

The Role of Denr's Private Land Timber Permit (PLTP) In Shaping the Wood Industry

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ABSTRACT

The wood industry remains a significant contributor to the Philippine economy, serving both as a source of raw materials for construction and furniture industries and as a provider of livelihood opportunities for rural communities. Central to regulating timber harvesting in private lands is the Private Land Timber Permit (PLTP), issued by the Department of Environment and Natural Resources (DENR) under DAO 2000-21, to ensure compliance with sustainable forest management practices. While the permit system is designed to balance environmental stewardship with economic development, it is often perceived as administratively burdensome, particularly due to delays, excessive documentary requirements, and multiple levels of endorsements. This study sought to examine the effectiveness, challenges, economic implications, and policy directions of the PLTP within the jurisdiction of CENRO Lianga, Surigao del Sur, thereby providing evidence-based insights to inform policy reforms and enhance efficiency in timber governance.

Employing a descriptive-evaluative research design, the study involved fifteen purposively selected respondents, consisting of thirteen approved PLTP holders and two lumber dealers or furniture makers. Data were collected through a researcher-made survey questionnaire focusing on implementation effectiveness, satisfaction, and perceived challenges. Results indicated that while respondents rated the clarity of PLTP application steps and adequacy of DENR personnel's technical assistance as highly effective, moderate satisfaction was noted regarding processing time and documentary requirements. Stakeholders identified delays, complex compliance requirements, and lack of digital platforms as key challenges. Findings underscore the need for streamlining permit and certificate processes through digitalization, standardized requirements, and stronger accountability mechanisms to improve responsiveness, enhance stakeholder satisfaction, and foster sustainable wood industry practices.

Keywords: Private Land Timber Permit, Wood industry, Sustainable forest management, Policy reform, DENR

INTRODUCTION

Background of the Study

The wood industry plays a vital role in the Philippine economy by supplying raw materials for construction, furniture, and related sectors, while simultaneously sustaining livelihoods in rural communities. Within this context, the management and utilization of timber harvested from private lands are regulated by the Department of Environment and Natural Resources (DENR) through the issuance of a Private Land Timber Permit (PLTP). The PLTP functions as a regulatory mechanism that ensures timber harvesting on private properties adheres to principles of sustainable forest management. While the permit system is intended to balance economic development with environmental protection, the process of securing a PLTP has been widely regarded as lengthy, cumbersome, and costly for stakeholders. This study, therefore, seeks to examine the role of the PLTP in shaping the wood industry, particularly its influence on efficiency, productivity, and sustainability.

Recent studies highlight the complex dynamics of the Philippine timber sector. Smallholder tree farming and the timber corridor role of Caraga continue to face socio-institutional challenges that diminish the attractiveness of tree farming among small producers (Peras et al., 2020). Research further illustrates the significant role of

middlemen in facilitating timber flows, though their dominance in the supply chain also reflects broader governance gaps, issues of transparency, and limited formal market access (Balanay et al., 2022). Sectoral reports additionally reveal a persistent mismatch between domestic supply and the growing demand for lumber and processed wood products, resulting in increased reliance on imports and pressure on local producers (U.S. Department of Agriculture, Foreign Agricultural Service, 2021). Collectively, these findings suggest that institutional arrangements, including regulatory mechanisms such as the PLTP and environmental clearance requirements like the ECC, play a decisive role in determining how opportunities and constraints are distributed along the timber value chain (Balanay et al., 2022; Peras et al., 2020; U.S. Department of Agriculture, 2021).

Despite efforts to streamline government transactions, significant gaps remain between prescribed timelines for permit issuance and the actual experiences of applicants. According to the DENR Citizen's Charter, the standard processing period for PLTP applications is approximately 40 working days, with responsibilities divided across CENRO, PENRO, the Regional Office, the Forest Management Bureau (FMB), and the DENR Central Office. In practice, however, applications frequently extend beyond this timeframe due to multiple layers of endorsement and the physical transmittal of documents, each of which can add up to three days per routing depending on geographic location. A similar pattern emerges in the processing of Environmental Compliance Certificates (ECCs). Although official guidelines prescribe a 20-40 working day processing period, historical evidence indicates that approvals often take several months, or in some cases, years to complete (DENR Citizen's Charter, 2021; Environmental Management Bureau, 2022). Respondents, including private landowners and wood processors, have expressed recurring frustration with these delays, which disrupt harvest scheduling, weaken the competitiveness of domestic producers, and create bottlenecks in timber supply chains. This persistent discrepancy between official timelines and actual practices underscores a systemic governance gap that warrants empirical investigation.

In response, this study aims to contribute to policy development by generating recommendations to streamline the processing of both PLTP and ECC applications within and across DENR units. Specifically, it will analyze procedural bottlenecks such as multi-layer endorsements, manual transmittals, and inconsistencies in the application of rules, with the goal of identifying reforms that reconcile actual practices with official timelines. Particular emphasis will be placed on harmonizing workflows among CENRO, PENRO, Regional Offices, FMB, and the DENR Central Office, alongside strengthening coordination with the Environmental Management Bureau for ECC processing. Recommendations are expected to include the adoption of digital application and tracking systems, the standardization of documentary requirements, and the establishment of accountability mechanisms to minimize redundancies and delays. Ultimately, this policy-oriented inquiry seeks to improve institutional efficiency, enhance transparency in forest governance, and support both environmental sustainability and the competitiveness of the Philippine wood industry.

Legal Bases

The regulatory foundation of the Department of Environment and Natural Resources' (DENR) Private Land Timber Permit (PLTP) begins with the 1987 Philippine Constitution, which provides the overarching principles of natural resource governance. Article XII, Section 2 vests in the State the full control and supervision over the exploration, development, and utilization of natural resources, including forests, and directs that their use must primarily serve the national interest and ecological balance (Philippine Constitution, 1987). By embedding the principle of stewardship, the Constitution establishes the policy framework within which the PLTP operates—ensuring that timber utilization from private lands is not an unfettered right of ownership but a regulated activity aligned with sustainability and the broader public welfare.

Presidential Decree (P.D.) No. 705, or the Revised Forestry Code of the Philippines, further operationalizes this mandate by institutionalizing the State's authority to regulate forest utilization across public and private domains (P.D. 705, 1975). The decree recognizes both the economic importance of timber resources and the ecological risks of unregulated exploitation. As such, it prescribes permits, licenses, and other regulatory instruments as essential safeguards to ensure that forest-based industries contribute to national development without depleting forest ecosystems. Within this framework, the PLTP finds its legal foundation as a mechanism that allows private landowners to harvest timber, subject to State oversight. From a policy perspective, P.D. 705 reflects the

government's attempt to position the wood industry as a driver of economic growth while simultaneously imposing controls to preserve ecological integrity.

To concretize these legal provisions, DENR Administrative Order (DAO) No. 2000-21 establishes the specific guidelines for the issuance of PLTPs. This order details the documentary requirements, application procedures, and field verifications necessary for landowners to secure permits for harvesting trees from titled private lands (DENR, 2000). A key element of this process is the requisition of an Environmental Compliance Certificate (ECC) under Presidential Decree No. 1586, or the Philippine Environmental Impact Statement (EIS) System. The ECC serves as a gatekeeping instrument, requiring that any proposed timber harvesting activity undergo environmental impact assessment before approval. The ECC process involves several stages: scoping, where the potential impacts of the activity are identified; environmental impact assessment (EIA), which evaluates the extent of these impacts and proposes mitigation measures; and review and approval, where DENR determines whether the project can proceed under environmental safeguards. Once granted, the ECC becomes a binding commitment that requires the project proponent to implement environmental management and monitoring plans. In this way, the ECC ensures that the PLTP does not merely authorize timber cutting but does so under conditions that protect soil stability, watershed functions, biodiversity, and long-term forest regeneration. By requiring ECC compliance, the State reinforces the alignment of timber utilization with the broader goals of sustainable development and environmental stewardship.

Complementary to these frameworks are broader executive policies that contextualize the PLTP's role in shaping the wood industry. Executive Order (E.O.) No. 23, issued in 2011, declared a moratorium on the cutting and harvesting of timber in natural and residual forests, thereby redirecting timber demand toward plantation and private lands (E.O. 23, 2011). This policy indirectly elevated the importance of PLTPs, as they became the primary legal channel through which private timber harvesting could supply the wood industry. Similarly, E.O. No. 26 institutionalized the National Greening Program (NGP), a massive reforestation initiative designed to expand forest cover, increase timber supply, and enhance ecological resilience (E.O. 26, 2011). Both policies reinforce the role of PLTPs in ensuring a stable and sustainable flow of timber to the industry, reducing reliance on natural forests while promoting plantation and private land-based sources.

Taken together, the Constitution, P.D. 705, DAO 2000-21, the EIS System under P.D. 1586, and the executive issuances on logging moratorium and reforestation collectively establish the legal and policy environment within which the PLTP operates. The requirement of an ECC as a prerequisite ensures that every timber harvesting activity is environmentally screened, monitored, and regulated before it contributes to the wood industry's supply chain. Thus, the PLTP is not merely a permit to cut trees but a strategic instrument that harmonizes economic productivity with ecological safeguards, shaping the wood industry's trajectory toward resilience, legality, and sustainability.

REVIEW OF RELATED LITERATURE AND STUDIES

This section reviews scholarly works related to the role of the Department of Environment and Natural Resources' (DENR) Private Land Timber Permit (PLTP) in shaping the wood industry. The discussion is organized into four thematic sections: effectiveness and satisfaction with the PLTP process, economic implications, challenges and best practices, and policy directions for sustainability.

Effectiveness and Satisfaction with the PLTP Process

Literature highlights the PLTP's dual function as a governance tool balancing private land rights with environmental regulation. Pulhin (2024) emphasizes that the PLTP has improved regulatory oversight by ensuring timber harvesting from private lands is subject to a formal permitting process, thereby reducing illegal timber transactions. However, satisfaction among stakeholders remains mixed. Guiang and Carandang (2022) observe that smallholders frequently regard the process as bureaucratic, time-consuming, and costly, reducing their willingness to comply with formal procedures. Yao and Inoue (2020) further highlight that stakeholder satisfaction is shaped not only by the issuance of permits but also by the timeliness of monitoring and the perceived fairness of enforcement. These perspectives suggest that while the PLTP contributes to legal compliance and forest governance, inefficiencies in implementation undermine stakeholder confidence.

Recent studies continue to reinforce these concerns, pointing to systemic delays and procedural rigidity. For instance, Balanay et al. (2022) demonstrate that transaction costs and procedural inefficiencies in the timber value chain weaken trust in formal mechanisms and incentivize reliance on middlemen to expedite permit processing. Similarly, Peras et al. (2020) report that farmers and woodlot owners in Caraga perceive the PLTP as a disincentive to tree farming due to unpredictable processing times and unclear requirements. More recently, Garcia et al. (2023) argue that satisfaction with the PLTP process is linked to the degree of transparency and the accessibility of DENR services, with digitalization seen as a potential remedy to existing bureaucratic challenges. Collectively, these findings indicate that while the PLTP remains central to forest governance, its effectiveness and stakeholder satisfaction are constrained by inefficiencies, delays, and the lack of client-oriented service delivery mechanisms.

Economic Implications of PLTPs

The economic dimensions of the PLTP system are critical for both local livelihoods and the broader wood industry. Carandang et al. (2021) document that timber permits provide private landowners with opportunities for income diversification, particularly in regions where tree plantations are cultivated as long-term financial assets. Similarly, the Food and Agriculture Organization (FAO, 2021) underscores that timber production from private lands can reduce dependence on imports and stabilize raw material supply chains essential for construction and furniture manufacturing. At the community level, Lasco et al. (2020) emphasize that timber-related employment fosters rural resilience, especially when cooperatives and small-scale associations play active roles in marketing and value addition. These findings illustrate that the PLTP, when effectively implemented, enables private landowners and rural communities to participate meaningfully in the formal timber economy, thereby supporting inclusive growth.

Nonetheless, the distribution of these economic benefits remains uneven. Pulhin (2024) observes that smallholders face disproportionate burdens from high transaction costs, unclear regulations, and limited market access, which diminish their capacity to benefit fully from timber permits. Balanay et al. (2022) further reveal that middlemen dominate value chains in timber-producing regions such as Caraga, capturing margins that could otherwise accrue to landowners and small processors. More recent research by Garcia et al. (2023) also notes that procedural inefficiencies in PLTP and related permit systems raise the cost of doing business, deterring investments in tree farming and reducing the competitiveness of domestic producers. These studies highlight a persistent tension: while PLTPs carry strong potential for economic development, their impact is weakened by bureaucratic inefficiencies, inequitable benefit distribution, and market asymmetries. Addressing these challenges is therefore essential to maximize the economic promise of the PLTP and to ensure that its benefits extend beyond large firms to include smallholders, cooperatives, and rural communities.

Challenges and Best Practices in Implementation

Despite its intended role in fostering sustainable timber production, the PLTP system is constrained by administrative and operational challenges. Yao et al. (2021) identify overlapping mandates between DENR field offices and local governments, which contribute to inefficiencies in permit issuance and monitoring. Research by Pulhin and Dressler (2020) underscores weak enforcement mechanisms, which allow some actors to bypass environmental safeguards. Additionally, procedural delays, inadequate field verification, and risks of corruption have been widely cited as persistent obstacles (Guiang & Carandang, 2022).

Nevertheless, best practices are emerging. According to DENR-FMB (2022), digital permitting platforms, geotagged inventories, and streamlined compliance models for smallholders are enhancing transparency and reducing transaction costs. Lasco et al. (2020) also document how community-based monitoring and cooperative-led timber operations contribute to more equitable and sustainable outcomes. These innovations suggest that systemic reforms are possible, provided they are institutionalized across all levels of governance.

Policy Directions and Sustainability Imperatives

Scholarly works consistently emphasize the need for reforming the PLTP framework to better align with sustainability and transparency goals. Pulhin (2024) recommends differentiated compliance pathways that ease

administrative burdens for smallholders without compromising environmental safeguards. Similarly, Yao and Inoue (2020) argue that greater integration of environmental assessments, particularly through the Environmental Compliance Certificate (ECC), can strengthen the ecological legitimacy of PLTPs. Carandang et al. (2021) further propose that PLTP policies should be embedded within broader rural development strategies, ensuring that local communities gain more equitable benefits from timber markets. Collectively, these recommendations underscore that the PLTP's role in shaping the wood industry must extend beyond economic outputs to encompass sustainability, inclusivity, and governance integrity.

The reviewed literature underscores the PLTP as a pivotal mechanism in balancing economic, environmental, and regulatory dimensions of forestry governance. While it has created pathways for legal timber supply, enhanced regulatory oversight, and supported local economic opportunities, its effectiveness is hindered by bureaucratic inefficiencies, inequities in benefit distribution, and weak monitoring mechanisms. Best practices such as digitalization, cooperative-led operations, and integrated environmental safeguards offer promising pathways forward. However, there remain gaps in empirical assessments of stakeholder satisfaction, long-term environmental impacts, and the distributional equity of PLTP benefits, areas that the present study seeks to address.

Objectives of the Study

This study is guided by the following objectives, which collectively aim to assess the effectiveness, economic impact, implementation challenges, and policy directions of the DENR's Private Land Timber Permit (PLTP) in shaping the wood industry.

1. To evaluate the level of effectiveness and satisfaction of the proponent on the PLTP process and its policies;
2. To evaluate the economic implications of PLTPs for private landowners, timber operators, and local communities;
3. To discuss the major challenges encountered by the implementation of PLTP and identify best practices; and

Scope and Limitation of the Study

This study primarily aims to examine the role of the Department of Environment and Natural Resources' (DENR) Private Land Timber Permit (PLTP) in shaping the wood industry, with particular attention to its economic, environmental, and regulatory dimensions. Specifically, it focuses on evaluating the impacts of the PLTP on timber harvesting operations, employment generation, forest management practices, and revenue contributions within the local wood industry sector. By addressing these themes, the study underscores how the PLTP serves as both a regulatory mechanism and a policy instrument that influences the sustainability and viability of the industry.

The intention of this inquiry revolves around the implementation of the PLTP under DENR Administrative Order (DAO) 2000-21, including its effectiveness, challenges, and innovations as experienced within the jurisdiction of the Community Environment and Natural Resources Office (CENRO) in Lianga, Surigao del Sur. The geographic coverage spans eight municipalities: Barobo, Lianga, San Agustin, Marihatag, Bayabas, Cagwait, Tago, and San Miguel, where wood industry operations are closely linked to private landholdings and small-scale timber enterprises.

The respondents of the study are PLTP holders and lumber dealers or furniture makers operating on privately titled lands within the designated areas. Data were gathered during the year 2025, encompassing both primary inputs from respondents and secondary references to existing policies, records, and reports relevant to PLTP implementation.

In terms of its scope, the study is limited to the local jurisdiction of CENRO Lianga, and therefore does not attempt to generalize findings to the entire Philippine wood industry. Instead, it offers a contextualized assessment that highlights local realities while contributing to broader policy discussions. The focus is on the interplay of regulatory compliance, economic outcomes, and environmental management under the PLTP,

leaving out unrelated aspects such as illegal logging activities outside private lands, corporate concessions, or international timber trade. The limitations are acknowledged to ensure clarity in interpreting the findings, while the study remains valuable for its localized, evidence-based insights that may inform both regional and national forestry governance.

Significance of the Study

This study is significant as it sheds light on the role of the Private Land Timber Permit (PLTP) under DAO 2000-21 in promoting the sustainability and recovery of the wood industry within the jurisdiction of CENRO Lianga, Surigao del Sur. It contributes valuable insights on how legal timber harvesting in private lands can support sustainable forest management, provide livelihood opportunities, and strengthen local economies while aligning with environmental policies. The findings of this research may benefit the following groups:

Private Landowners and PLTP Holders. The primary implementers of DAO 2000-21, they can gain a clearer understanding of sustainable harvesting practices, legal compliance, and economic opportunities under PLTP. This can help them manage their land more efficiently and profitably.

Local Wood-Based Industries and Processors. Stakeholders can benefit from a more stable supply of legal and sustainably sourced timber, supporting continuous operations and job generation in wood processing, furniture making, and construction.

Local Government Units (LGUs) and Policy Makers. This can provide insights to help refine local forestry policies, promote investment in timber plantations, and create programs that balance economic growth and environmental protection.

CENRO Lianga and DENR Personnel. Regulatory bodies, they can use the findings to improve permit processing, monitoring, and enforcement of sustainable practices, enhancing the effectiveness of DAO 2000-21 implementation.

Community Members and Local Workers. This study highlights how sustainable forestry practices under PLTP can lead to job creation, livelihood projects, and increased community participation in forest protection and income-generating activities.

Environmental Advocates and NGOs. The use the study as a basis to support or assess forest policy reforms and promote sustainable land use practices aligned with climate action goals.

National Government Agencies. The Department of Trade and Industry (DTI) and the Department of Agriculture (DA), which may integrate findings into broader economic and land-use planning strategies.

Researchers and Academics. The study can serve as a reference for future studies on forestry policy, environmental management, rural development, and local economic resilience.

Students and Future Foresters. Those interested in forest policy, environmental science, or sustainable development, as the study provides contextual knowledge applicable in academic and practical settings.

Definition of Terms

For precision and consistency in the discussion, the following terms are operationally defined as they are specifically applied in this study, ensuring a clearer understanding of concepts related to the implementation and impacts of the Private Land Timber Permit (PLTP).

CENRO (Community Environment and Natural Resources Office). A field office under the Department of Environment and Natural Resources (DENR) responsible for implementing environmental laws and policies within a designated area.

Forest Charges. These are the fees collected by the government for the use or harvesting of forest products, which contribute to both local and national revenue.

Private Land Timber Permits (PLTP/SPLTP). A permit issued by the Department of Environment and Natural Resources (DENR), specifically under DAO 2000-21, that authorizes the cutting, gathering, and utilization of naturally grown trees and planted premium species within titled private lands.

Sustainable Forest Management. The process of managing the forest to achieve one or more specified objectives related to the continuous flow of desired forest products and services, without compromising the forest's inherent values, future productivity, or causing harmful effects to the physical and social environment.

Sustainable Forestry. The management of forest resources in a way that meets present needs without compromising the ability of future generations to meet theirs. It includes practices that maintain forest health, biodiversity, and long-term productivity.

Timber Corridor. A term used to describe regions, such as Caraga, that are rich in forest resources and serve as central hubs for wood production and processing in the country.

Wood Industry. The sector engaged in the harvesting, processing, and manufacturing of wood and wood-based products such as timber, plywood, veneer, and furniture.

Wood Processing Plants. These are facilities where raw logs are processed into finished or semi-finished wood products such as lumber, plywood, and veneer.

RESEARCH METHODOLOGY

This section presents the research design, participants, locale, instruments, data gathering procedures, and methods of analysis employed to systematically examine the role of the Private Land Timber Permit (PLTP) in shaping the wood industry.

Research Design

This study employed a descriptive-evaluative research design, which is widely recognized for its capacity to assess existing programs, policies, and processes in terms of their effectiveness, outcomes, and challenges. According to Creswell and Creswell (2021), descriptive designs are useful in systematically describing and interpreting the current status of a phenomenon, while evaluative components allow researchers to measure the extent to which programs achieve their intended objectives. In this context, the descriptive-evaluative design is well-suited for examining the role of the Private Land Timber Permit (PLTP) in shaping the wood industry, as it provides both a factual account of stakeholder experiences and a critical assessment of policy implementation.

The adoption of this design is particularly applicable given the objectives of the study, which include evaluating effectiveness and satisfaction levels, analyzing economic implications, identifying challenges and best practices, and proposing policy recommendations. As Saunders et al. (2020) emphasize, research designs must align with the questions being addressed to generate relevant and actionable insights. Similarly, Khoo-Lattimore et al. (2021) argue that descriptive-evaluative approaches provide a comprehensive framework for exploring both measurable impacts and contextual challenges. By applying this design, the study ensures a balanced inquiry into the PLTP system within the jurisdiction of CENRO Lianga, thereby producing findings that are not only descriptive but also policy-oriented and actionable.

Research Locale

This study was conducted within the jurisdiction of the Community Environment and Natural Resources Office (CENRO) Lianga, which encompasses eight municipalities: Barobo, Lianga, San Agustin, Marihatag, Bayabas, Cagwait, Tago, and San Miguel in the province of Surigao del Sur. The area was selected because of its abundance of privately titled lands with significant forest cover, where timber harvesting is regulated through the issuance of the Private Land Timber Permit (PLTP). Such characteristics make the locale highly relevant to

the objectives of the study, as it reflects both the opportunities and challenges in managing timber resources under the Department Administrative Order (DAO) 2020-21.

Moreover, the Caraga Region, where CENRO Lianga is situated, is widely recognized as the “Timber Corridor of the Philippines,” underscoring its pivotal role in sustaining the country’s wood industry. This distinction highlights the locale’s strategic importance in assessing the effectiveness, economic implications, and policy impacts of PLTP implementation. Conducting the study in CENRO Lianga thus provides a practical and grounded context for analyzing how PLTP influences timber operations and local livelihoods, while also generating insights that can inform policy directions for sustainable forest management in the region.

Research Respondents

The respondents of this study consisted of thirteen (13) approved Private Land Timber Permit (PLTP) holders and two (2) lumber dealers or furniture makers operating within the jurisdiction of CENRO Lianga, Surigao del Sur, specifically from the municipalities of Barobo, Lianga, San Agustin, Marihatag, Bayabas, Cagwait, Tago, and San Miguel. These respondents were purposively selected based on their direct involvement in the PLTP process, either as private landowners engaged in timber harvesting or as wood processors utilizing legally sourced timber. The inclusion criteria required that the respondents be active stakeholders with approved permits or ongoing timber-related operations, ensuring that their insights reflect firsthand experiences of the policy’s implementation and impact on the wood industry.

The study employed purposive sampling technique widely used in policy-oriented research to deliberately select respondents who can provide rich and relevant data. This method is particularly applicable in studies involving respondents with specific knowledge and experience on the subject under investigation (Palinkas et al., 2020). By focusing on respondents who represent the primary stakeholders of the PLTP, the sampling design ensures that the perspectives gathered are both contextually grounded and analytically significant for evaluating the effectiveness, economic implications, and policy directions of PLTP implementation in the wood industry.

Research Instrument

The primary research instrument used in this study was a researcher-made survey questionnaire specifically designed to gather empirical data on the effectiveness, economic implications, implementation challenges, and policy directions of the Private Land Timber Permit (PLTP) under DAO 2000-21. The instrument was structured to elicit standardized responses from key stakeholders, namely PLTP holders, lumber dealers, and furniture makers, thereby ensuring that the information collected reflected the perspectives of individuals directly engaged in timber operations and processing. Its design aligned with the study’s objectives of assessing the role of PLTP in shaping the wood industry in the jurisdiction of CENRO Lianga, Surigao del Sur.

The questionnaire was composed of three major components. The first section gathered contextual information from respondents, such as their role in the timber industry and nature of PLTP engagement. The second section addressed the effectiveness and satisfaction with the PLTP process, as well as its perceived economic implications for landowners, operators, and local communities. The third section focused on challenges encountered during the implementation of PLTP and identified best practices that could inform future policy directions. Each item was measured using a structured Likert scale to capture the degree of agreement or disagreement of respondents, thereby facilitating quantifiable and comparable results.

To ensure face and content validity, the questionnaire was reviewed by a panel of experts consisting of the Provincial Environment and Natural Resources Officer (PENRO), Development Management Officer (DMO) III and IV, Land Management Officer (LMO I and IV of CENRO Lianga). These validators were purposively chosen based on their technical expertise, administrative roles, and extensive experience in forestry regulation and timber industry management. Their evaluation ensured that the instrument’s items were clear, relevant, and comprehensive in addressing the research objectives. Comments and suggestions from the validators, such as refining terminologies, rephrasing ambiguous statements, and aligning indicators with regulatory provisions, were carefully incorporated to enhance the tool’s clarity and applicability.

The validated questionnaire was then subjected to a pilot test among a small group of timber stakeholders outside the final respondent pool to establish its reliability. The results of the reliability test revealed a Cronbach's Alpha coefficient exceeding 0.70, which is considered acceptable for social science research. This outcome confirmed the internal consistency of the instrument and its suitability for actual data collection. Feedback from the pilot respondents further contributed to minor revisions, such as improving the sequencing of questions and adjusting response categories for better comprehension. The final version of the instrument thus reflected both expert validation and empirical testing, ensuring its validity, reliability, and effectiveness in capturing data for this study.

Data Gathering Procedure

The data gathering procedure of this study was conducted systematically, beginning with preparation and planning to ensure alignment with the research objectives. Prior to the administration of the research instrument, the researcher secured formal permission from the Dean of the Graduate School and subsequently obtained authorization from the Community Environment and Natural Resources Officer (CENRO) of Lianga and the Provincial Environment and Natural Resources Officer (PENRO) in Tandag City, Surigao del Sur. This preparatory stage ensured compliance with institutional and agency protocols while affirming the relevance of the study to the policies and processes governing the Private Land Timber Permit (PLTP).

Following approval, the survey questionnaire, designed to assess the role of DENR and identify challenges in PLTP implementation, was finalized and subjected to expert validation to ensure clarity and content relevance. Upon endorsement, the researcher proceeded with the implementation stage, which involved the distribution and retrieval of survey questionnaires, supplemented by interviews with purposively selected respondents such as PLTP holders, private landowners, and permittees directly engaged in the timber industry to support the responses from the survey questionnaire. Clear instructions were provided to respondents to facilitate accurate responses, while demographic and contextual data were also gathered to contextualize findings within the socio-economic and policy environment. Retrieval of the completed instruments was personally undertaken by the researcher to maximize response rates and data reliability.

The data collected were systematically organized and tabulated, with confidentiality maintained by assigning identifiers instead of respondent names. Quantitative methods were employed in the analysis, enabling the identification of key issues in the implementation of DAO 2000-21, particularly the PLTP's effectiveness, economic implications, and challenges. The results were then synthesized and interpreted in line with the objectives of the study, providing an empirical basis for formulating policy recommendations. Ultimately, the analysis led to the development of proposed strategies aimed at enhancing the efficiency, transparency, and sustainability of the PLTP system, thereby contributing to improved forest governance and the revitalization of the local wood industry.

RESULTS AND DISCUSSIONS

This section presents, analyzes, and interprets the data gathered from the survey and interviews, aligning the findings with the study's objectives to assess the effectiveness, economic implications, and implementation challenges of the Private Land Timber Permit (PLTP) that lead to the policy recommendation to streamline the PLTP and ECC applications.

Effectiveness and Satisfaction with the PLTP Process

The findings revealed that the highest-rated indicators were the clarity of the PLTP application steps (Mean = 5.0) and the adequacy of technical assistance provided by DENR personnel (Mean = 5.0), both of which were assessed as highly effective. These results imply that applicants generally find the procedural flow understandable and appreciate the support extended by DENR staff, which contributes to smoother compliance. This aligns with the argument of Pulhin (2024), who underscored that the institutionalization of PLTP has strengthened regulatory oversight by making timber harvesting more transparent and legally anchored. Similarly, Yao and Inoue (2020) highlight that stakeholder satisfaction increases when regulatory agencies demonstrate fairness and provide timely technical guidance, confirming that institutional assistance is a critical driver of

effective policy implementation. Thus, the findings indicate that while procedural transparency and staff support are being met, these strengths can serve as a foundation to improve other aspects of the permitting system.

Table 2. Level of Effectiveness and Satisfaction with the PLTP Process

Indicators	Mean	Adjectival Rating
1. The steps in the PLTP application process are clearly explained and easy to follow.	5.0	Highly Effective
2. The documentary requirements for PLTP are specific, reasonable, and accessible to applicants.	4.6	Moderately Effective
3. DENR personnel provide adequate technical guidance and assistance during the PLTP application process.	5.0	Strongly Agree
4. The processing time for PLTP applications is efficient and reasonable.	4.6	Moderately Effective
5. Overall, I am satisfied with the PLTP policies and their implementation by DENR.	3.9	Effective
Over-all Mean	4.6	Moderately Effective

On the other hand, the lowest-rated indicator was the overall satisfaction with PLTP policies and implementation (Mean = 3.9), which, although still rated effective, signals a relative gap in stakeholder perception. This outcome reflects broader concerns noted in prior studies, where Guiang and Carandang (2022) observed that smallholders often view the PLTP process as bureaucratic, costly, and time-consuming, reducing their overall satisfaction with the system. Similarly, Yao and Inoue (2020) argued that delays in processing and inconsistencies in enforcement tend to lower trust in forestry regulatory mechanisms. The moderately effective ratings for documentary requirements (Mean = 4.6) and processing time (Mean = 4.6) reinforce this interpretation, as these are precisely the area's most vulnerable to inefficiencies. Taken together, the results imply that while technical guidance and procedural clarity are strong points, improvements in timeliness, accessibility of requirements, and policy responsiveness are necessary to sustain compliance incentives and enhance stakeholder confidence in the PLTP framework.

In synthesis, the results imply that while the PLTP process demonstrates strengths in procedural clarity and technical assistance, its overall effectiveness is constrained by issues in processing efficiency and satisfaction with policy implementation. These findings confirm earlier literature that emphasizes the need to reduce bureaucratic barriers and enhance institutional responsiveness (Guiang & Carandang, 2022; Yao & Inoue, 2020). Hence, the study points toward policy recommendations centered on streamlining documentary requirements, reducing application delays, and strengthening participatory mechanisms to build trust among stakeholders. By addressing these areas, the PLTP framework can better balance regulatory oversight with user satisfaction, thereby reinforcing compliance and contributing to a more sustainable wood industry.

Economic Implications of PLTPs

The highest ratings in the PLTP process were given to the clarity of application steps and the adequacy of DENR personnel's technical assistance, both scoring 5.0, which underscores the system's strength in providing clear guidance and procedural support. These results implies that the applicants find the process understandable and benefit from the assistance of knowledgeable staff, factors that reduce uncertainties and encourage compliance. Such institutional clarity aligns with Carandang et al. (2021), who emphasize that when permit procedures are accessible and well-communicated, landowners are more likely to invest in tree plantations as long-term financial assets. Likewise, Lasco et al. (2020) highlight that strong technical support enhances the participation of local communities in timber-related activities, fostering resilience through employment and cooperative engagement. Thus, the high ratings indicate that the PLTP process has effectively built a foundation of

procedural efficiency and trust, encouraging stakeholders to view timber production as a sustainable and economically viable endeavor.

Table 3. Level of Effectiveness to Economic Implications of PLTPs

Indicators	Mean	Adjectival Rating
1. The PLTP has positively contributed to my income or livelihood.	5.00	Highly Effective
2. The implementation of PLTP creates employment opportunities within the community.	5.00	Highly Effective
3. Timber harvested under PLTP generates fair and substantial economic returns.	4.80	Moderately Effective
4. PLTP contributes to the long-term financial sustainability of stakeholders.	4.80	Moderately Effective
5. The PLTP provides sufficient incentives for private landowners to adopt sustainable forest management practices.	5.00	Highly Effective
Over-all Mean	4.90	Moderately Effective

Conversely, the lowest result, with a mean of 3.9, reflects only moderate satisfaction with the overall PLTP policies and implementation, signaling those broader systemic concerns remain unresolved. While specific steps and guidance are clear, issues with documentary requirements and processing time (both rated 4.6) appear to undermine satisfaction, as applicants may still perceive the process as administratively burdensome. Pulhin (2024) underscores that such transaction costs disproportionately affect smallholders, who often lack the resources to navigate lengthy or complex bureaucratic procedures, allowing larger firms to capture greater benefits. This resonates with FAO (2021), which cautions that inefficiencies in permit systems can limit the ability of local producers to compete, perpetuating dependence on imports and weakening domestic supply chains. Therefore, the relatively low satisfaction rating implies that while the PLTP process is structurally sound in clarity and support, gaps in accessibility and timeliness continue to constrain its inclusivity and capacity to deliver equitable economic outcomes.

The results collectively highlight that while the PLTP process demonstrates strengths in clarity and technical guidance, satisfaction is undermined by perceived inefficiencies in documentation and processing time, which disproportionately affect smallholders. These findings underscore the need for policy directions that prioritize efficiency in streamlining requirements, transparency in ensuring equitable access, and responsiveness in addressing the varying capacities of stakeholders, thereby strengthening both the inclusivity and sustainability of the PLTP system.

Challenges and Best Practices in Implementation

The highest-rated indicators; delays in the approval and release of PLTP applications (M=5.00), the difficulty of meeting legal and environmental requirements (M = 5.00), and the potential of digital platforms to enhance efficiency and transparency (M = 5.00); reflect both entrenched systemic challenges and opportunities for reform within the PLTP process. The unanimous rating of delays and compliance difficulties as “highly effective” indicators of challenge underscores how administrative bottlenecks, overlapping mandates, and burdensome requirements create persistent obstacles for applicants, particularly small-scale landholders. This is consistent with Yao et al. (2021), who found that conflicting institutional roles contribute to inefficiencies, and with Pulhin and Dressler (2020), who noted weak enforcement mechanisms that complicate compliance efforts.

Table 4. Challenges Encountered and Best Practices in Implementation

Indicators	Mean	Adjectival Rating
1. There are significant delays in the approval and release of PLTP applications.	5.00	Highly Effective
2. The PLTP system needs more transparency in decision-making and permit approval.	4.60	Moderately Effective
3. The compliance requirement on replacement planting (seedlings) is burdensome for small-scale applicants.	4.80	Moderately Effective
4. Meeting legal and environmental requirements for PLTP approval is challenging for most applicants.	5.00	Highly Effective
5. The use of digital platforms and technology can enhance the efficiency and transparency of PLTP processing.	5.00	Highly Effective
Over-all Mean	4.90	Moderately Effective

However, respondents' strong agreement that digital platforms can resolve inefficiencies reveals a somewhat contradictory response: while delays and complex requirements remain pressing barriers, stakeholders are also optimistic about technological interventions. This aligns with DENR-FMB (2022), which documents how geotagged inventories and online permitting streamline processes. Still, implies this optimism must be tempered by recognition that digital solutions may inadvertently marginalize applicants who are less computer literate, creating a digital divide that could exacerbate inequities rather than resolve them.

Conversely, the lowest-rated item; the need for more transparency in decision-making and permit approval ($M = 4.60$); suggests that although stakeholders perceive opacity in the process, they prioritize procedural delays and compliance burdens as more immediate concerns. The moderately high rating highlights a paradox: while stakeholders recognize the importance of transparency, their greater frustration lies with inefficiency and overly complex compliance systems. Guiang and Carandang (2022) support this concern by identifying risks of corruption and inadequate verification as recurring problems in forestry permit systems. Furthermore, the contradictory responses regarding digitization; valued for its potential yet problematic for those lacking digital skills; implies the broader challenge of implementing reforms that are both technologically advanced and socially inclusive. As Lasco et al. (2020) emphasize, community participation and cooperative-led monitoring foster trust and accountability, ensuring that reforms do not privilege only the digitally literate. Thus, while stakeholders endorse modernization, they also signal the need for capacity-building and inclusive mechanisms to address digital literacy gaps and ensure equitable access.

The results reveal that while systemic delays, complex compliance requirements, and limited transparency continue to hinder the effectiveness of PLTP implementation, stakeholders recognize the promise of digital platforms and streamlined processes in addressing these inefficiencies. However, the contradictory responses highlight those reforms must not only improve efficiency and transparency but also ensure responsiveness to the realities of small-scale applicants, particularly those with limited digital literacy. These findings directly point to policy recommendations that emphasize efficiency through reduced delays and simplified compliance, transparency through institutionalized monitoring and decision-making mechanisms, and responsiveness by integrating inclusive and capacity-building measures to ensure equitable access to PLTP services.

CONCLUSIONS AND RECOMMENDATIONS

This section presents the study's conclusions and recommendations, synthesizing empirical findings to inform evidence-based reforms that enhance the efficiency, transparency, and inclusivity of the Private Land Timber Permit (PLTP) system.

Conclusions

The study concludes that the Private Land Timber Permit (PLTP) process within the jurisdiction of CENRO Lianga is moderately effective, as reflected in stakeholders' perceptions and experiences. The clarity of application steps and the adequacy of technical guidance from DENR personnel are recognized as key strengths, highlighting the system's potential to foster compliance and legal timber production. Nevertheless, moderate satisfaction with documentary requirements, processing time, and overall policy implementation implies that procedural inefficiencies continue to constrain stakeholder trust and limit full participation in the permit process.

Although procedural clarity and personnel support foster applicant confidence, these advantages are tempered by inefficiencies in documentation and processing. This suggests that broader challenges remain in balancing economic opportunities with equitable access, as smallholders face greater barriers compared to larger stakeholders. Addressing these disparities is therefore essential to ensure that PLTPs effectively support local livelihoods, reduce reliance on timber imports, and contribute meaningfully to sustainable forest management.

Overall, while the PLTP system is designed to promote sustainable timber production and support community livelihoods, it continues to face constraints arising from bureaucratic inefficiencies, compliance burdens, and uneven accessibility. Innovations in digital platforms offer promising avenues for enhancing efficiency and transparency; however, persistent challenges such as limited digital literacy and inconsistent institutional responsiveness imply that technological solutions alone are insufficient. A balanced approach that integrates technological improvements with socially inclusive mechanisms is thus required to ensure that PLTP implementation delivers equitable benefits to all stakeholders and strengthens the system's overall effectiveness.

Recommendations

The streamlining of documentation and processing requirements under the PLTP framework gains greater acceptance when anchored on standardized forms, stepwise guidelines, and simplified submission channels. The participation of private landowners, PLTP holders, and local government units (LGUs) reinforces these measures, while policy makers provide the enabling framework for institutional adoption. CENRO Lianga and DENR personnel demonstrate a pivotal role in sustaining procedural clarity and building stakeholder confidence through consistent technical support.

Hybrid mechanisms that combine digital platforms with community-based assistance desks expand access for applicants across varying literacy levels. Local wood-based industries, processors, community members, and local workers benefit from these inclusive systems, while DENR and LGUs sustain technical guidance and orientation programs. Capacity-building activities involving students, future foresters, and local workers foster institutional resilience, advance digital literacy, and cultivate the next generation of responsible forest stewards.

Broader adoption of reforms emerges through collaborative evaluation processes involving environmental advocates, NGOs, researchers, and academics, generating evidence-based refinements and practical models for improvement. Inter-agency support from national government agencies strengthens coordination and resource mobilization, while stakeholder consultations contribute perspectives necessary for balancing efficiency with inclusivity. Through these combined efforts, the PLTP process attains greater transparency, responsiveness, and equity, thereby reinforcing its role in sustainable forest management.

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