

Problem structuring illegal logging policies in West Aceh

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Article History:

Received: 31/10/2022

Revised: 17/03/2023

Accepted: 14/04/2023

Published: 02/05/2023

Abstract

The rise of illegal logging practices requires the government to be more serious in tackling this problem with policies as an effort to control illegal logging without permits. This study aims to analyze the effectiveness of the implementation of illegal logging policies in West Aceh District using the structuring problem approach and to find out the causes and efforts made. The method used is a case study approach, data collection techniques using triangulation. The results of the study traced if the main causes of illegal logging in terms of structuring the problem of inappropriate program policies designed by the government included supervision, socialization, and policies for providing assistance to community. Judging from the ROCCIPI theory, indicates that forest utilization policies have not been focused on the economic conditions of the community so that it opens up gaps for individuals who carry out illegal logging, lack of solid communication between stakeholders, and capacity problems (lack of organizing resources). Therefore, it is necessary to provide alternative regulatory solutions that take into account the community's economy, strengthen communication between stakeholders, and approach the community so that they do not carry out forest destruction followed by the right alternative solutions offered to the community. **Keywords:** Illegal logging, Problem-structuring, Public policy

How to cite: Safrida, S. Maulida, D., Latif, I.R., Safrida, N. (2023) Problem structuring illegal logging policies in West Aceh. *Publisia: Jurnal Ilmu Administrasi Publik*, 8(1), 35-52
<https://doi.org/10.26905/pjiap.v8i1.8876>

1. Introduction

Forests play a crucial role in safeguarding ecosystems and serve as a vital resource for meeting the needs of local communities. Forests have become an integral component of human existence due to their significant contributions towards

preserving human life and the natural environment. Therefore, it is imperative that forest usage is conducted in a continuous and sustainable manner through various community based forest management practices (Prajanti et al., 2015; Tomao et al., 2020). The engagement of the community is a crucial element in the prevention of illicit log-

ging activities (Thompson & Magrath, 2021a). Upon acknowledging the significance of upholding forest sustainability, the government endeavors to institute protective measures through policies, typically enshrined in the 1945 Constitution Article 33, Paragraph 3. This provision stipulates that the state exercises control over the earth, water, and their inherent natural resources with the aim of maximizing their utilization for the welfare of the populace”.

The management and utilization of forest products in Indonesia are currently plagued by violations that threaten the natural beauty of forests. Includes excessive exploitation of forest products or wood as the primary cause of erosion of primary forest areas in Indonesia, behind efforts to deforest the region. Even in 2021, 110 instances of illegal logging have been documented (Sani, 2022)

Aceh has been adversely affected by the issue of illegal logging, which has garnered significant attention from the central government. The year 2019 witnessed a significant loss of forest cover in Aceh, amounting to approximately 15,071 hectares, primarily attributed to the detrimental impact of illegal logging. The average daily forest loss during this period was estimated to be 41 hectares (Hanafiah, 2020). The Government of Aceh is responsible for managing Aceh’s forests, encompassing the stages of planning, implementation, utilization, and monitoring, as per the Law on the Government of Aceh No. 11 of 2006.

Furthermore, the Government of Aceh has implemented a set of policies, including Qanun Number 7 of 2016 on forestry, Governor of Aceh Regulation Number 20 of 2016 on forest and land fire control, and Regulation of the Governor of Aceh Number 10 of 2017 on the management of tertiary conflicts in forest areas, in addition to the aforementioned regulations. Despite the existence of a provincial policy, there is currently a lack of qanun, or regional regulation that specifically addresses the issue of illegal logging, including at the village level (Qanun gampong). To date, the issue of illegal logging has not been regarded as a pressing social concern that warrants prompt political intervention (Maryudi, 2016). The persistence of illegal logging activities indicates that the forest preservation policies implemented thus far have not effectively addressed the issue at hand.

As an area that has extensive forest, West Aceh District, West Aceh, has ± 274,472.24 hectares of forest, with a division consisting of ± 108,001 hectares of protected forest (HL), production forest (HP) of ± 4,648.77 hectares, and other user areas (APL) ±161,822.08 hectares. (ANTARA, 2015). Despite the presence of a protected forest area, the forested regions of West Aceh are still susceptible to illegal logging activities. Specifically, the districts of Woyla Barat, Pante Ceuremen, Pantan Reu, and Sungai Mas are

Table 1. Illegal logging case in West Aceh

Forest Zone	Forest Group	Date	Suspected (Person)	Theft	Source
Woyla Barat	Protected Forest	-	-	-	-
Pante Ceuremen	Protected Forest	29/08/2020	3	Logs	Serambinews.com Meulaboh
Pantan Reu	-	-	-	-	-
		16/05/2016	1	48 Meranti logs	TRIBRATA News, Meulaboh
		08/11/2018	3	22 wooden blocks	Aceh.tribunnews.com
Sungai Mas	Protected Forest	13/01/2020	1	40 Meranti logs	Antaranews.com
		21/07/2020	-	RC wood +/- 6,4573 m3	Aceh.tribunnews.com
		30/09/2021	-	Block wood 3,094 m3	Dlhk.acehprov.go.id

frequently targeted by illegal logging perpetrators. Table 1 displays the instances of unlawful logging that transpired in the West Aceh District.

Table 1 indicates that instances of illicit logging persist in the West Aceh over time. Even though protected forests are designated as such, they remain vulnerable to illegal logging activities. These activities have the potential to cause significant harm to the forest ecosystem and pose a risk to the well-being of local communities residing in the vicinity of the forest area.

Previous research on illegal logging has focused more on the involvement of a particular agency in addressing illegal logging issues, such as focusing on IFM (Independent Forest Monitoring) institutional organizations (Mbziban & Thchoudjen, 2021), forest police (Indahsari & Solihin, 2022; Rochdat et al., 2013), and forestry-related services (Alfaris et al., 2022).

The present study demonstrates novelty by prioritizing the examination of policies pertaining to illegal logging through the lens of problem structuring theory, thereby enabling a comprehensive analysis of the intricacies of the challenges encountered, including the economic predicaments experienced by the local populace. The local populace residing in the vicinity of the forest continue to rely heavily on forest resources, thereby resorting to illicit logging practices as a means of fulfilling their economic requirements. The implementation of policies aimed at curbing illegal logging has assumed a more profound and significant role in both the economic welfare of local communities and the broader societal context. In order to observe the synchronization and coordination in the implementation of policies, specifically pertaining to the Environment Service and Forest Management Unit (KPH) in Region IV Aceh, the District Government and local communities in West Aceh District have been involved.

This study endeavors to map the underlying causes of illegal logging in West Aceh and describe the government's efforts to address them. The Problem Structuring Theory of Policy Formulation by William Dunn, comprising four phases, namely problem search, problem defini-

tion, problem specification, and problem sensing, is utilized to systematically classify the challenges encountered in policy implementation (Dunn, 2016). Public policy theory is utilized by researchers in conjunction with the ROCCIPI method. This method encompasses a set of rules, opportunities, capacities, communications, interests, processes, and ideologies developed by Robert B. Seidman, Ann Seidman, and Nalin Abeysekere. The purpose of this approach is to examine the underlying reasons why policies may fail to achieve their intended outcomes (Seidman et al., 2002).

2. Literature Review

The act of illegal logging can be defined as the unregulated exploitation of natural resources within forested areas. This practice is in violation of established regulations and encompasses various stages of the timber industry, including logging, transportation, processing, and marketing of logs. (Ilma et al., 2022). The act of engaging in unauthorized logging activities can pose a significant risk, particularly for nations that possess equatorial woodlands (Lee et al., 2018; Sumarsono et al., 2022). The primary driver of tropical forest degradation globally is the unlawful felling of trees, which constitutes between 50% to 90% of the total timber extraction in tropical nations (Arcilla et al., 2015). The term "illegal logging" refers to the unauthorized felling of trees by various actors, including local individuals, external groups, institutions, or corporations, for personal profit or on behalf of others, without the requisite legal authorization (Felia & Kartika, 2019). The impact of illegal logging is typically more severe than that of legal logging operations due to the indiscriminate felling of trees without consideration for their regeneration or potential harm to the forest ecosystem. This practice renders forests susceptible to drought and fire hazards (Carvalho et al., 2020).

In fact, Presidential Instruction Number 4 of 2005 has been implemented in Indonesia to tackle the problem of illegal logging. Its objective

is to eradicate illegal logging in forest areas and prevent the circulation of illegally logged timber throughout the country. The requirement for a similar action is necessitated by both Law No. 32 of 2009 on the Protection and Management of the Environment (UU PPLH) and Law No. 18 of 2013 on the Prevention and Eradication of Forest Destruction.

To date, scholarly investigations on illegal logging have primarily concentrated on the legal dimension, specifically the normative implementation of laws in accordance with relevant regulations. Consequently, the evaluative aspect has been limited to scrutinizing the adherence of activities to legal provisions, including criminal law for perpetrators of illegal logging. Research has been conducted on the implementation of Law No. 41 of 1999 pertaining to forestry and Law No. 8 of 2013 pertaining to the prevention and restriction of forest destruction. This research examines the substance, structure, and legal culture of these laws (Rahmat, 2020). Additional research endeavors have similarly focused solely on the implementation of Law No. 32 of 2009, which pertains to Environmental Management Protection, utilizing a normative legal methodology to delineate the conduct of unlawful loggers and the populace in accordance with statutory regulations (Dewa et al., 2021; Ilma et al., 2022; Mudzalifah & Priyana, 2020; Susanto, 2022; Wahyudi, n.d.).

Prior studies pertaining to illicit logging have primarily centered on the engagement of a specific entity in tackling the problem of unauthorized logging, with emphasis on institutional bodies responsible for Independent Forest Moni-

toring (IFM) (Mbziban & Thchoudjen, 2021), forest police (Indahsari & Solihin, 2022; Rochdat et al., 2013), and forestry-related services (Alfaris et al., 2022).

This research demonstrates novelty by emphasizing more the analysis of illegal logging policies with problem structuring theory to formulate the problems faced in detail and relate them to the more complex role of the government, which includes several offices at once. For the sake of seeing synchronization and coordination in carrying out policies, namely the Environment Service, Forest Management Unit (KPH), Region IV Aceh, District Government, and communities in West Aceh District.

3. Research Method

The study employed a qualitative research design utilizing a case study approach, which was conducted in the West Aceh District, specifically in the Sungai Mas and Johan Pahlawan Districts during the month of August in the year 2022. The selection of the qualitative approach was based on its ability to examine social issues and associated challenges (Iskandar, n.d.). When a comprehensive examination of programs and events in a specific domain is required, a case study methodology is appropriate (Creswell, 2010). Primary data sources for research, such as observations and interviews, were selected using purposive sampling techniques that took into account various criteria including the informant's knowledge, membership, structural position, and community leadership (Kaharuddin, n.d.). The list of informants can be seen in Table 2.

Table 2. The list of informant

Identity	Status
Informant 1	The Environmental Service of West Aceh Region
Informant 2	The Environmental Service of West Aceh Region
Informant 3	KPH Region IV Aceh
Informant 4	KPH Region IV Aceh
Informant 5	Sungai Mas District Government
Informant 6	Society

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Secondary data is derived from various sources, such as literature reviews, electronic journals, and books, as well as government documents. The triangulation method is a commonly used research data collection technique that involves the use of multiple sources of data to enhance the validity and reliability of the findings. This method typically involves the use of three primary techniques: interviews, observation, and documentation. Triangulation is a research method that involves collecting data from multiple sources or perspectives using identical questions or measures across various subjects and contexts (Zamili, 2015). To bring out multiple points of view on the same issue or question.

The employed methodology for data analysis is validity triangulation, which entails the acquisition of diverse data from multiple sources and the application of multiple analytical techniques (Fadli, 2021). A model for interactive analysis is also used by researchers. (Miles et al., 2014), as shown in Figure 1:

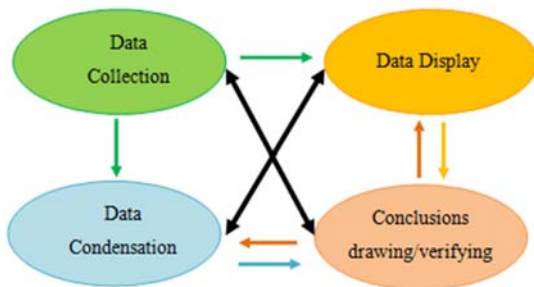


Figure 1. Data analysis model from Miles, Huberman, & Saldana (Miles et al., 2014)

According to Figure 1, the initial step in the data analysis process utilizing the Miles, Huberman, and Saldana technique involves: (1) Data Collection: To collect data in accordance with the formulation of the problem; (2) Data Condensation: To facilitate data mapping, we condense our data by selecting, narrowing, abstracting, and converting primary and secondary data obtained from the field into transcripts; (3) Data Presentation (*display*): The purpose of data presentation is to facilitate researchers' compre-

hension of the research data's comprehensive view; and (4) Drawing conclusions, the process of drawing conclusions is a continuous activity that is undertaken during the research process in order to analyze the data.

4. Results and Discussion

The issue of illicit logging persists in the West Aceh district. This paper aims to further analyze the findings by utilizing problem structuring theory and evaluating the ROCCPI method as an analytical tool for identifying the root causes of the persistent issue of illegal logging. Despite efforts to address the problem, a viable solution has yet to be identified.

The findings of the research indicate that forest management and supervision in West Aceh District require the involvement of multiple stakeholders, rather than being the sole responsibility of a single entity or institution. The entities tasked with overseeing supervision encompass local and provincial governments, communities, and districts.

If a more stringent demarcation is applied, it can be observed that the primary responsibilities and duties pertaining to the management and safeguarding of the forested regions in West Aceh are entrusted to the Environmental Service of the district. This includes the oversight of the Grand Forest Park in West Aceh and KPH Region-IV, as per the provisions of Law Number 32 of 2014. Consequently, the jurisdiction to administer forestry activities no longer rests with the district, but with the province.

Aceh Region-IV Forest Area Management Unit which oversees the watershed groups (Krueng Woyla, Krueng Meureubo, and Lae Lasikin), as can be seen in Figure 2.

The jurisdiction of KPH Region-IV Aceh, situated in West Aceh Regency, encompasses a monitoring region comprising West Aceh District (100%), Aceh Jaya, Nagan Raya Pidie, Aceh Tengah, and Simeulue. This is evident from the available information.

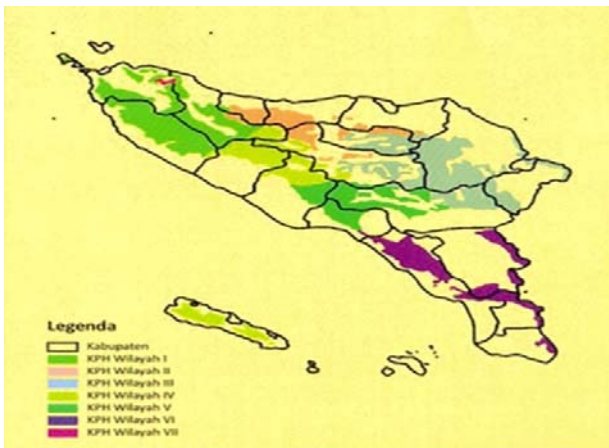


Figure 2. The cartographic representation of the Aceh DAS DLHK KPH Working Area (DLHK Aceh, 2022)

Problem-Structuring Illegal Logging in West Aceh

According to Dunn (2016), the concept of problem structuring theory posits that flawed policies can be attributed to the formulation of problematic issues. The process of problem structuring can be construed as an endeavor aimed at guaranteeing that the concerns that are identified and incorporated as the foundation for public policy genuinely reflect the interests of the public (Andhika, 2019). It can be argued that the issue of structuring is a crucial factor in ensuring that a policy aligns with the requirements of the general public, particularly the intended beneficiaries. Particularly when considering the issue of illicit deforestation in the region of West Aceh. Problem structuring theory identifies multiple phases that are crucial to the success of policy formulation. The initial stage involves problem searching, wherein the critical consideration is how to establish the criteria for an event or phenomenon as an urgent problem. This aligns with the pressing issue of illicit deforestation in West Aceh. The problem is initially defined through problem definition, which involves examining the substantive realm to determine its fundamental and general relationship with applicable regulations. The subsequent step involves delineating the issue of illicit logging by classifying it as either a public or formal problem. This classifica-

tion serves as the impetus for embarking upon the problem sensing stage, wherein the objective is to conduct a more comprehensive examination of the issue of illegal logging.

The categorization of illegal logging in West Aceh District as an urgent problem is based on its significant impacts, which include forest destruction and natural disasters such as floods and landslides, as previously explained. The findings of the study indicate that the policy formulation implemented by the West Aceh government has failed to take into account the economic dimensions of the local populace. The resultant policies typically focus solely on enhancing environmental conditions, thereby leading the community, which relies on forest products for sustenance, to disregard the recommendations provided and the potential adverse consequences. According to the testimony of the first informant, who is affiliated with the Environmental Service of West Aceh Regency:

“Masih terjadinya illegal logging itu, kalau kita lihat, masyarakat sendiri terkadang tidak peduli, karena mereka menganggap hutan sumber mata pencaharian, misalnya mereka tinggal dekat hutan yang ada potensi disitu emas, kayu, dipikiran mereka ialah bagaimana cara mengambilnya. Sehingga rusak tidaknya lingkungan mereka tidak memperhatikannya” (wawancara, 15, September 2022).

“The issue of illicit logging persists, and upon closer examination, it becomes apparent that certain individuals are apathetic towards the matter due to their reliance on the forest as a means of sustenance. As an illustration, in the event that an individual resides in close proximity to a woodland area that presents opportunities for obtaining gold and wood, their primary preoccupation is centered on devising a means of acquisition. Regardless of the extent of environmental degradation, individuals tend to disregard its significance” (The interview was conducted on September 15, 2022).

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Furthermore, as per the statement provided by second Informant (2) affiliated with the West Aceh Environment Service, it can be inferred that: *“Sebenarnya dalam melakukan penebangan memerlukan izin, tetapi oknum misalkan dari pihak masyarakat kalau mau mengurus izin tidak murah tapi mahal. Bisa ratusan juta, mungkin ini salah satu faktor penyebab terjadinya penebangan secara ilegal, bisa juga karena tidak ada lapangan pekerjaan lain”*. (Wawancara, 15 September 2022).

“Logging activities necessitate obtaining a permit, which can be a costly endeavor for individuals, including those from the community, seeking to acquire one. The estimated number could potentially reach hundreds of millions, and this may be considered as one of the contributing factors to the issue of illegal logging. Additionally, the lack of alternative employment opportunities could also be a possible explanation” (The interview was conducted on September 15, 2022).

In response to the aforementioned issue, Informant 5, hailing from the local government of Sungai Mas District, expressed their viewpoint by stated that:

“Terkadang ekonomi masyarakat menjadi alasan mereka untuk melakukan illegal logging, tidak banyak yang bisa dilakukan untuk memenuhi kebutuhan hidup selain dengan menikmati hasil hutan, mereka menganggap bahwa hutan itu milik mereka sehingga tidak perlu ada surat izinnya” (Wawancara, 19 Oktober 2022).

“Illegal logging may be driven by the economic needs of certain individuals who rely on forest products for their daily sustenance. These individuals may perceive the forest as their own and therefore do not feel the need to obtain a permit for their activities” (The interview was conducted on October 19, 2022).

The aforementioned statements of the three informants suggest that the issue of illegal log-

ging in West Aceh can be attributed to several factors. Specifically, a structural analysis reveals that inadequate policies to address the economic challenges confronting the local populace, insufficient awareness regarding the perils of illegal logging, and the arduous process of obtaining logging permits are among the key drivers of this problem completed at a significant expense. Moreover, the lack of alternative livelihoods for the offenders is a contributing factor to their involvement in the activity.

Analysis of Illegal Logging Issues in West Aceh According to the Rules Opportunity Capacity Communication Interest Process Ideology (ROCCIPI) Model

Rules

In actuality, issues with the policy itself can contribute to problems with policy implementation. Unquestionably, there are rules that create opportunities for problems to arise, such as ambiguous policies or those that tend to grant absolute authority to certain parties. Regarding the problem of regulations regarding illegal logging in West Aceh, there are regulations at the regional level in the form of qanuns, but there are no specific qanuns at the district level, according to Informant 3, who is from KPH Region IV-Aceh:

“Kalau Aceh Barat tidak ada qanun khusus yang mengatur illegal logging, tapi kalau Provinsi Aceh ada Qanun No 7 Tahun 2016 tentang Kehutanan Aceh, didalamnya menjelaskan kebijakan dan wewenang bagaimana perlindungan dan pengelolaan hutan. Kemudian dibawahnya ada Perbup Aceh Barat No 46 Tahun 2018 tentang Kesatuan Pengelolaan Hutan, tapi bukan khusus kajian illegal logging” (Wawancara, 15 September 2022).

“The region of West Aceh does not possess a designated qanun that governs the issue of illegal logging. However, Aceh Province has implemented Qanun No. 7 of 2016, which pertains to Aceh’s Forestry and outlines policies and authorities for the protection and management of forests, the West Aceh Re-

gional Regulation No. 46 of 2018 pertains to Forest Management Units, albeit not with explicit focus on the examination of illicit logging activities." (The interview was conducted on September 15, 2022)

According to Thompson & Magrath (2021) the implementation of these regulations has enhanced the regional endeavors to safeguard, secure, and administer forests in Aceh. The regulatory intervention mechanism implemented by the government has proven to be effective in addressing illegal forest development. This includes the provision of clear demarcation signs for development boundaries and the reinforcement of law enforcement measures in forestry management. Additionally, community engagement has been encouraged to combat the issue of illegal logging. The Regional KPH IV-Aceh's Informant 3 has indicated that a specific budget has been allocated through the DIPA (Budget Executor Entry List) to facilitate the implementation of the program aimed at achieving the aforementioned objectives, as follows:

"Tiap tahun kita ada namanya kegiatan melalui DIPA dalam melakukan pencegahan dan menurunkan resiko kerusakan hutan di wilayah kerja, ini merupakan program rutin, dan selalu ada setiap tahun. Secara teknis meliputi patroli rutin pengamanan dan pengawasan kawasan hutan, kemudian koperasi ilegal logging, koperasi penertiban peredaran hasil hutan kayu ataupun non kayu itu kita lakukan sepanjang tahun. Namun patroli sifatnya situasional, atau hanya sebulan sekali" (Wawancara, 15 September 2022).

"annually, an initiative is undertaken by DIPA to mitigate and forestall the potential hazards of forest damage within the designated work area. This program is a recurring event that takes place annually. From a technical standpoint, the process involves regular patrols aimed at ensuring the safety and monitoring of forested regions. Additionally, there are illegal logging cooperatives that oversee the distribution of both timber and

non-timber forest products, which are conducted on a year-round basis. Patrols are contingent upon the situation or occur on a monthly basis" (The interview was conducted on September 15, 2022)

Informant 6, a constituent of West Aceh District, commented on the regulations and protocols pertaining to unlawful deforestation, stated that:

"Praktik illegal logging diakui menjadi praktik yang melanggar hukum, dan tentu ada aturan yang mengatur tentang itu termasuk aturan dari pemerintah setempat. Namun, kebutuhan ekonomi terkadang menjadi sesuatu yang harus dicarikan solusi dibandingkan hanya sekedar menjalankan aturan sehingga ada solusi alternative yang diberikan pemerintah dalam memenuhi kebutuhan ekonomi masyarakat selain dari menebang hutan" (Wawancara, 19 Oktober 2022).

"The act of engaging in illegal logging is widely acknowledged as a violation of legal statutes and is subject to regulatory measures, including those imposed by local governmental bodies. In certain circumstances, economic exigencies may necessitate the identification of solutions beyond strict adherence to established regulations. As such, governmental entities may offer alternative measures to address the economic requirements of the populace that do not involve the depletion of forested areas." (The interview was conducted on October 19, 2022)

The findings of the interviews are summarized as following regional regulations Qanun No. 7 of 2016 concerning Aceh Forestry and West Aceh Regional Regulation No. 46 of 2018 concerning Forest Management Units. Regular patrol activities are carried out throughout the year as part of the program to prevent and reduce forest damage in West Aceh, which has been allocated a separate budget for its implementation. In addition to conventional regulations, the policies implemented by the West Aceh administration

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have yet to attain a state of optimal resolution. The policy program prioritizes environmental protection over economic considerations within the community.

Opportunity

The presence of an opportunity may increase the likelihood of a violation being committed. In the event that an opportunity arises, it has the potential to prompt an individual to deviate from their current course of action. With regards to the issue of illicit logging in the West Aceh district, it is noteworthy that there is indeed a viable prospect, as elucidated by Informant 3, hailing from KPH Region IV-Aceh:

“Jadikan posisi hutan di Kecamatan Sungai Mas sebagai tujuan para oknum illegal logging kalau kita lihat topografinya, topografis hutan lindung kelerengannya curam. Sulit diakses dalam melakukan pengawasan, tetapi oknum-oknum ini orang-orang yang punya prinsip dan bernyali tinggi, karena sebenarnya mereka sendiri bisa jadi korbannya” (Wawancara, 15 September 2022).

“The forest’s location in Sungai Mas District has become a prime destination for illegal loggers. Upon examining the topography, it can be observed that protected forests exhibit a terrain characterized by steep slopes. Conducting surveillance can pose challenges with regards to accessibility. However, it is noteworthy that the individuals involved in such activities exhibit principled behavior and demonstrate remarkable courage, given that they themselves may be susceptible to victimization.” (The Interview was conducted on September 15, 2022).

According to the findings of the interviews, the individuals’ preferred locations for engaging in illegal logging were those that posed challenges for government oversight. These challenges may be perceived as a favorable circumstance for illicit loggers to engage in their activities. In addition,

the dearth of patrols is posited as a contributing factor to the recurrent incidence of illicit logging in West Aceh, as per the perspective of Informant 4 hailing from KPH Region IV-Aceh;

“Saat ini patroli yang dilakukan masih kurang rutin sehingga membuka peluang bagi pelaku untuk lakukan penebangan. Karena sebulan sekali, jadi ada rentang waktu bagi mereka untuk melakukan penebangan, pemotongan dan pengangkutan di tempat pun bisa. Seharusnya patroli menurut saya seminggu sekali atau bahkan tiga hari sekali. Seperti ke daerah Sungai Mas, Nagan Raya, Beutong. Kalau rutin kita lakukan, ketemu pelaku, ada barang bukti, musnahkan, ada senso kita ambil, ada bensin kita tarik” (Wawancara, 15 September 2022).

“The patrols’ irregularity creates opportunities for logging perpetrators to act. Once a month, they have a specific timeframe to carry out logging, cutting, and transportation activities, wherever feasible. According to my sources, patrol frequency in certain areas such as Sungai Mas, Nagan Raya, and Beutong is currently set at once a week or every three days. It is suggested that this frequency be adopted in other areas as well. If carried out regularly, the perpetrators will be encountered, evidence will be eliminated, sensors will be taken, and gasoline will be extracted.” (The Interview was conducted September 15, 2022).

The Sungai Mas District Government conveyed that the level of patrol intensity was still deemed low, who stated that:

“Untuk menertibkan praktik illegal logging tentu bukan sesuatu yang mudah. Ada banyak tantangan yang akan kita temui di lapangan. Namun setidaknya kita bisa memantau praktik tersebut dengan patrol dari dinas terkait. Namun sejauh ini patrol yang dilakukan masih tergolong minim, sehingga menjadi celah bagi para pelaku untuk menebang hutan tanpa izin” (Wawancara, 19 Oktober 2022).

“It’s not an easy task to put an end to illegal logging. There are various obstacles that one may face while working in the field. However, it is possible to keep track of this activity through the implementation of patrols by relevant authorities. As per the current scenario, patrols have been minimal, which has led to a loophole for the wrongdoers to cut down forests without a permit.” (The Interview was conducted October 19, 2022).

The aforementioned informants have explicated that the absence of regular government patrols, which are conducted on a monthly basis instead of the recommended weekly or tri-weekly schedule, contributes significantly to the potential for illegal logging activities to occur.

Capacity

The concept of capability pertains to the state of being unable to execute a desired action due to it exceeding the individual’s or group’s capacity. Despite efforts to conduct supervision through routine patrols, the actual execution of such measures remains constrained by budgetary limitations as well as inadequate facilities and infrastructure. This includes the provision of counseling and outreach programs aimed at raising awareness about the perils of illegal logging. According to the statement provided by Informant 2 as a representative of the West Aceh Environmental Service:

“Kalau porsi anggaran untuk Dinas Lingkungan Hidup ini kecil, anggarannya sebesar 30 juta terlalu kecil untuk melakukan sosialisasi yang berdampak yang sangat besar kepada masyarakat sedangkan wilayah Aceh Barat yang mengalami kerusakan hutan itu sangat besar, belum lagi biaya transportasi untuk kelapangan” (Wawancara, 15 September 2022).

“If the portion of the budget for the Environmental Service is small, the budget of 30 million rupiah is too small to carry out socialization, which has a very large impact on

the community, while the area of West Aceh, which has experienced forest destruction, is very large, not to mention the transportation costs for the field” (The interview was conducted on September 15, 2022).

The absence of a budget for program implementation, as explained by Informant 3 in the KPH Region IV-Aceh, is a matter of concern:

“Kendala utama itu di anggaran yang sangat terbatas, dan kedua sarana. Bayangkan KPH Wilayah IV Aceh mengelola 400.000 Hektar kawasan hutan kabupaten, kami hanya mempunyai satu mobil double cabin, mengawasi wilayah Aceh Barat sepenuhnya, Nagan Raya 70%, Simeulue 100%, Aceh Tengah 60% itu yang besar-besar, yang kecil-kecil di daerah pidie sekian ribu hektar. Anggaran kami tahun ini Rp.200.069.000, untuk semua kegiatan, kalau terjadi kebakaran gambut, kebakaran kebun itu juga pakai uang itu. Selain itu kita juga butuh tambahan personil, setidaknya setidaknya 20 personil tapi karena anggarannya kecil yang ada 10 orang” (Wawancara, 15 September 2022).

“The primary challenge was the constrained budget and the presence of only two facilities. KPH Region IV Aceh is responsible for overseeing a vast district forest area of 400,000 hectares. However, we only have one double-cabin car to manage this area. Despite this limitation, we are fully committed to overseeing the West Aceh region, Nagan Raya (70%), Simeulue (100%), and Central Aceh (60%), as well as the smaller areas in Pidie that amount to several thousand hectares. The allocated budget for this year’s activities is Rp. 200,069,000. In the event of a peat fire, the plantation fire will also utilize the same budget. There is a need for more personnel, specifically 20 individuals; however, due to budget constraints, only 10 have been allocated” (The Interview was conducted on September 15, 2022)

Informant 4, who is also a member of KPH Region IV-Aceh, stated the same thing in the interview:

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“Sepertinya anggaran memang menjadi hal yang harus ditelaah kembali. Banyak kegiatan yang seharusnya kita lakukan dan masuk dalam list rencana kita tidak bisa dilakukan karena kendala anggaran, sehingga kita mampu bergerak dengan maksimal, seperti patroli. Idealnya patroli bisa dilakukan 3 kali dalam seminggu, tapi kita hanya bisa mengagendakan satu kali dalam sebulan karena keterbatasan dana tadi, jumlah personil dan sarana pendukung lainnya” (Wawancara, 15 September 2022).

“The budget appears to be a topic that requires further examination. Due to budget constraints, several planned activities, including patrolling, were not carried out as intended. This hindered our ability to operate optimally. According to my sources, patrols are ideally conducted three times a week. However, due to limited funds, personnel, and supporting facilities, we are only able to schedule one patrol per month” (The interview was conducted on September 15, 2022).

From the statement above, it can be understood that not only is there a lack of budget, but the parties concerned have stated that the necessary facilities, infrastructure, and human resources are still insufficient, so that the resulting performance is not optimal. But even so, the Aceh Regional IV KPH and the Environmental Service will still try their best to carry out their duties and functions, even though they are still lacking in terms of facilities and budget.

Communications

The failure of implementation is frequently attributed to communication breakdowns, which stem from inadequate comprehension among stakeholders regarding the policies being implemented. In essence, miscommunication is the root cause of this issue. One of the challenges encountered by implementers in executing programs aimed at preventing illegal logging pertains to communication. According to a source identified

as Informant 1, affiliated with the West Aceh Environment Service:

“Mengenai himbauan mengenai larangan penebangan liar telah kita lakukan, tapi tergantung dengan kepribadian masing-masing, malah ada yang tidak peduli. Dulu juga pernah, pernah kami lakukan penyuluhan dan sosialisasi terpadu bersama Polres untuk masyarakat sekitar tahun 2016 agar peduli pada lingkungan. Kami disini perannya hanya menghimbau atau “sekedar halo-halo aja”, jangan melakukan penebangan ilegal, dan ke lokasi kita tempel spanduk” (Wawancara, 15 September 2022).

“Regarding the appeal against illegal logging, we have done it, but it depends on each individual’s personality; some don’t even care. In the past, we also conducted integrated counseling and outreach with the Polres for the surrounding community in 2016, so they care about the environment. Our role here is only to warn or “just say hello”, don’t do illegal logging, and we will attach banners to the location.” (The Interview was conducted on September 15, 2022)

The interview with informant 4 reveals that the disposition of the target demographic remains indicative of the ineffectiveness of communication efforts aimed at preventing illegal logging. The prevailing attitude among individuals residing in the vicinity of the forest is one that perceives their actions as permissible and not in violation of any regulations. The awareness regarding the utilization of forest resources by the community for their daily requirements, subject to adherence to regulations, appears to be lacking. Informant 3, who is affiliated with KPH Region IV Aceh, subsequently communicated this information:

“Secara normatif yang diketahui kawasan di hutan lindung tidak boleh dimanfaatkan kayunya kecuali non kayu, batang-batang, tanaman dan sebagainya. Dimana pemanfaatan batang kayu yang tumbuh sendiri tidak ditanam atau tumbuh alami. Boleh dimanfaatkan, tapi bukan untuk ditimbun dan di-

perjual belikan. Dalam pemanfaatannya masyarakat harus membayar PNPB (Penerimaan Negara Bukan Pajak), diikuti pelaporan. Tapi jika ditanam sendiri itu dibebaskan. Cuma memang yang terjadi kebaikan negara ini kadang-kadang dimanfaatkan secara tidak bertanggungjawab oleh oknum, karena begini kadang-kadang masyarakat terutama sering menyalahkan kehutanan” (Wawancara, 15 September 2022).

“The interview with informant 4 reveals that the disposition of the target demographic remains indicative of the ineffectiveness of communication efforts aimed at preventing illegal logging. The prevailing attitude among individuals residing in the vicinity of the forest is one that perceives their actions as permissible and not in violation of any regulations. The awareness regarding the utilization of forest resources by the community for their daily requirements, subject to adherence to regulations, appears to be lacking. Informant 3, who is affiliated with KPH Region IV Aceh, subsequently communicated this information” (The Interview was conducted on September 15, 2022)

Based on the interview’s description, it appears that there have been issues with communication. There is a common misconception among illegal loggers and the general public that protected forest areas are completely off-limits for any kind of activity. This misconception often leads to conflict among those who engage in illegal logging and continue to profit from forest products despite the protected status of the area. The establishment of bidirectional communication is deemed imperative to effectively disseminate policies pertaining to the utilization of forest products without trade for the betterment of people’s livelihoods, and the permissibility of planting or cultivating in forested regions without causing harm to the forest ecosystem.

As shown in the following interview, Informant 5, a member of the Sungai Mas District Government, admitted that they did not even

know very well about the issue of illegal logging that was occurring in their area or the plant assistance program from the government to the community:

“Kami jarang mendapatkan laporan tentang penebangan liar, bahkan tidak ada laporan ke Kantor Camat, kecuali longsor di jalan-jalan nasional, baru kami langsung terlibat. Kalau mengenai program bantuan tanaman, itu dari perkebunan atau kehutanan, mengenai hal tersebut tidak ada laporan pada kami” (Wawancara, 19 Oktober 2022).

“Illegal logging reports are infrequent and seldom reach the sub-district office. The only exception is when landslides occur on national roads, in which case we become directly involved. We have not received any report on the crop assistance program, whether it pertains to plantations or forestry.” (The Interview was conducted Oktober 19, 2022).

The statement indicates that the level of communication that exists between stakeholders in overcoming the problem of illegal logging still shows miscommunication, so that the programs implemented have not been maximized in their implementation.

Interest

Interests are more associated with individual aspects of carrying out a violation or deviation from the provisions, either due to material or formal gains. Interests can also refer to the benefits obtained by individuals when carrying out illegal logging. This was also conveyed by Informant 2 from the Department of the Environment:

“Kalau di masyarakat melakukan penebangan hutan karena kebutuhan ekonomi, tapi kalau dilingkungan itu kan sebenarnya merusak, menyebabkan kerusakan lahan, kerusakan ekosistem. Sehingga penebangan secara ilegal menguntungkan dari sisi ekonomi, tapi kalau dari sisi alam kan dapat merusak alam, merusak keseimbangan ekosistem, merusak lahan, erosi yang berakibat longsor, dan lain sebagainya dan masyarakatkan tidak mau

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tau dampaknya yang dia tau ekonominya kan itu,” (Wawancara, 15 September 2022).

“If the community does log due to economic needs, but if in the environment it actually destroys, causes damage to the land, damage to the ecosystem. So that illegal logging is profitable from an economic standpoint, but from a natural perspective it can destroy nature, destroy the balance of ecosystems, destroy land, cause erosion resulting in landslides, etc.”. (The Interview was conducted on September 15, 2022)

Communities engaged in illegal logging appear to prioritize economic gains over the potential long-term negative consequences of their actions. Based on the findings of community dependence on forest resources as a trigger for illegal logging, The government has sought a solution by providing a plant assistance program for the community. As said by Informant 4 from KPH Region 4, Aceh, as follows:

“Sebenarnya telah ada yang namanya intervensi dalam bentuk kebijakan publik berupa kegiatan-kegiatan yang untuk menarik masyarakat dari ketergantungan sumber daya hutan. Dimana program ini dilakukan secara kolaboratif. Karena jika peran DLHK saja tentu agak kaku dalam masalah pemanfaatan sumber daya alam hutan. Makanya peran Pemerintah Aceh dan dinas perkebunan juga diperlukan, seperti program pada masyarakat disekitar kawasan hutan, yakni program perkebunan, menanam pinang, atau ada penanaman misalnya tanaman yang multiguna seperti jernang juga” (Wawancara, 15 September 2022).

“There have been public policies and activities implemented to reduce people’s reliance on forest resources. This program is being carried out collaboratively. It’s worth noting that the DLHK has a strict role when it comes to the use of forest resources. The Government of Aceh and the plantation service play a crucial role in implementing programs for communities living around forest areas. These

programs include plantation initiatives such as areca nut and multi-purpose plant cultivation, like jernang.” (The Interview was conducted on September 15, 2022)

Despite the fact that the program serves as a means to reduce people’s reliance on forest resources, it also creates avenues for illicit logging activities. There exists a discrepancy that engenders novel issues with the program, as individuals are provided with botanical aid, yet the process of acquiring proficiency in its utilization remains protracted, spanning several years. The current solution appears to have fallen short in addressing the issues faced by the community. Nonetheless, it is important to note that this assertion may be subject to bias as it relies solely on the perspectives of the Sungai Mas District community, according to the findings obtained from the interview conducted as follow;

“Kami melakukan penebangan itu di kawasan hutan adat yang udah ada sebelumnya, sebelum ditetapkan sebagai hutan lindung, yang peruntukannya masih boleh untuk ditebang bagi penggunaan masyarakat sekitar masyarakat, sehingga itu bukan penebangan liar” (Wawancara, 19 Oktober 2022).

“The logging activities are conducted in a customary forest area that was already present before it was declared as a protected forest. The forest is still open for logging purposes, which benefits the surrounding community. Therefore, the logging activities are not considered illegal.” (The Interview was conducted on October 19, 2022).

This perspective asserts that the inhabitants of Sungai Mas perceive no wrongdoing in their utilization of forest resources. Thus, a significant inquiry arises: which entities exhibit a pronounced inclination towards engaging in illicit logging activities within the jurisdiction of West Aceh District? Informant 3 from KPH Region IV, Aceh, expressed their views on the matter:

“Karena posisi Sungai Mas yang berbatasan dengan beberapa kabupaten, bisa saja pelaku dari pidie dan gempang. Karena ternayat kasus penangkapan pelaku justru berasal dari Kabupaten Aceh Barat Daya dan Aceh Selatan. Jadi dia bekerja sebagai penebang, sehingga kita tidak sebrnannya tidak tahu dibalik itu profesinya apa, tidak bis ajuga kita katakan masyarakat, karena mereka punya hal pemanfatan. Maka yang melakukannya kita sebut saja “oknum” (Wawancara, 15 September 2022).

“Sungai Mas’ location, which shares borders with multiple districts, suggests that the culprits could potentially be affiliated with either Pidies or Seismic groups. I have information that the individuals who were apprehended in relation to the incident were from the districts of Southwest Aceh and South Aceh. The individual in question is employed as a logger, however, there is currently no information available regarding their profession beyond this. The community cannot be mentioned as they possess an advantage. The individuals who engage in this activity are commonly referred to as “persons. (“oknum” in Bahasa)” (The Interview was conducted on September 15, 2022)

This perspective posits that the individuals responsible for engaging in unlawful logging activities in West Aceh may originate from both internal and external sources within the West Aceh district. In cases where the offenders cannot be classified as individuals belonging to a particular societal group or occupational category, they are deemed to be “irresponsible persons”.

Process

The organizational behavior can be analyzed through a systematic approach that involves the examination of input, processing, and output stages, leading to a decision-making process, which is then followed by feedback. The official’s role in mitigating the issue of illegal logging is primarily that of a facilitator for the community,

as direct action cannot be taken without a report being filed. It is disheartening to observe that certain parties may interfere in the process, thereby impeding the resolution of the problem, as suggested by the perspective articulated by the Aceh Regional IV KPH:

“Kedinasan akan bertindak apabila ada laporan dari masyarakat atau LSM, selama ini minim laporan kita dapatkan, lebih pada temuan, sehingga peran kami ialah hanya memfasilitasi laporan. Dimana pelaku nantinya diproses melalui jalur hukum. Sebenarnya kalau kita lihat mereka menjalankan aksi melewati pos-pos polisi tetapi kita tidak tahu kenapa bisa lewat” (Wawancara, 15 September 2022).

“If you want to report something to the department, they will take action based on your report. However, they have only received a few reports so far and mostly just findings, so their role is to help people make reports. The perpetrators will be processed through legal channels. If you observe their movements and their interactions with police checkpoints, it is unclear why they are able to pass through without issue” (The Interview was conducted on September 15, 2022)

In the process of controlling illegal logging practices, there is no support from various parties, especially in terms of oversight, as described in the preceding sentence. This was also communicated by Department of the Environment informant 1 who stated:

“Terkadang kita juga heran kenapa pelaku bisa leluasa dalam menjalankan aksinya. Bahkan ada yang penebangan dalam skala besar namun tidak terindikasi sama sekali. Jadi memang dalam proses menertibkan penebangan liar tersebut perlu sinergitas dari berbagai pihak, termasuk masyarakat itu sendiri” (Wawancara, 15 September 2022).

“It’s not uncommon for people to question how perpetrators are able to commit their actions without consequences. Large-scale logging is being carried out without any in-

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dication. It is true that to effectively combat illegal logging, collaboration is crucial among multiple stakeholders, including the local community" (The Interview was conducted September 15, 2022).

Similarly, as per the statement provided by Informant 5 affiliated with the government of Sungai Mas District, it can be inferred that the aforementioned assertion holds true as followed that:

"Ini menjadi tanggungjawab kita bersama, hutan itu milik kita dan tentu akan memberikan manfaat bagi kita jika dinikmati dengan cara yang baik. jadi tidak ada alasan yang bisa membenarkan praktik illegal logging" (Wawancara, 19 Oktober 2022).

"The forest is a shared responsibility and it belongs to us. It is important that we enjoy it in a responsible manner to reap its benefits. I can confirm that there is no justification for engaging in illegal logging" (The Interview was conducted Oktober 19, 2022)

The statements provided by certain informants indicate an irregularity in cases where there exists a potential for collusion between offenders and government entities. As a result, it is imperative to implement stringent monitoring measures aimed at suspected groups. In the event of verification, appropriate penalties may be imposed in accordance with relevant regulations.

Ideology

Ideology refers to the shared values and attitudes that guide the actions and thoughts of a particular group or society, representing a collective consensus. Divergent values within heterogeneous groups often serve as the primary catalyst for conflict. Communities residing in forested areas have long recognized the significance of their ancestral relationship with the forest, thus asserting their entitlement to utilize its resources. According to the source (informant 3) of information.

"Kita tidak bisa secara egois menyalahkan rakyat setempat yang sudah berdomisili sejak nenek moyang mereka disitu karena tidak salah. Secara undang-undang memang seharusnya negara menjamin pemanfaatan bagi mereka. Sekarang ceritanya mereka melakukannya karena tuntutan ekonomi dan punya rasa memiliki terhadap sumber daya alam dalam bentuk hutan atau kawasan hutan yang berada diwilayahnya, mereka mencoba memanfaatkan bahasa baik tapi kalau bahasa negatif mencoba mengeksploitasi". (Wawancara, 15 September 2022).

"It is not justifiable to attribute culpability to the indigenous inhabitants who have resided in the area for generations, as their actions are not erroneous. It is imperative that the state ensure the utilization of resources as mandated by legal regulations. The prevailing narrative suggests that economic pressures and a perceived entitlement to natural resources, specifically forests or forested regions within their respective territories, motivate these actions. Individuals endeavor to utilize appropriate language; however, in the event that they resort to negative language, they may attempt to manipulate it to their advantage" (The Interview was conducted September 15, 2022).

This is still permissible, but becomes problematic and illegal when the use is for sale and stockpiling and causes adverse impacts. There were even cases where parties asked for permission with the excuse of opening a village, even though it was only a mode. This value is what the government wants to shift slightly by emphasizing the utilization of the potential of the forest around the community. This is still permissible, but becomes problematic and illegal when the use is for sale and stockpiling and causes adverse impacts.

There were even cases where parties asked for permission with the excuse of opening a village, even though it was only a mode. This value is what the government wants to shift slightly by

emphasizing the utilization of the potential of the forest around the community. As reported by a source identified as Informant 4 hailing from KPH Region 4:

"Kami sering menyampaikan sosialisasi, dimana masyarakat di tengah hutan itu kan tahu potensi dari hutan, maka perlu dikembangkan potensinya. Tapi kadang ada pihak yang membuat izin membuka desa, yang bisa hanya modus. Jadi bila ketemu yang demikian kita berikan pemahaman kontra sosial untuk menyelesaikannya" (Wawancara, 15 September 2022).

"We frequently stress the importance of socialization, stressing that only those living in the heart of the forest can fully appreciate its untapped potential. However, there are occasionally parties that issue permits to open villages, something that should be done sparingly. Therefore, if we ever come across such a problem, we will offer a counter-social perspective on how to address it" (The Interview was conducted on September 15, 2022).

Informant 1 from the Environment Service provided a comparable statement in reaction to this, elucidating that:

"Kita perlu melakukan pendekatan persuasif kepada masyarakat untuk menjalankan aturan terkait illegal logging. Yang terjadi selama ini sepertinya karena adanya interpretasi yang berbeda antara pemerintah dengan masyarakat setempat yang menjadi pelaku. Masih ada anggapan bahwa hutan yang berada di kawasan masyarakat tersebut menjadi hak milik masyarakat, sehingga penebangan hutan bukan menjadi sesuatu yang harus diatur" (Wawancara, 15 September 2022).

"The community must be approached in a persuasive manner to implement regulations pertaining to illegal logging. The current situation appears to be a result of conflicting interpretations between the government and the individuals responsible, who happen to be locals. It is commonly assumed that the forest within the community's vicinity is under their ownership, hence, there is no need

for regulation of logging activities" (The Interview was conducted on September 15, 2022).

Based on the informant's statement, it can be inferred that the government should implement a persuasive communication strategy to educate the public on the advantages of protected forests, forest sustainability, and the consequences of illegal logging activities"

5. Conclusion

The issue of illegal logging in West Aceh, as analyzed through structural problem assessment, can be attributed to economic incentives and reliance on forest resources, indifference towards the adverse effects of illegal logging, limited employment opportunities, and challenges in obtaining logging permits. The ROCCIPI theory was employed to conduct an analysis, which revealed that the primary factor responsible for the persistent occurrence of illegal logging is attributed to inadequate regulations that have failed to address the economic challenges faced by the community. This study examines the various dimensions of stakeholder communication, resource constraints stemming from insufficient government funding, and traditional values and interests that have shaped the community's approach to forest utilization. The government's endeavors to address the issue of illegal logging involve the formulation of alternative policies aimed at providing crop assistance, socialization, and counseling. Additionally, efforts are being made to maximize supervision despite limited budgets and infrastructure. The development of program policies aimed at addressing illegal logging necessitates the consideration of both environmental factors and the economic circumstances of communities residing in forested regions. Additionally, increased oversight is required, which can be facilitated through the allocation of adequate funding by the Aceh government. Furthermore, educational initiatives should be implemented with a focus on communities situated in areas affected by illegal logging.

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