



Forest Crime Law Enforcement and the Authority of Forest Police in North Minahasa, North Sulawesi

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Article Info

Article History:

Received January 3, 2026

Revised January 20, 2026

Accepted: February 5, 2026

Keywords:

Forest Crime, Forest Police Authority, Illegal Logging, Forest Destruction Law, Enforcement.

Abstract

Forest destruction remains a critical legal and environmental challenge in Indonesia, particularly where illegal logging, forest burning, unauthorized mining, and unlawful plantation activities threaten sustainable forest governance. This study examines the authority of Forest Police in enforcing criminal law against forest destruction in North Minahasa, North Sulawesi. The research applies a normative legal method supported by limited empirical information from relevant forestry institutions. Legal materials were examined through statutory, conceptual, and qualitative juridical analysis, focusing on forestry legislation, environmental law, criminal procedure, and regulations concerning Forest Police and Civil Servant Investigators. The findings show that Indonesian forestry law categorizes forest destruction into multiple criminal offences, including damaging forest-protection facilities, illegal timber harvesting, transporting forest products without valid documents, unlawful mining, forest burning, document falsification, corporate timber laundering, obstruction of enforcement, and abuse of authority by officials. Law No. 18 of 2013 substantially expands criminal liability by addressing organized forest crime, corporate involvement, illicit financing, and misuse of forest permits. Forest Police hold pre-emptive, preventive, and repressive authority, including patrol, document inspection, evidence collection, arrest in flagrante delicto, and investigation when appointed as Civil Servant Investigators. Effective enforcement depends on coordinated investigation with the National Police, procedural compliance, and strengthened institutional capacity.

Introduction

Forests represent one of the most important strategic natural resources in Indonesia because they function not only as economic assets but also as ecological systems that sustain environmental balance, biodiversity conservation, climate stability, and social welfare. Indonesia possesses one of the largest tropical forest areas in the world, and these forests contribute significantly to water regulation, erosion control, carbon absorption, and habitat preservation for diverse species. In addition, forests provide timber and non-timber products that support state revenue and local community livelihoods. The constitutional foundation for forest governance in Indonesia is reflected in Article 33 paragraph (3) of the 1945 Constitution, which states that natural resources are controlled by the state and utilized for the greatest prosperity of the people. This constitutional principle establishes that forest management is not merely an economic activity but also a legal obligation of the state to ensure sustainability, justice, and environmental protection (Hoops, 2022; Prins et al., 2023).

The importance of forests has increasingly become a major legal and environmental concern due to the continuous rise of forest destruction in various regions of Indonesia (Harly, 2023; Pulhin et al., 2024). Deforestation, illegal logging, forest burning, unauthorized mining, and unlawful conversion of forest land into plantations continue to threaten sustainable forest governance. Forest degradation not only reduces environmental quality but also generates severe social and economic consequences such as floods, landslides, biodiversity loss, ecosystem imbalance, and declining livelihoods for forest-dependent communities (Djafar et al., 2023). Reports concerning Indonesian forestry governance have consistently shown that forest destruction is strongly connected with weak law enforcement, illegal economic interests, permit abuse, and organized criminal activity operating within forest areas (Dekiwati, E. S. (2022; Wuryandari et al., 2022; Berenschot et al., 2023; Wijayanto et al., 2022). Consequently, forestry issues in Indonesia can no longer be viewed solely from an environmental perspective because they also involve criminal law, administrative law, governance accountability, and institutional effectiveness.

The problem of forest destruction is particularly significant in North Sulawesi, including North Minahasa Regency, where substantial forest areas continue to experience ecological degradation. Forest areas in North Sulawesi consist of conservation forests, protected forests, limited production forests, permanent production forests, and convertible production forests that possess important ecological and economic functions. However, increasing exploitation of forest resources has contributed to damaged forest conditions in several areas of North Minahasa. Illegal logging, unauthorized land clearing, transportation of timber without legal documentation, and forest encroachment have become persistent challenges for forestry authorities and law-enforcement institutions. These activities frequently occur in remote forest regions where supervision remains limited, thereby creating opportunities for organized forest crime networks to operate more effectively (Fassnacht et al., 2024; Hoffman et al., 2022; Pierson et al., 2024; Begazo & Vranken, 2025; Nursamsi et al., 2024). As a result, the protection of forest resources requires not only legal regulation but also institutional capacity capable of preventing and responding to forestry crimes comprehensively.

Forest destruction in Indonesia has evolved into a complex form of organized crime involving multiple actors and interconnected illegal activities. Illegal logging, for example, is not limited to unauthorized tree cutting but extends to transportation, processing, document falsification, illegal trade, financial transactions, and timber laundering practices intended to disguise illegal timber as lawful products (Villanueva et al., 2023; Mechik & Von, 2022; Sandhya et al., 2026). In many cases, forestry crimes involve cooperation between field actors, intermediaries, financiers, corporations, transport operators, and even public officials who misuse their authority to facilitate unlawful forest exploitation (Kilonzo & Bakta, 2025; Nduguta, 2025; Zvĩncã et al., 2025; Hatta et al., 2026). This complexity demonstrates that forestry crime is not merely an isolated environmental violation but rather a structured criminal activity capable of causing extensive ecological and state losses. Therefore, forest destruction requires an integrated enforcement approach that addresses both direct perpetrators and the broader networks supporting illegal forest exploitation.

The Indonesian legal system has established a substantial regulatory framework to address forest destruction and forestry-related crimes. Law No. 41 of 1999 concerning Forestry provides the principal legal basis for forest management, forest protection, and criminal sanctions against unlawful activities in forest areas. The law categorizes several acts as forestry crimes, including unauthorized timber harvesting, forest burning, unlawful occupation of forest land, transportation of forest products without valid documentation, unauthorized mining, and destruction of forest-protection facilities. Criminal sanctions under the law include imprisonment, fines, confiscation of equipment, and compensation for ecological damage

(Gavrilov, 2022; Al-Sherman & Aldabousi, 2024). However, the continuing occurrence of forest destruction demonstrates that the existence of statutory provisions alone is insufficient without effective implementation and institutional enforcement mechanisms.

The enactment of Law No. 18 of 2013 concerning the Prevention and Eradication of Forest Destruction further strengthened Indonesia's legal response to forestry crimes. This law expanded the scope of criminal liability by addressing organized forest crime, illegal timber financing, permit misuse, corporate involvement, timber laundering, falsification of legality documents, and obstruction of law enforcement. The law also introduced stricter sanctions for corporations and organized criminal groups involved in forest destruction activities. Through this development, Indonesian forestry law shifted from a conventional approach focused primarily on direct perpetrators toward a broader enforcement model targeting networks, financiers, corporations, and officials responsible for facilitating illegal forest exploitation (Berenschot et al., 2023; Cetera & Negara, 2025). This expansion reflects recognition that forest destruction often involves organized systems of illegal economic activity rather than individual violations alone.

Within this legal framework, Forest Police possess a central institutional role in protecting forest areas and enforcing forestry law. Indonesian forestry regulations define Forest Police as specialized officials within forestry institutions who are granted authority to conduct forest protection and forestry law enforcement activities. Their duties include safeguarding forest areas, monitoring forest-product transportation, conducting patrols, collecting evidence, receiving reports, and responding to forestry offences (Dekiawati, 2022; Musafir et al., 2025). The role of Forest Police is particularly important because forestry crimes frequently require technical expertise concerning forest boundaries, timber legality documents, conservation regulations, and ecological conditions that may not be fully understood by ordinary law-enforcement officers.

The authority of Forest Police is generally exercised through pre-emptive, preventive, and repressive functions. Pre-emptive authority involves legal education, public awareness programs, and community guidance intended to reduce the possibility of forestry crimes. Preventive authority includes patrols, guarding forest areas, identifying threats, and monitoring activities within forest regions. Repressive authority involves law-enforcement actions such as securing evidence, inspecting transport documents, arresting suspects caught in the act, and supporting criminal investigations (Ifeanyichukwu et al., 2023; Wexler, 2024). These functions indicate that Forest Police operate not only as security officers but also as specialized environmental law-enforcement actors responsible for maintaining sustainable forest governance.

In addition to their protective role, certain Forest Police officers may also function as Civil Servant Investigators authorized to investigate forestry crimes. Indonesian forestry legislation grants investigative authority to forestry civil servants to examine reports, inspect persons or legal entities suspected of forest destruction, conduct searches and seizures, examine documents, summon witnesses, and prepare investigation reports. This authority reflects the specialized nature of forestry crimes, which often involve technical evidence related to forest permits, timber origin, protected areas, and environmental damage (Koningisor, 2023). Nevertheless, forestry investigations must still operate within the broader criminal justice system through coordination with the National Police and prosecutors to ensure procedural legality and case validity.

The effectiveness of forestry law enforcement cannot be separated from broader theories concerning legal systems and institutional enforcement. Licht (2024) explains that law functions through the interaction of legal substance, legal structure, and legal culture. In the

context of forestry law, legal substance refers to forestry statutes and criminal regulations, legal structure refers to institutions responsible for enforcement, and legal culture concerns public awareness and compliance regarding forest protection. Similarly, Alhalalmeh & Al-Tarawneh (2025) argues that law enforcement represents the harmonization of legal norms and actual social behavior, meaning that enforcement effectiveness depends not only on written law but also on institutional performance and social participation. These perspectives demonstrate that successful forestry law enforcement requires coordination among legal institutions, community participation, and consistent implementation of legal norms.

Despite the existence of extensive legal regulations and institutional authority, forest destruction continues to occur in many Indonesian regions, including North Minahasa. This condition indicates a persistent gap between normative legal provisions and practical enforcement effectiveness. Weak supervision, limited personnel, insufficient coordination, remote forest geography, corruption risks, and organized criminal networks often reduce the effectiveness of forest protection measures (Paredes et al., 2024; von et al., 2025; Phyo et al., 2026). Consequently, examining the authority of Forest Police and the implementation of forestry law enforcement becomes increasingly important for understanding how Indonesian forestry law operates in practice. The issue is not only whether legal authority formally exists, but also whether that authority can be effectively implemented to prevent forest destruction and ensure sustainable forest governance.

This study focuses on analyzing the authority of Forest Police in enforcing criminal law against forest destruction in North Minahasa Regency, North Sulawesi. The discussion emphasizes the forms of forestry crimes regulated under Indonesian law, the institutional authority of Forest Police, and the implementation of forestry law enforcement within the broader criminal justice system. The study contributes to forestry law scholarship by examining how specialized forestry enforcement operates within regional practice and how institutional coordination influences the effectiveness of forest protection efforts in Indonesia.

Method

Research Design

This study employed a normative legal research design supported by limited empirical information to analyze the authority of Forest Police in responding to forest destruction crimes in North Minahasa Regency, North Sulawesi. The research was positioned within the discipline of legal science, particularly forestry law, environmental law, and criminal law enforcement, because the principal focus of the study was directed toward examining legal norms, statutory provisions, institutional authority, and enforcement mechanisms related to forest protection. Normative legal research was selected because the study emphasized the analysis of written law, legal doctrines, legal principles, and regulatory frameworks rather than statistical testing or experimental measurement. In legal scholarship, normative research functions to examine the consistency, structure, interpretation, and application of positive law in addressing specific legal issues. This approach was considered appropriate because the research sought to clarify the legal authority of Forest Police, the classification of forestry crimes, and the procedural relationship between forestry investigators and other criminal justice institutions.

The study was also designed as library-based legal research because the primary source of analysis originated from statutory regulations, legal documents, scholarly literature, and institutional legal instruments governing forest protection and criminal enforcement. The library-research orientation enabled the study to systematically identify, interpret, and evaluate legal rules concerning forest destruction, forest governance, criminal sanctions, and the enforcement authority granted to Forest Police under Indonesian law. This design was

important because the issue of forest destruction involves not only environmental concerns but also legal interpretation, institutional coordination, and procedural implementation within the criminal justice system.

Research Approaches

This study applied several complementary legal-research approaches, namely the statutory approach, conceptual approach, and analytical approach. The statutory approach was used to examine the legal framework governing forestry protection and law enforcement in Indonesia. Through this approach, the study analyzed relevant legal instruments, including the 1945 Constitution of the Republic of Indonesia, Law No. 41 of 1999 concerning Forestry, Law No. 18 of 2013 concerning the Prevention and Eradication of Forest Destruction, Government Regulation No. 45 of 2004 concerning Forest Protection, Government Regulation No. 60 of 2009, Government Regulation No. 28 of 1985, and Minister of Forestry Regulation No. P.75/Menhut-II/2014 concerning Forest Police. These regulations were examined to identify the legal scope of forestry offences, institutional authority, criminal sanctions, investigative powers, and procedural coordination mechanisms involving Forest Police, Civil Servant Investigators, and the National Police.

The conceptual approach was employed to clarify and interpret central legal concepts relevant to the study. These concepts included forest, forest area, forest destruction, forestry crime, criminal sanction, investigative authority, special police authority, and environmental law enforcement. The use of a conceptual approach was necessary because forestry law contains technical and doctrinal concepts that require legal interpretation to ensure analytical consistency. In addition, the study adopted several theoretical perspectives concerning law enforcement and legal systems in order to strengthen the analytical framework. Friedman's legal-system theory was used to explain the interaction between legal substance, legal structure, and legal culture in forestry enforcement. Meanwhile, Soekanto's theory of law enforcement was used to understand enforcement as the harmonization of legal norms, institutional conduct, and social behavior. These theoretical perspectives assisted the study in evaluating whether the existing forestry legal framework has been effectively implemented in practice.

The analytical approach was applied to assess the relationship between legal norms and institutional enforcement mechanisms. Through this approach, the study examined whether the legal authority granted to Forest Police under Indonesian law is sufficient to prevent and respond to forest destruction crimes effectively. The analytical process also focused on identifying legal gaps, procedural limitations, institutional overlaps, and coordination challenges among forestry investigators, National Police investigators, prosecutors, and forestry institutions. This approach enabled the study to move beyond descriptive legal explanation toward a more critical evaluation of forestry law enforcement effectiveness.

Types and Sources of Legal Materials

The study utilized primary, secondary, and tertiary legal materials as the principal sources of data. Primary legal materials consisted of authoritative legal instruments that possess binding legal force. These materials included constitutional provisions, forestry legislation, environmental legislation, criminal procedure regulations, government regulations, ministerial regulations, and other formal legal instruments relevant to forest protection and forestry crime enforcement. The primary legal materials functioned as the core basis for identifying the authority of Forest Police and the legal classification of acts categorized as forest destruction crimes.

Secondary legal materials consisted of scholarly writings and academic references relevant to forestry law, criminal law, environmental governance, and law enforcement. These materials

included textbooks, scientific journals, legal commentaries, research reports, conference proceedings, and academic publications discussing forestry crime, environmental protection, criminal sanctions, and institutional law enforcement. Secondary legal materials were used to interpret statutory provisions, compare legal opinions, and situate the study within broader academic discussions concerning forestry governance and environmental criminal law.

Tertiary legal materials were also used to support the research process. These materials included legal dictionaries, encyclopedias, terminology references, and supporting documentation that assisted in clarifying technical legal concepts and terminologies encountered in forestry law and criminal enforcement discussions. The inclusion of tertiary materials was important for ensuring conceptual precision and consistency throughout the analysis.

In addition to normative legal materials, the study incorporated limited empirical information obtained from competent forestry-related institutions and relevant officials in North Minahasa Regency. This empirical information functioned as supporting data intended to enrich the normative analysis by providing insight into the practical implementation of forestry law enforcement. The empirical component was not intended to generate statistical generalization but rather to provide contextual understanding regarding institutional coordination, enforcement obstacles, and operational practices related to forest-crime handling in the region.

Data Collection Techniques

Data collection in this study was conducted through documentary study and interviews. Documentary study constituted the primary method of data collection because the research focused principally on legal norms and written legal materials. The documentary process involved collecting, reviewing, classifying, and analyzing statutory regulations, government policies, ministerial regulations, court-related legal references, academic literature, journals, institutional reports, and other written sources relevant to forestry law and forest-crime enforcement. This technique enabled the study to systematically identify the legal basis of Forest Police authority, the forms of forestry crimes recognized under Indonesian law, and the procedural framework governing forestry investigations.

The documentary study also facilitated examination of the historical development of forestry criminal regulation in Indonesia, particularly the transition from conventional forestry regulation under Law No. 41 of 1999 to the more comprehensive enforcement framework established under Law No. 18 of 2013. Through this process, the study was able to analyze the expansion of criminal liability from individual offenders toward organized criminal actors, corporations, permit abusers, and financial facilitators involved in forest destruction activities.

Interviews were conducted as a supporting method to obtain practical information from individuals considered competent in forestry law enforcement in North Minahasa Regency. Informants included forestry officials, institutional representatives, or parties possessing direct knowledge regarding the implementation of forestry protection and criminal enforcement mechanisms. The interviews were conducted in a semi-structured manner to allow flexibility in exploring issues related to institutional authority, procedural coordination, investigative practices, and operational constraints encountered by Forest Police and forestry investigators.

The purpose of the interviews was not to produce quantitative findings but to strengthen the normative analysis by connecting written legal provisions with their implementation in practice. Through this combination of documentary study and supporting interviews, the research was able to examine forestry law not only as a normative legal framework but also as an operational enforcement system functioning within a particular regional context.

Data Analysis Technique

The collected data were analyzed using qualitative juridical analysis. This method emphasized interpretation, systematization, comparison, and evaluation of legal norms and institutional practices related to forestry law enforcement. Qualitative juridical analysis was selected because the study aimed to understand the legal meaning, scope, and implications of statutory provisions concerning Forest Police authority and forest destruction crimes rather than to measure variables quantitatively.

The analytical process began with the classification of legal materials according to their substantive function, including constitutional foundations, forestry substantive law, criminal sanctions, investigative authority, procedural coordination, and institutional enforcement mechanisms. After classification, the legal materials were interpreted systematically to identify relationships among statutory provisions and to assess how those provisions regulate forest protection and forestry law enforcement. Comparative analysis was also conducted among various legal instruments to evaluate consistency, overlap, and legal integration within the forestry regulatory framework.

The empirical information obtained from interviews was subsequently integrated into the normative analysis to illustrate how legal authority operates in practical enforcement situations. This integration allowed the study to identify discrepancies between normative legal authority and operational implementation, particularly concerning investigative coordination, evidence collection, procedural compliance, and institutional limitations faced in handling forest destruction cases in North Minahasa Regency.

The results of the analysis were interpreted comprehensively in order to formulate a coherent legal explanation regarding the authority of Forest Police and the effectiveness of forestry law enforcement under Indonesian law. Through this analytical method, the study sought to explain not only the formal legal structure governing forest protection but also the institutional and procedural factors influencing the practical implementation of forestry criminal enforcement in North Minahasa.

Result and Discussion

Forms of Crimes Categorized as Forestry Criminal Offences

The analysis of legal materials and supporting empirical information obtained from forestry-related institutions in North Minahasa demonstrates that forest destruction in Indonesia is regulated as a broad category of criminal offences rather than as a single unlawful act. The principal forms of forestry crime identified in this study include illegal logging, forest and land burning, unauthorized mining, unlawful conversion of forest areas into plantations, transportation and possession of forest products without legal documentation, use of heavy equipment within forest areas without authorization, and manipulation of forestry permits. These findings indicate that forestry crime is structurally complex because it combines ecological destruction, unlawful economic extraction, administrative violations, and criminal liability. This condition supports Zain's argument that forestry crime cannot be understood merely as environmental damage because it also generates economic, ecological, and socio-cultural consequences affecting state governance and local communities (Bilu et al., 2025). Similarly, Hamide et al. (2025) emphasizes that forestry law enforcement must be viewed within the broader context of environmental protection and criminal justice administration.

The empirical findings from interviews with forestry officials in North Minahasa further show that the operational patterns of forest crime have become increasingly organized and difficult to detect (Udin & Manam, 2024). Informants explained that illegal logging activities are rarely

conducted independently by local woodcutters alone. Instead, illegal timber extraction frequently involves coordinated networks consisting of field workers, transport operators, intermediaries, timber collectors, and buyers who distribute forest products outside the region. Forestry officers reported that timber transportation commonly occurs during nighttime or through alternative routes intended to avoid official checkpoints and patrol monitoring. In several cases, timber transported from forest areas was accompanied by incomplete or manipulated legality documents, making verification difficult during field inspections. These findings demonstrate that forestry crime has evolved beyond unauthorized tree cutting into a broader chain of illegal activities involving transportation, processing, documentation manipulation, and unlawful commercialization of forest products.

Interviews conducted with local forestry personnel also revealed that illegal forest exploitation in North Minahasa is frequently driven by economic pressures within communities located near forest areas. Limited employment opportunities and dependence on forest resources encourage certain community members to participate in illegal timber extraction activities despite awareness of criminal sanctions. According to several respondents, some local residents perceive illegal logging as an economic survival strategy rather than purely criminal behavior. This condition creates enforcement difficulties because punitive approaches alone are often insufficient to eliminate illegal forest activities. Forest Police officers noted that preventive measures such as public awareness programs and community education are regularly conducted, yet economic dependency on forest resources continues to influence the persistence of forest destruction in the region.

The study further finds that forestry crime in North Minahasa is not limited to direct ecological destruction but also involves administrative and institutional violations. Under Law No. 41 of 1999 concerning Forestry, several acts are expressly categorized as forestry crimes, including damaging forest-protection facilities, occupying forest areas unlawfully, cutting trees within prohibited buffer zones near rivers and water sources, conducting mining activities without ministerial authorization, transporting forest products without valid legality certificates, bringing heavy equipment into forest areas without permission, and burning forest land. These statutory provisions indicate that Indonesian forestry law criminalizes not only direct acts of forest destruction but also activities facilitating unlawful forest exploitation. However, field interviews suggest that enforcement implementation remains inconsistent because certain violations are difficult to monitor continuously, particularly in remote forest regions where patrol access and supervision capacity remain limited.

The findings also demonstrate that the operational complexity of forestry crime often creates coordination problems among enforcement institutions. Forest Police officers interviewed during the study explained that cases involving transportation of illegal timber frequently require coordination with National Police investigators because suspects and evidence may move across district boundaries. In practice, differences in institutional priorities, administrative procedures, and investigative authority occasionally delay case processing. Several respondents noted that Forest Police possess technical expertise regarding forest boundaries and timber legality verification, while National Police investigators possess broader criminal-procedure authority. Although coordination mechanisms formally exist under Indonesian criminal procedure, practical implementation sometimes encounters delays related to evidence transfer, case documentation, or procedural administration. These findings suggest that institutional coordination remains one of the major challenges affecting the effectiveness of forestry law enforcement in North Minahasa.

The criminal sanctions regulated under Law No. 41 of 1999 demonstrate that Indonesian forestry law adopts a strong deterrence approach. Intentional forest burning may result in

imprisonment of up to fifteen years and substantial financial penalties, while unlawful harvesting, transportation, or possession of illegal forest products may also result in severe imprisonment and fines. Furthermore, corporate actors involved in forestry crimes may face increased sanctions and confiscation of equipment used in criminal activities. Nevertheless, interviews with forestry enforcement personnel indicate that severe statutory sanctions do not automatically prevent recurring forest destruction. Respondents emphasized that enforcement effectiveness is frequently constrained by limited personnel, insufficient patrol vehicles, inadequate monitoring equipment, and the extensive geographical coverage of forest areas requiring supervision. In several instances, forestry officers explained that illegal logging activities resumed shortly after enforcement operations because monitoring capacity could not be maintained continuously.

The enactment of Law No. 18 of 2013 concerning the Prevention and Eradication of Forest Destruction significantly broadened the scope of criminalized conduct by targeting organized forestry crime networks. The law criminalizes unlawful timber transportation, use of timber derived from illegal logging, falsification of legality documents, misuse of transport certificates, unauthorized mining and plantation activities within forest areas, and financial support for illegal forest exploitation. Importantly, the law also recognizes corporate liability and criminalizes officials who misuse licensing authority or facilitate illegal forestry activities. The empirical findings of this study indicate that these expanded legal provisions are highly relevant in North Minahasa because forestry crimes frequently involve interconnected actors rather than isolated offenders. Forestry personnel interviewed during the research explained that identifying financiers, permit manipulators, or higher-level organizers remains substantially more difficult than apprehending field workers directly involved in timber cutting or transportation.

A further important finding concerns the persistence of forest destruction despite the existence of severe criminal sanctions and expanded legal authority. Interviews with forestry institutions indicate that enforcement obstacles are strongly influenced by operational limitations, geographical conditions, and socio-economic pressures surrounding forest areas. Forest Police officers reported difficulties in conducting regular patrols due to limited transportation facilities and insufficient personnel compared to the size of protected forest regions requiring supervision. In addition, respondents noted that some illegal logging activities benefit from informal protection networks or prior information regarding enforcement operations, making arrests more difficult. Although no direct evidence of corruption was formally identified in the interviews, several informants acknowledged that weak supervision and potential abuse of authority remain risks within forestry governance systems. These findings support broader arguments in environmental-crime studies that severe legal sanctions alone are insufficient without strong institutional integrity, operational resources, and effective inter-agency coordination.

The study therefore demonstrates that forestry crime in North Minahasa should be understood as both a legal-enforcement problem and a governance challenge involving economic, institutional, and social dimensions. While Indonesian forestry legislation already provides comprehensive criminal provisions regulating forest destruction, the practical effectiveness of enforcement depends heavily on institutional capacity, coordination mechanisms, community participation, and supervision systems. The novelty of this study lies not merely in describing statutory regulations but in demonstrating how forestry crimes operate within localized enforcement realities in North Minahasa. The findings show that forest destruction persists not because of the absence of legal sanctions, but because enforcement institutions continue to face operational limitations, coordination challenges, economic pressures within surrounding communities, and difficulties in targeting organized networks behind illegal forest exploitation.

Legal Provisions on Forest Police Authority against Forest Destruction Offenders

The analysis of legal materials and supporting empirical information demonstrates that Forest Police occupy a strategic position in forestry law enforcement in North Minahasa Regency. Government Regulation No. 45 of 2004 and Minister of Forestry Regulation No. P.75/Menhut-II/2014 define Forest Police as specialized officials within forestry institutions who are authorized to exercise particular police powers in the field of forestry protection and conservation. Their duties include securing forest areas, protecting forest products and wildlife, monitoring forest utilization, and safeguarding the legal rights of the state and communities related to forest management. In practice, this institutional role is highly important because forestry crimes frequently occur in remote forest regions requiring officers who possess technical understanding of forest boundaries, timber legality documents, conservation classifications, and environmental protection procedures (Iordăchescu & Vasile, 2023; Shytov, 2023; Paredes et al., 2024).

The empirical findings of this study indicate that the practical implementation of Forest Police authority in North Minahasa faces substantial operational challenges. Interviews with forestry officers revealed that the number of Forest Police personnel remains limited compared to the extensive forest areas requiring supervision. Several respondents explained that patrol coverage cannot be conducted continuously because available personnel and transportation facilities are insufficient to monitor all vulnerable forest regions simultaneously. As a result, illegal logging activities often occur in isolated areas with minimal supervision, particularly during nighttime or in locations accessible through unofficial routes. These findings demonstrate that although forestry regulations provide broad authority to Forest Police, enforcement effectiveness is strongly influenced by institutional capacity and operational resources.

The authority of Forest Police is generally exercised through pre-emptive, preventive, and repressive functions. Pre-emptive authority includes legal education, public-awareness campaigns, and community guidance intended to prevent forest-related crimes before they occur. Preventive authority includes routine patrols, guarding forest areas, identifying vulnerable locations, and monitoring transportation routes used for forest products. Repressive authority includes conducting enforcement operations, collecting information, securing evidence, arresting suspects caught in the act, and responding to forest fires or wildlife disturbances. Article 51 paragraph (2) of Law No. 41 of 1999 further authorizes Forest Police to inspect transport documents, receive reports, collect evidence, arrest offenders caught in flagrante delicto, and prepare official reports concerning forestry offences.

Nevertheless, interviews with forestry personnel in North Minahasa indicate that preventive and repressive functions are often constrained by practical realities in the field. Forestry officers explained that patrol frequency is heavily dependent on budget allocation, fuel availability, operational vehicles, and geographical accessibility. In several forest areas, difficult terrain and limited infrastructure reduce the ability of Forest Police to conduct rapid enforcement responses. Respondents also noted that illegal timber transportation sometimes uses routes outside official monitoring areas, making detection more difficult. Consequently, Forest Police frequently rely on information from local communities or inter-agency coordination to identify suspicious activities. These findings show that enforcement effectiveness depends not only on formal authority but also on logistical support, community participation, and surveillance capacity.

The study also finds that Forest Police play an important role in community-based forest protection efforts. Several interview respondents explained that forestry officers regularly conduct outreach activities in villages located near forest areas to educate communities regarding forestry regulations and environmental risks associated with illegal logging and

forest burning. According to respondents, these preventive programs are necessary because many forest-related offences are influenced by economic pressures and limited employment opportunities in surrounding communities. Some local residents continue to engage in illegal timber extraction because it provides immediate financial benefits despite awareness of criminal sanctions. This condition demonstrates that forest destruction in North Minahasa cannot be understood solely as a legal-enforcement problem but must also be viewed as a socio-economic issue connected with rural livelihoods and resource dependency.

The findings further show that Forest Police may acquire broader investigative authority when appointed as Civil Servant Investigators under Article 77 of Law No. 41 of 1999 and Article 30 of Law No. 18 of 2013. These provisions authorize forestry investigators to examine reports, inspect persons or corporations suspected of forest destruction, conduct searches and seizures, collect documentary evidence, summon witnesses, arrest suspects, and prepare investigation reports. This investigative authority is highly significant because forestry crimes often involve technical evidence related to permit legality, forest-product certification, ecological damage, and transportation documentation that require specialized forestry expertise.

However, the empirical findings reveal that investigative implementation frequently encounters coordination challenges with National Police investigators. Forestry officers interviewed during the study explained that forestry investigators must coordinate with police investigators during case registration, evidence transfer, suspect handling, and case-file submission. Although this coordination mechanism is intended to maintain procedural legality within the integrated criminal justice system, several respondents indicated that differences in institutional procedures and administrative requirements occasionally slow the investigation process. In some cases, forestry investigators possess stronger technical understanding of forest offences, while police investigators possess broader criminal-procedure authority. This division of authority sometimes creates procedural overlap or delays, particularly when handling cases involving transportation across jurisdictions or organized illegal logging networks.

A further practical obstacle identified through interviews concerns evidence collection and verification. Forestry officers noted that illegal logging cases frequently involve falsified transport permits, manipulated legality certificates, or incomplete administrative documentation. Verifying the origin and legality of timber products therefore requires coordination with multiple agencies and technical examination of forestry documents. Respondents also explained that suspects involved in illegal timber transportation are often field workers or drivers rather than financiers or organizers behind the operation. As a result, enforcement efforts frequently succeed in apprehending lower-level actors while the larger criminal networks financing illegal forest exploitation remain difficult to identify and prosecute. This finding suggests that forestry enforcement in North Minahasa still faces limitations in addressing organized and financially supported forest-crime structures.

The study additionally demonstrates that severe criminal sanctions have not fully prevented recurring forest destruction in North Minahasa. Interviews with forestry institutions indicate that weak supervision in remote forest areas, limited operational resources, and economic dependency on forest resources continue to influence illegal activities. Several respondents acknowledged that certain illegal logging operations appear to receive prior information regarding patrol schedules or enforcement activities, allowing perpetrators to avoid direct detection. Although the study did not identify direct evidence of corruption, forestry officers recognized that abuse of authority and weak monitoring systems remain potential risks affecting forestry governance. These findings support the argument that forestry law

enforcement effectiveness depends not only on statutory severity but also on institutional integrity, supervision systems, and consistent enforcement practices.

The results therefore indicate that Forest Police authority in North Minahasa functions within a broader framework of operational, institutional, and socio-economic challenges. While Indonesian forestry legislation already grants extensive authority to Forest Police and forestry investigators, practical enforcement remains constrained by limited personnel, inadequate operational facilities, coordination difficulties, geographical obstacles, and community-economic pressures surrounding forest areas. The novelty of this study lies in demonstrating how Forest Police authority operates within localized enforcement realities rather than merely describing statutory provisions. The findings show that effective forestry law enforcement requires not only legal authority but also stronger institutional coordination, adequate operational resources, improved supervision systems, and preventive strategies addressing the socio-economic conditions contributing to forest destruction in North Minahasa.

The Effectiveness of Forest Police Authority in Forest-Crime Enforcement

The results demonstrate that forestry crime in Indonesia is a systemic phenomenon that cannot be adequately addressed through a narrow understanding of illegal tree cutting. The offences identified in Law No. 41 of 1999 and Law No. 18 of 2013 show that forest destruction involves a sequence of actions that may begin with unlawful access to forest areas but continue through timber extraction, document falsification, transport, processing, financing, marketing, and laundering of illegal proceeds. This finding corresponds with Friedman's conception of law as a system consisting of legal substance, legal structure, and legal culture (Flora & Erawati, 2023). The legal substance already contains broad prohibitions and severe sanctions; however, the legal structure must be capable of investigating complex networks, and legal culture must support compliance, reporting, and community participation (Apaut & Saunoh, 2025).

The classification of forestry crimes under Law No. 41 of 1999 shows the state's effort to protect forests as ecological, economic, and legal assets. By criminalizing conduct such as forest burning, unauthorized timber harvesting, unlawful mining, transport without documents, and possession of illegal forest products, the law links environmental protection with criminal deterrence. Yet, the later development of Law No. 18 of 2013 indicates that the earlier framework was insufficient to address organized forest destruction. The 2013 law expands liability toward organizers, financiers, corporations, document falsifiers, permit abusers, and officials who misuse authority. This expansion is significant because field-level actors often represent only the visible layer of forestry crime, while the economic benefits may flow to financiers, traders, corporate actors, or corrupt officials. In this sense, forestry law has moved from a conduct-based model toward a network-based model of criminalization.

The sanctions identified in the results also show a strong deterrent orientation. Imprisonment of up to fifteen years for intentional forest burning, fines reaching billions of rupiah for illegal forest-product possession, and corporate fines reaching Rp1 trillion under Law No. 18 of 2013 indicate that forestry crime is treated as a serious offence. However, Goldstein's theory of total, full, and actual enforcement suggests that severe statutory sanctions do not automatically produce effective enforcement (Moin, 2024). Total enforcement is rarely achievable because investigators are constrained by procedural requirements, evidence rules, personnel, time, budget, and institutional coordination. Therefore, the central issue is not whether the legal framework contains sanctions, but whether enforcement institutions can transform normative authority into actual case processing and successful prosecution (Egger et al., 2024).

The Forest Police are institutionally important because forestry offences often occur in locations and contexts that ordinary law-enforcement officers may not fully understand. Forest

boundaries, timber legality documents, protected species, forest-function classifications, and the ecological consequences of forest destruction require specialized knowledge. Forest Police therefore function as frontline legal actors whose work connects environmental protection, administrative supervision, and criminal enforcement. Their pre-emptive and preventive roles are especially important in regions where forest destruction may be driven by economic pressure, limited livelihood alternatives, weak public awareness, or local tolerance of illegal forest use. In this respect, enforcement should not be reduced to punishment after the occurrence of crime; it must include legal education, community engagement, patrols, and early detection.

The repressive authority of Forest Police is also crucial. The ability to inspect transport documents, secure evidence, arrest perpetrators caught in the act and prepare incident reports allows Forest Police to intervene at the earliest stage of forest-crime detection. This is particularly important in illegal logging cases, where timber and transport vehicles may move quickly across administrative boundaries. Evidence may disappear if officers cannot act immediately. Nevertheless, the exercise of repressive authority must remain procedurally disciplined. The legitimacy of forestry enforcement depends not only on the discovery of forest crime but also on the legality of arrest, seizure, documentation, and transfer of evidence. If evidence is improperly collected or procedural rules are ignored, prosecution may be weakened.

The appointment of Forest Police as Civil Servant Investigators strengthens specialized enforcement capacity, but it also creates a coordination requirement. Under Indonesian criminal procedure, Civil Servant Investigators operate under the coordination and supervision of the National Police. This arrangement is consistent with the integrated criminal justice system, which places police, prosecutors, and courts within a procedural chain (Lestarini, 2023). The study's finding that forestry civil servant investigators must coordinate with police investigators is therefore not an institutional limitation alone; it is a safeguard for procedural validity (Hanifah & Adil, 2025; Hutajulu, 2025). Coordination ensures that forestry expertise is integrated with criminal-procedure standards.

The implications for North Minahasa are significant because forest destruction in the region occurs within a broader provincial landscape of conservation, protected, production, and convertible forest areas. The reported forest damage in North Minahasa, including severely critical, critical, and lightly damaged areas, requires enforcement that can address both direct physical destruction and organized exploitation. The legal framework provides Forest Police with authority to patrol, inspect, receive reports, collect evidence, arrest suspects caught in the act, and investigate when appointed as Civil Servant Investigators. However, the effectiveness of this authority depends on operational capacity, frequency of patrols, accuracy of boundary identification, access to transport-document verification, and coordination with police investigators and prosecutors.

A key implication is that forest-crime enforcement should prioritize not only the visible perpetrators but also the broader structure that enables forest destruction. The research notes indicate that earlier enforcement patterns often reached field perpetrators such as cutters, transport workers, or vehicle owners, while masterminds were difficult to identify. Law No. 18 of 2013 provides stronger legal tools to address this problem by criminalizing organizing, financing, laundering, document falsification, corporate involvement, and official abuse of authority. In practice, this requires investigators to follow financial flows, examine company records, verify permits, inspect transport documents, and investigate the relationship between field actors and higher-level beneficiaries. Without such investigative depth, enforcement risks punishing low-level actors while leaving the main economic drivers of forest crime untouched.

The study also indicates that forest destruction should be approached as both a legal and environmental governance issue. Criminal enforcement is necessary, but it should be linked with administrative sanctions, compensation, confiscation, and restoration. Law No. 41 of 1999 already provides for compensation according to the level of damage and recovery needs, while Law No. 18 of 2013 provides administrative sanctions against corporate actors, including government coercion, coercive money, and license revocation. These measures are consistent with the view that criminal sanctions are reactive, while administrative and restorative measures may protect society and prevent further harm (Kärner, 2022). In forestry cases, the ultimate objective is not only to punish perpetrators but also to maintain forest functions, restore damaged areas, and prevent repeated offences.

The most critical issue emerging from the analysis is the need for stronger coordination between Forest Police, Civil Servant Investigators, National Police investigators, prosecutors, and local forestry institutions. Coordination is required from the initial report through investigation, evidence collection, case-file submission, and prosecution. Article 138 of the Criminal Procedure Code requires prosecutors to examine case files and notify investigators whether the file is complete, with further completion required when necessary. This procedural requirement means that weak documentation, incomplete evidence, or poor coordination may delay or weaken forestry cases. Therefore, improving enforcement requires not only more patrols but also better case-building capacity.

The broader legal implication is that forestry enforcement must integrate substance, structure, and culture. Substantive law has already developed through Law No. 41 of 1999, Government Regulation No. 45 of 2004, Government Regulation No. 60 of 2009, Ministerial Regulation No. P.75/Menhut-II/2014, and Law No. 18 of 2013. The structural challenge lies in ensuring that Forest Police and Civil Servant Investigators can work effectively with the National Police and prosecutors. The cultural challenge lies in building community awareness, reducing tolerance for illegal forest exploitation, and encouraging public participation in monitoring forest areas. Conception of law enforcement suggests, legal enforcement is not merely mechanical application of written rules but the realization of justice, social benefit, and public order in concrete social life (Sihombing, 2024).

Conclusion

This study concludes that forest destruction in North Minahasa Regency constitutes a complex and organized forestry crime involving illegal logging, unlawful transportation of timber, permit manipulation, forest burning, and other activities causing ecological and economic harm. Although Indonesian forestry law, particularly Law No. 41 of 1999 and Law No. 18 of 2013, provides broad authority and severe sanctions against forest offenders, the effectiveness of enforcement remains constrained by limited personnel, inadequate operational facilities, difficult geographical conditions, weak supervision, coordination challenges between Forest Police and National Police investigators, and socio-economic pressures within communities surrounding forest areas. The findings show that Forest Police play a strategic role through preventive, pre-emptive, and repressive functions; however, stronger institutional coordination, improved enforcement capacity, and community-based preventive approaches are necessary to ensure more effective forest protection and sustainable forestry governance in North Minahasa Regency.

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