village roads. This damage has directly affected community mobility, particularly in transporting agricultural produce to the subdistrict center.

Furthermore, the disruption of road access has reduced the frequency of visits by middlemen (toke) to the village, thereby depressing the selling price of agricultural products as farmers are forced to bear the transportation burden themselves. In some cases, timber transport from the forest has also damaged residents' agricultural land, especially farms located along the transportation routes, leading to economic losses for landowners.

Socially, illegal logging has triggered horizontal conflicts within the community—between those involved in the activity and those who oppose it—as well as vertical conflicts with law enforcement authorities or government officials. This aligns with the statement of the Village Head of Kaban Tengah, Mr. Nihan Berasa, who stated:

"The impact of illegal logging not only disrupts social order and inter-community relations, but also brings long-term economic harm. Although some residents may benefit temporarily, the environmental degradation reduces the natural resources that could otherwise be used sustainably, and increases the risk of natural disasters such as floods and landslides, which threaten the livelihoods of villagers." (Interview on April 14, 2025, with Village Head Nihan Berasa at the Village Office)

Illegal logging also results in significant long-term losses for the local community. Forests, which should serve as sustainable natural resources and a support system for future generations, are being severely degraded due to uncontrolled exploitation. Instead of being

used wisely and sustainably, forest areas are being massively logged without consideration for ecological balance or environmental sustainability. Yet forests play a critical role as oxygen providers, water quality regulators, biodiversity reservoirs, and natural barriers against disasters such as floods and landslides. When forests are destroyed, humans lose a natural partner that provides ecological, social, and economic benefits. As a result, communities not only lose long-term sources of livelihood but also face increased disaster risk and a decline in overall quality of life.

This is supported by a statement from Mr. Sampang Angkat, Secretary of Kaban Tengah Village, who explained:

"Illegal logging activities may offer short-term benefits to some local residents, such as quick income from tree cutting, but the long-term losses are far greater. Environmental damage caused by illegal logging diminishes natural resources that can be sustainably utilized, such as clean water, non-timber forest products, and fertile soil for agriculture. Moreover, the resulting natural disasters—such as floods and landslides—increase economic losses and threaten the long-term viability of community life." (Interview on April 14, 2025, with Village Secretary Sampang Angkat at the Village Office)

These findings are also corroborated by the researcher's direct field observations, which reveal clear signs of environmental damage caused by illegal logging in Kaban Tengah Village. One of the most striking impacts is the severely damaged condition of the village's roads, which have been traversed by timber-transport trucks. Roads previously used for daily community mobility are now riddled with potholes, muddy, and difficult to pass—especially during the rainy season—significantly disrupting the community's economic and social activities. Moreover, the researcher found piles of processed timber logs near forest areas and village roads, indicating systematic illegal logging and timber processing activities. These findings demonstrate that the impact of illegal logging is not only ecological but also directly damages vital infrastructure used by the community to meet their daily needs.

Given these evident impacts, both the government and relevant authorities bear a significant responsibility in addressing this issue. This was emphasized in an interview with Mr. Matius Napitupulu, a forest ranger and officer at the Siranggas Wildlife Reserve (SM Siranggas) for Region I in STU Jehe Subdistrict, who serves as a Junior Ecosystem Controller in the area. He stated:

"As law enforcement officers, it is our duty and responsibility to help prevent the impacts of illegal logging felt by the people of Kaban Tengah Village, particularly from economic and environmental standpoints. Economically, we support government programs aimed at improving rural welfare, including coordinating fertilizer distribution to farmer groups in collaboration with the village administration. Environmentally, we actively conduct patrols and monitoring in forest areas to prevent illegal logging. These efforts are part of our strategic steps to preserve the forest and protect the social and economic well-being of the village community in a sustainable manner." (Interview on April 20, 2025, at the SM Siranggas 1 Office, STU Jehe Subdistrict, Sibande)

This was further emphasized by Mr. Jalan Berutu, Regional Secretary of Pakpak Bharat Regency, who stated:

"As the local government of Pakpak Bharat Regency, we are strongly committed to preventing and addressing the impacts of illegal logging from environmental, economic, and

social perspectives. One concrete step we have taken is collaborating with the Directorate General of Natural Resources and Ecosystem Conservation (KSDAE) of North Sumatra through the KSDA Regional Office I Kabanjahe and the Conservation Section I Sidikalang to sign a Conservation Agreement from June 25–27, 2024, with three buffer villages surrounding conservation areas—namely the Sicike-cike Nature Park (TWA), Siranggas Wildlife Reserve (SM), and Deleng Lancuk Nature Park (TWA). Through this agreement, we aim to encourage direct community participation in forest protection by providing agricultural production tools to farmer groups, such as hand tractors, brush cutters, and portable sprayers, tailored to local needs. Additionally, we are developing ecotourism potential and promoting the growth of local MSMEs as sustainable alternative sources of income. On the social front, we are investing in human resource development through government-funded higher education scholarship programs to produce a generation capable of managing regional potential wisely. We also continue to strengthen collaborative forest management with the Siranggas Wildlife Reserve to protect biodiversity and maintain the ecological balance that supports life for communities around the forest." (Interview on April 22, 2025, at 1:00 PM)

Law Enforcement Against Illegal Logging Violations

Law enforcement against illegal logging violations in Kaban Tengah Village has not yet been fully implemented in accordance with the provisions set out in Law Number 41 of 1999 on Forestry. Although normatively the law stipulates strict sanctions for perpetrators of forest destruction, its implementation at the village level still faces various challenges, including limited supervision, lack of resources among law enforcement officers, and low legal awareness among the community.

The lack of firm action against illegal loggers creates an impression of permissiveness, which ultimately weakens the deterrent effect and allows such illegal practices to persist. This condition highlights a gap between formal regulations and field realities, which, if not addressed promptly, could threaten forest conservation and the sustainability of natural resources in the region.

Based on an interview with one of the informants, Mr. Matius Napitupuluh, a forestry police officer from the STU Jehe Subdistrict, he stated:

"When talking about sanction enforcement based on existing laws, there is no such thing as perfect implementation. In practice, many challenges must be faced in the field, ranging from limited resources to social dynamics within the community. Therefore, I can say that law enforcement has not yet operated at 100% effectiveness. Nevertheless, we continue to make the best efforts to carry out the duties and responsibilities entrusted to us, in accordance with our capacity and prevailing conditions." (Interview on April 20, 2025, at SM Siranggas 1 Office, STU Jehe Subdistrict, Sibande)

With regard to the effectiveness of sanctions imposed on illegal loggers in Kaban Tengah Village in serving as a deterrent, ideally, such legal penalties should instill fear and prevent similar offenses in the future. However, in practice, the sanctions imposed have not been fully implemented in accordance with Law Number 41 of 1999 on Forestry. This is due to various procedural and technical constraints in the field.

As Mr. Matius further explained:

"The enforcement of sanctions under the law cannot be carried out instantly. There are legal processes that must be followed, beginning with preliminary investigations, evidence

gathering, reporting to the authorities, and proceeding to legal action at higher levels. These lengthy procedures often hinder effective enforcement, particularly when faced with limited resources or insufficient support from relevant stakeholders. As a result, illegal logging perpetrators are not immediately subject to firm legal consequences, thereby reducing the preventive and deterrent effect that such sanctions are meant to provide."

(Interview on April 20, 2025, at SM Siranggas 1 Office, STU Jehe Subdistrict, Sibande)

This statement is further reinforced by Mr. Jalan Berutu, Regional Secretary of Pakpak Bharat Regency, who stated:

"Deterrent effects against illegal loggers do not always guarantee that similar violations will not recur, even when sanctions have been imposed. This is due to various factors, one of which is the economic pressure faced by communities, especially in rural areas, which often becomes the main trigger for such violations. Therefore, efforts to improve community welfare, particularly in the economic sector, must continue to be optimized by the government to reduce the potential for illegal logging in the future."

(Interview on April 22, 2025, at 1:00 PM)

In the Regional Regulation of Pakpak Bharat Regency Number 20 of 2006 concerning the Utilization of Non-Timber Forest Products, there are no explicit provisions regulating sanctions for illegal logging violations. This regulation focuses more on mechanisms for the legal and orderly use of non-timber forest products by the people of Pakpak Bharat. To date, no updated regional regulation specifically governs forest management and protection, including legal sanctions for forestry violations in the area. This is due to the fact that forest areas in Pakpak Bharat Regency fall under the authority and supervision of the North Sumatra Provincial Forestry Service. Thus, the role of the district government is more coordinative and collaborative, through partnerships with authorized institutions such as the Provincial Forestry Office and forestry police officers in each subdistrict to conduct patrols and forest monitoring.

As explained by Mr. Jalan Berutu:

"To this day, there has been no new regional regulation specifically governing forestry in Pakpak Bharat Regency. Nevertheless, the district government continues to coordinate with the North Sumatra Provincial Forestry Office and forestry police in each subdistrict to ensure routine patrols and monitoring are conducted in protected forest areas as part of forest conservation efforts and illegal logging prevention." (Interview on April 22, 2025, at 1:00 PM)

This statement demonstrates that efforts to combat illegal logging at the district level rely heavily on effective cross-agency collaboration.

Government Obstacles in Enforcing Sanctions for Illegal Logging Violations

Based on interviews with village and district officials, several challenges have been identified in enforcing sanctions against illegal logging violations in Kaban Tengah Village. As explained by the Village Head of Kaban Tengah, Mr. Nihan Berasa:

"The main challenges in addressing illegal logging in Kaban Tengah Village include limited resources and facilities available to conduct continuous monitoring throughout the forest area. Additionally, the low level of community awareness and knowledge about the importance of forest conservation is a significant barrier in efforts to curb illegal logging in the region."

This statement is further supported by Mr. Matius Napitupuluh, who stated:

"As an authority responsible for handling illegal logging cases, there are a number of obstacles in applying sanctions in Kaban Tengah Village. The main challenges include limited resources—both in terms of personnel, budget, and adequate support facilities—to conduct routine monitoring and enforcement in vast and hard-to-reach forest areas. Moreover, legal enforcement cannot be executed directly due to the need to follow administrative steps and legal procedures, which often require time and strong evidence. Another obstacle is the social dilemma, as some perpetrators are local residents who rely on forest products for their livelihood. Therefore, repressive measures must be balanced with persuasive strategies and continuous community development." (Interview on April 20, 2025, at SM Siranggas 1 Office, STU Jehe Subdistrict, Sibande)

Field observations by the researcher revealed that there are no visible signs or markers clearly indicating forest boundaries accessible to and usable by the community. This suggests a significant lack of public dissemination and official notice regarding protected forest boundaries in Kaban Tengah Village. Responding to this, Mr. Matius stated:

"Kaban Tengah is one of the remote areas rarely reached by regular patrols from forestry police officers. One of the main obstacles in conducting patrols is the limited number of personnel, lack of support facilities such as vehicles to reach difficult forest locations, and minimal operational funding. Nevertheless, the authorities continue to coordinate with the village government to conduct community outreach activities. In addition, boundary signs or posts have been installed to mark areas that the community is permitted to use. However, these markers are believed to have deteriorated or disappeared due to a lack of updates over an extended period." (Interview on April 20, 2025, at SM Siranggas 1 Office, STU Jehe Subdistrict, Sibande)

The Role of Government and Community Expectations in Preventing Illegal Logging

The government plays a crucial role in addressing illegal logging in Kaban Tengah Village, particularly in terms of monitoring, prevention, and law enforcement. Based on interviews with several community members who served as informants in this study, it was revealed that the community perceives the government's role—especially in terms of socialization and supervision of illegal logging practices—as still lacking. As stated by Mrs. Siti Aisyah:

"To this day, the informant stated that she had never heard of any outreach activities related to illegal logging issues in Kaban Tengah Village. According to her and other respondents, most community members have never participated in such activities and are not even aware of whether such initiatives have ever taken place. Meanwhile, forest patrols by forestry officials were reported to have occurred, albeit very rarely. The informant recalled seeing a forestry vehicle once at the village office, although direct patrols into the forest areas remain minimal."

This statement contrasts with the perspective of the village government. The Head of Kaban Tengah Village, Mr. Nihan Berasa, explained that:

"Monitoring of forestry activities is regularly conducted in cooperation with the local community, including reporting suspicious activities to the authorities. In addition, educational efforts regarding the importance of forest conservation are being intensified to raise environmental awareness. As part of the strategy to involve the community, the establishment

of conservation awareness groups is also being encouraged to strengthen the sustainable protection and management of forest areas."

This was further supported by Mr. Sampan Angkat, who noted that:

"Although village officials do not have the authority to impose legal sanctions, they actively support the law enforcement process. Their involvement includes submitting initial reports, securing the site, identifying potential perpetrators, and coordinating with relevant agencies for follow-up enforcement."

The discrepancy between the government's account and the community's perception highlights a communication and implementation gap on the ground. While village authorities claim to have implemented various monitoring and preventive efforts, the continued occurrence of illegal logging suggests that policy implementation has not been fully effective. This points to the need for greater transparency, more frequent socialization activities, and increased public involvement in forest surveillance. Strengthening the synergy between the government and the community is essential to ensure that every program and policy delivers real benefits and has a tangible impact on reducing illegal logging in the area.

Naturally, the residents of Kaban Tengah Village have high expectations for improved efforts in addressing and preventing illegal logging, which has adversely affected their social, economic, and environmental well-being. The community seeks concrete actions from the government and relevant authorities to put an end to illegal tree felling that damages forests, disrupts village infrastructure, and degrades their quality of life.

These expectations include stricter monitoring, routine forest patrols, firm law enforcement against perpetrators, and ongoing public education and awareness campaigns to enhance community understanding of the importance of forest preservation. Moreover, the community hopes to be actively involved in conservation programs—not merely as passive recipients of policy but as active participants in managing and safeguarding natural resources sustainably for the future of their village. This is supported by Mr. Jamaludin Berutu, who stated:

"The people of Kaban Tengah Village hope that the impacts of illegal logging can be swiftly addressed through government policies. These hopes include road infrastructure improvements and support for agricultural economic management to reduce dependence on forest exploitation, particularly through illegal tree felling."

Mrs. Mariani also expressed:

"Improved road infrastructure is needed to facilitate the transportation of crops to the market. Adequate road conditions will increase distribution efficiency and support better income opportunities by improving market access for the community."

Additionally, Mrs. Diana stated:

"It is hoped that law enforcement will be more stringent, especially toward illegal logging perpetrators. With stricter law enforcement, offenders would receive more appropriate punishments. Harsher penalties are expected to serve as a deterrent, thereby significantly reducing the number of offenders. Furthermore, law enforcement officers must take real action to protect forest areas, given that environmental degradation has a direct impact on community livelihoods—such as reduced agricultural yields and increased risk of natural disasters."

The discussion in this study aims to interpret and analyze field findings presented earlier by critically relating them to relevant theories and existing laws and regulations. The core focus of this research is divided into two key aspects. First, to examine the extended impacts of illegal logging practices on the social, economic, and environmental conditions of the community in Kaban Tengah Village. Second, to explore the various challenges faced by local governments and law enforcement agencies in enforcing the law, particularly in imposing sanctions on illegal logging perpetrators in the area.

Based on field findings, law enforcement against illegal logging violations in Kaban Tengah Village has not been fully implemented in accordance with existing regulations, particularly the forestry law. Legal sanctions imposed on illegal loggers tend not to reflect the severity of the criminal penalties clearly outlined in Law No. 18 of 2013 on the Prevention and Eradication of Forest Destruction.

As stipulated in Article 82, Paragraph (1), Letter (c) of Law No. 18 of 2013:

“Any individual who intentionally conducts unauthorized tree felling within forest areas as referred to in Article 12, Letter (c), shall be subject to imprisonment for a minimum of 1 (one) year and a maximum of 5 (five) years and a fine of at least IDR 500,000,000 (five hundred million rupiah) and at most IDR 2,500,000,000 (two billion five hundred million rupiah).”

However, implementation on the ground shows a significant gap between these legal provisions and actual practice. The penalties imposed on illegal logging offenders in Kaban Tengah Village reportedly fall far short of the statutory minimums. This condition indicates that law enforcement has not been optimally carried out and reflects weak implementation of statutory regulations at the local level. This weakness undermines the deterrent effect of legal penalties and opens the door for recurring violations in the future.

Community Understanding of Illegal Logging Violations

Based on interviews with informants, it was found that the majority of the residents in Kaban Tengah Village do not have a comprehensive understanding of the legal aspects concerning sanctions imposed on perpetrators of illegal logging. This lack of awareness is largely due to the minimal efforts in socialization, education, and government involvement in disseminating legal knowledge and preventing illegal logging practices in the region. The lack of effective communication between the government and the community is one of the main factors contributing to the low level of legal awareness among the public regarding the consequences of illegal logging, as stipulated in the applicable laws and regulations.

Forest management should be based on the principles of good governance to ensure that public interests remain the primary goal. Theoretically, good governance is the process of distributing authority to the public in the delivery of public services, while also supporting development across various sectors, including social, political, economic, and cultural spheres. In this context, good governance is often interpreted as a system of sound governmental management in which the relationship between the government and the public is synergistic and well-structured (Cheriani, 2023).

According to the aforementioned theory, ideal forest governance must be rooted in the principles of good governance so that public interests can be accommodated in a fair and sustainable manner. The relationship between the government and the community must be constructed synergistically and structurally to ensure that development—including in the forestry sector—can proceed optimally.

However, in practice, these good governance principles have not been fully implemented, particularly in Kaban Tengah Village. Field findings indicate that the low level of public understanding regarding the impacts of illegal logging, the legal sanctions under forestry laws, and the illegality of such activities reflects the lack of active government involvement in building communication and cooperation with the community. The absence of legal socialization and participatory forums involving communities in forest monitoring and conservation has led to insufficient public awareness about the importance of preserving forests legally and sustainably.

The lack of synergy between the government and the public in this context reveals weak implementation of public participation—an essential component of good governance. When communities are not given the opportunity to actively engage in decision-making processes or to understand the legal consequences of illegal logging, both law enforcement and environmental conservation efforts become ineffective. Therefore, the failure to establish sound forest governance not only leads to an increase in illegal logging practices but also undermines the collective awareness needed to protect the environment.

Community Participation in Forest Conservation in Kaban Tengah Village

Active community participation is a crucial element in forest conservation efforts, particularly in Kaban Tengah Village. As those who live near and interact directly with forest areas, local residents occupy a strategic position and play a significant role as the front line in preventing illegal logging practices. Community involvement is important not only in terms of supervision but also in supporting environmental conservation policies through tangible actions at the local level. With adequate understanding and government support in the form of education and empowerment, communities are expected to serve as key actors in preserving forests as ecologically, socially, and economically valuable natural resources.

One example is the role of indigenous communities, who possess traditional wisdom in utilizing and managing forests based on customary rules and norms passed down through generations. These norms, referred to as *adat*, represent traditions maintained to preserve their culture, particularly in protecting forests as part of their ecosystem and habitat (Milunardi, 2021).

Among the Pakpak indigenous community, one tradition is called *menanda tahun*—an annual ritual held by local clans before the opening of new farmland. This ceremony, conducted before the planting season, serves to align farming practices with what is believed to be the spiritual laws of nature, aimed at maintaining ecosystem balance. For the Pakpak people, farming is not merely an economic activity but one deeply connected to social and religious needs.

However, field findings indicate that the involvement of indigenous communities in forest conservation is gradually declining. The *menanda tahun* tradition, once used as a guiding principle for land clearing, is now rarely observed—even in Kaban Tengah Village. As a result, land clearing is carried out freely, disregarding the customary boundaries and ecological norms that were once held in high regard. This has become one of the main causes of forest degradation in the area. Communities that were once guardians of the environment are now increasingly involved in illegal logging and unregulated land clearing. The erosion of traditional values that governed the harmonious relationship between humans and nature has accelerated

environmental degradation that could have otherwise been prevented through the preservation of local wisdom and cultural traditions.

The Real Impact of Illegal Logging on Community Life and the Environment in Kaban Tengah Village

Illegal logging activities in forest areas have caused numerous negative impacts across various sectors, increasingly damaging the environment due to rampant deforestation (Supriadi, 2019). Based on this theory, it is evident that illegal logging not only threatens forest sustainability as a life-supporting ecosystem but also poses the risk of ecological disasters such as landslides, floods, and the loss of wildlife habitats. Furthermore, this damage affects the livelihoods of local communities who depend on forest resources and undermines sustainable environmental conservation efforts.

Findings from research conducted in Kaban Tengah Village demonstrate that illegal logging has had complex and multidimensional impacts on the environment, the economy, and the community's social structure. Massive illegal logging activities have resulted in severe environmental degradation. Uncontrolled tree cutting, especially on hillside areas, has led to the loss of vegetative cover that normally serves to hold the soil in place. This has significantly increased the risk of landslides, particularly during the rainy season, posing threats to human safety and the sustainability of natural resources.

One of the most visible infrastructural impacts is the damage to village roads caused by heavy timber transport vehicles. Roads that were previously vital for transporting agricultural produce have become severely damaged, full of potholes, and difficult to traverse. This condition hampers the community's economic activities by disrupting the distribution of crops, leading to increased dependence on middlemen. When access roads are damaged, traders are reluctant to visit the village, forcing farmers to bear the transportation costs themselves, ultimately reducing the selling price of their harvest.

Additionally, in some cases, unauthorized logging transport routes pass through community farmland, damaging productive agricultural areas. This has had a direct impact on farmers' incomes, resulting in significant economic losses. These findings indicate that illegal logging not only destroys forest resources but also deprives local communities of their land rights and livelihoods.

The Village Head of Kaban Tengah, Mr. Nihan Berasa, emphasized that the short-term gains from illegal logging are not worth the long-term losses borne by the wider community. Declining natural yields, environmental hazards, and social disruption show that such practices are in direct conflict with the principles of sustainable development. Similarly, the Village Secretary, Mr. Sampang Angkat, highlighted that illegal logging undermines the long-term economic potential of non-timber forest products, clean water, and fertile agricultural land.

In the context of the Sustainable Development Goals (SDGs), sustainable development is a development paradigm that seeks to meet present needs without compromising the ability of future generations to meet their own (Rachman, 2023). However, implementation in the field often deviates, with forests being exploited without limits and without sustainability efforts. True sustainability cannot be achieved if the use of natural resources is driven solely by short-term economic gains while neglecting ecological and social aspects. Illegal logging clearly violates the principles of the triple bottom line—balancing people, planet, and profit. When one of these pillars is neglected, it compromises the others.

Field observations also strongly indicate that illegal logging in Kaban Tengah Village is systematic. The presence of processed timber stockpiles near the forest and village roads suggests the existence of an illegal supply chain that continues without strict legal enforcement. This phenomenon reflects not only ecological damage but also weak forest governance and a lack of participatory community involvement in forest monitoring.

The impact of illegal logging experienced by the community in Kaban Tengah Village cannot be resolved solely through repressive sanctions. Rather, it requires comprehensive policies that address environmental restoration, social protection, and sustainable community economic development. In this regard, progressive legal theory provides an important foundation for the government to design policies that are not merely based on rigid regulations, but are adaptive to the real needs of society. As emphasized by this theory, law should not serve as a cold, formalistic tool of power, but as a means to achieve contextual and humane social justice (Raharjo, 2007).

Therefore, government policies aimed at addressing the impacts of illegal logging must reflect legal flexibility while considering social dynamics, the long-term needs of the community, and efforts to restore forest ecosystems. Progressive legal approaches advocate for law enforcement and policymaking that are not only reactive but also proactive and transformative—by involving communities directly in conservation, strengthening the local economy through support for agriculture and MSMEs, and fostering human resource development capable of managing forest potential sustainably. In this way, resolving the impacts of illegal logging through a progressive legal framework becomes more relevant and aligned with both community interests and long-term environmental preservation.

The government—both at the regional level and among law enforcement agencies—plays a significant role in addressing and mitigating the impacts of illegal logging experienced by the community in Kaban Tengah Village. Research findings and interviews with local police and regional government officials reveal various efforts by authorities. For instance, the police have clearly stated their responsibility to protect the public from the economic and environmental consequences of illegal logging. This is carried out through support for government programs such as the distribution of fertilizers for farmer groups in coordination with the village administration, as well as routine patrols in forest areas to prevent illegal logging directly.

Meanwhile, the Pakpak Bharat District Government has shown long-term commitment through inter-institutional cooperation with the Directorate General of Natural Resources and Ecosystem Conservation (KSDAE) of North Sumatra. One tangible form of this commitment is the signing of a conservation agreement with three villages bordering forest areas, which includes support for agricultural production facilities tailored to community needs. This initiative aims not only to reduce dependency on illegal forest products but also to promote alternative economic development through sustainable agriculture, ecotourism, and MSMEs. In the social sector, the local government has also allocated scholarship funds for higher education as a long-term investment in developing human resources capable of managing local potential wisely. Furthermore, strengthening collaboration with the management of the Sirנגgas Wildlife Reserve reflects an integrative strategy for maintaining biodiversity while preserving the ecological functions of forests as life-support systems for local communities.

However, despite these stated programs, their implementation on the ground remains uneven and does not fully address the comprehensive needs of the community. In Kaban Tengah Village, for example, the development of MSMEs still faces significant challenges as most residents are farmers. Therefore, the introduction of non-agricultural enterprises cannot be implemented without considering the economic characteristics and limited capacity of the local population. Accordingly, government policies should delve deeper and focus on strengthening the agricultural sector as the primary livelihood base for the community.

Assistance such as fertilizers and farming equipment is indeed important but insufficient unless accompanied by efforts to build farmers' capacity in managing and optimizing agricultural production. This requires ongoing training, technical assistance, and the formation of active, productive farmer groups so that the provided facilities can be utilized effectively. Additionally, the development of basic infrastructure such as village roads is urgently needed, as poor road conditions are among the primary complaints from residents and directly impact the distribution of agricultural goods and economic mobility. Without adequate infrastructure and human resource capacity, the distributed aid risks becoming ineffective. Therefore, a more comprehensive, participatory, and context-sensitive policy approach is essential to ensure that government programs truly address the real needs of the community and provide long-term solutions to the impacts of illegal logging.

Law Enforcement Against Illegal Logging Violations in Kaban Tengah Village

Law enforcement efforts against illegal logging in Kaban Tengah Village remain suboptimal, despite the existence of a strong legal foundation provided by Law No. 18 of 2013 on the Prevention and Eradication of Forest Destruction. While this law clearly stipulates sanctions for forest-related crimes, its implementation at the village level encounters various challenges, including limited human resources, inadequate field supervision, and low public awareness of legal norms. This condition reflects a significant gap between the ideal legal framework and the realities of law enforcement on the ground.

Interviews with relevant authorities, such as the Forestry Police of STU Jehe District, reveal that although officers strive to fulfill their duties, technical and social obstacles hinder effective enforcement. Lengthy and complex legal procedures often render law enforcement inefficient and fail to deter offenders. As Mr. Matius Napitupuluh explained, actions against illegal loggers cannot be taken immediately due to the formal procedures that must be followed, which can be time-consuming. This procedural delay allows perpetrators to reoffend without fear of legal consequences.

Furthermore, the Secretary of Pakpak Bharat Regency, Mr. Jalan Berutu, highlighted that economic pressures are a major factor driving communities to engage in illegal logging. When basic needs are not adequately met, people often resort to illegal forest exploitation as a last resort, despite being aware of the risks involved. This indicates that a purely repressive legal approach is insufficient to comprehensively address the issue.

In this context, the Progressive Legal Theory as proposed by Satjipto Rahardjo becomes particularly relevant. This theory asserts that the law should not merely consist of rigid written rules but must function as an instrument for achieving substantive justice and social transformation (Rahardjo, 2007). From the perspective of progressive law, legal structures must align with the people's interests, and law enforcers should act not only as passive

executors of statutes but also as agents of social change who understand local community contexts.

In addressing illegal logging in Kaban Tengah Village, this theory urges a re-evaluation of legal effectiveness—not merely by the existence of legal mechanisms or penalties, but by how well the law reflects values of justice, social balance, and local aspirations.

However, field findings reveal a disjunction between codified legal norms and the social values or realities of the community. The sanctions outlined in Law No. 18 of 2013 are normatively firm, yet their implementation often disregards the complexities of local values—particularly related to economic necessity, limited access to legal natural resources, and the lack of legal education. This leads to social resistance and noncompliance, as the law is perceived not as a protective mechanism but as a punitive one without offering viable alternatives.

As emphasized in integrative legal theory, law enforcement that ignores the community's value system will likely be socially ineffective. In this case, the lack of deterrent effect from legal sanctions is not solely due to weak enforcement but also due to the absence of integration between legal norms and local value-based approaches—such as distributive justice, social solidarity, and the pursuit of a decent livelihood. When offenses are driven by economic desperation rather than criminal intent, a solely repressive approach will fail to address the root causes.

Government Challenges in Enforcing Sanctions Against Illegal Logging Violations

Based on interviews with various stakeholders—including village and regency-level government officials—several significant obstacles to sanction enforcement in Kaban Tengah Village were identified. The Village Head, Mr. Nihan Berasa, emphasized that the primary challenges in tackling illegal logging include limited human resources and the lack of adequate monitoring facilities. The absence of sufficient tools and infrastructure makes it difficult for the village government to continuously supervise the vast forested areas. Additionally, the low level of legal awareness among residents poses a major barrier. Many villagers do not fully understand the legal boundaries of protected forests or the legal consequences of illegal logging activities.

This view was echoed by Mr. Matius Napitupuluh, a forestry officer in STU Jehe District, who explained that structural constraints such as insufficient personnel, limited budgets, and inadequate transportation facilities hinder effective patrolling and law enforcement. The extensive and geographically challenging forest areas add another layer of complexity to regular monitoring efforts. Moreover, convoluted legal procedures and lengthy administrative processes often delay the imposition of sanctions on offenders.

Beyond structural issues, law enforcers also face social dilemmas, as most perpetrators of illegal logging are local residents who rely on forest products for their livelihoods. This reality creates tension between the need for a repressive approach (law enforcement) and a more persuasive, developmental approach (community engagement and education).

The Role of the Government and Community Expectations in Preventing Illegal Logging

The government plays a significant role in preventing illegal logging violations in Kaban Tengah Village. Article 8, Paragraph (1) of Law No. 18 of 2013 explicitly states that "The

central and regional governments are obliged to combat forest destruction." This legal mandate clearly places the responsibility of forest protection on the government.

However, the research findings indicate that the government's role in this context has not been fully optimized, especially in terms of visible on-the-ground presence and active community engagement. As expressed by Mrs. Siti Aisyah, a resident of Kaban Tengah Village, she has never participated in any explicit public outreach concerning the dangers or prohibitions of illegal logging. She also noted that forest patrols are rarely seen, and when they do occur, they are limited to visits to the village office without direct monitoring within the forest areas.

On the other hand, statements from local government officials paint a different picture. The Village Head of Kaban Tengah, Mr. Nihan Berasa, claimed that the local administration regularly monitors forest areas, provides educational outreach to residents, and coordinates with relevant authorities to prevent illegal logging. He also emphasized the importance of inter-agency cooperation and advocated for the establishment of forest conservation awareness groups as part of a broader community engagement strategy.

This contrast highlights the need for improved vertical communication between the government and the community, including more comprehensive outreach and direct community involvement in monitoring efforts. Government programs and policies should not only be designed formally but must also be implemented in an inclusive and participatory manner, so that communities feel they are integral stakeholders in forest conservation efforts.

Community expectations for more active government involvement in addressing illegal logging are strong. Residents of Kaban Tengah Village call for concrete actions, such as more frequent forest patrols, firm and transparent law enforcement, and ongoing environmental education. They also stress the importance of improving infrastructure, such as village roads damaged by logging activities, which hinder agricultural distribution.

As noted by Mr. Jamaluddin Berutu, the community hopes that the damage caused by illegal logging can be addressed promptly, including road repairs and economic empowerment of farmers, to reduce reliance on income from illegal logging. Mrs. Mariani and Mrs. Diana also emphasized that proper road access and strict law enforcement are critical factors in preventing further forest degradation.

Therefore, synergy between the government and local communities must be strengthened through collaborative mechanisms that respond to the realities on the ground. The government should not merely act as a policy-maker but also serve as a facilitator for behavioral change, guiding communities toward more sustainable and equitable forest governance. Involving communities as active participants in forest monitoring and management not only enhances policy effectiveness but also fosters a sense of ownership and collective responsibility for preserving their local environment.

4. CONCLUSION AND RECOMMENDATIONS

Based on the research conducted in Kaban Tengah Village, STU Jehe Sub-district, Pakpak Bharat Regency, the following conclusions can be drawn:

1. The tangible impacts of illegal logging on the lives of the community and the environment in Kaban Tengah Village include ecological damage such as increased risk of landslides and loss of forest cover, disruption of village infrastructure—particularly main connecting roads—and economic losses due to damaged agricultural land and hindered distribution of harvests. Although the government and law enforcement agencies have undertaken various efforts such as forest patrols, provision of agricultural assistance, and inter-agency conservation cooperation, their implementation on the ground remains uneven and has yet to address the root causes comprehensively. Existing programs tend to be sectoral in nature and have not adequately considered the specific needs of the local community, such as the predominance of farming as the main livelihood and the community's limited capacity to manage the aid provided.
2. Several obstacles are faced by law enforcement agencies in applying sanctions against illegal logging violations in Kaban Tengah Village. These include limited human resources, inadequate monitoring facilities, poor infrastructure, and lengthy, bureaucratic legal processes. In addition, the low level of legal awareness among community members and the involvement of local residents in illegal logging practices further complicate law enforcement efforts. Legal enforcement against illegal logging activities has not been effectively implemented in accordance with the Forestry Law. In Kaban Tengah Village, legal enforcement remains largely formalistic and has yet to address the root causes of the problem.

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