INDONESIA'S CURRENT AND FUTURE EFFORTS TO TACKLE THE ISSUE OF DEFORESTATION

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Abstrak: Indonesia menghadapi hambatan yang signifikan dalam bentuk deforestasi, yang disebabkan oleh aktivitas manusia seperti pertanian dan penebangan hutan. Isu ini berdampak luas terhadap konservasi keanekaragaman hayati dan perubahan iklim yang terjadi di seluruh dunia. Untuk mengatasi masalah ini, Indonesia telah berupaya melakukan sejumlah cara, seperti moratorium penebangan hutan dan program reboisasi lahan yang sebelumnya telah dibuka. Oleh karena itu, analisis terhadap aktivitas Indonesia dalam memerangi deforestasi disajikan dalam kajian ini - dengan perhatian khusus pada gagasan bahwa kemitraan internasional dan dukungan finansial berperan dalam mendukung inisiatif-inisiatif ini. Studi ini, yang mengacu pada teori neoliberal institusionalism, menekankan pentingnya kerjasama global dalam mengatasi kesulitan yang ditimbulkan oleh deforestasi secara efektif. Selain itu, kajian ini juga akan menggabungkan metode penelitian analisis konten untuk lebih memahami argumen-argumen yang disajikan. Bagaimanapun juga, Indonesia masih menghadapi tantangan seperti korupsi dan masalah tata kelola yang menghalangi mencapai tujuannya, meskipun Indonesia telah membuat kemajuan dalam menurunkan laju deforestasi. Namun, temuan penelitian ini menyoroti pentingnya dukungan internasional yang berkelanjutan dan mengadopsi strategi inklusif untuk mencapai pengelolaan hutan yang berkesinambungan di tingkat Indonesia. Akhirnya, studi ini menekankan kebutuhan kemitraan global dan upaya kolaboratif untuk mencapai kesuksesan jangka panjang dalam upaya Indonesia untuk memerangi deforestasi dan mempromosikan keberlanjutan lingkungan, dengan demikian menyoroti urgensi untuk mengatasi kekhawatiran lingkungan yang mendesak ini.

Kata Kunci: deforestasi, Indonesia, kerjasama global, neoliberal institusionalisme, keberlanjutan lingkungan

Abstract: Indonesia faces a substantial challenge in the form of deforestation, resulting from human activities such as agriculture and logging. This issue has far-reaching repercussions for the conservation of biodiversity and the climate change that is occurring on a worldwide scale. In order to address this problem, Indonesia has attempted a number of methods, such as moratoriums on forest removal and programs to reforest previously cleared land. As such, an analysis of Indonesia's activities to combat deforestation is presented in this study - with a particular attention on the notion that international partnerships and financial support play in bolstering these initiatives. The study, which draws on the neoliberal institutionalism theory, places an emphasis on the significance of global cooperation in efficiently addressing the difficulties posed by deforestation. In addition, this literature would also incorporate the research method of content analysis in order to better understand the arguments presented. Be that as it may, Indonesia still encounters challenges such as corruption and governance concerns that are preventing them from achieving their goals, despite the fact that they have made progress in lowering the rates of deforestation. Nonetheless, the findings of this study highlight the importance of sustaining international support and adopting inclusive strategies in order to achieve sustainable forest management at the Indonesian level. Ultimately, the study emphasizes the necessity of global partnerships and collaborative endeavors to achieve long-term success in Indonesia's efforts to combat deforestation and promote environmental sustainability, thereby emphasizing the urgency of addressing these urgent environmental concerns.

Keywords: *deforestation,   Indonesia,   global   cooperation, Neoliberal institutionalism, environmental sustainability*

INTRODUCTION

Deforestation is a significant worldwide problem marked by the extensive elimination of wooded regions, mostly caused by human activities such as agriculture, logging, and urban expansion (Varrial, 2023). This process causes substantial disturbances in ecosystems, resulting in the depletion of biodiversity as numerous plant and animal species leave their habitats. Rainforests, commonly known as the Earth's respiratory system, have a vital function in absorbing carbon dioxide and generating oxygen. Their destruction worsens climate change by raising the levels of greenhouse gases in the atmosphere (Intergovernmental Panel on Climate Change, 2019). Furthermore, deforestation has a significant impact on the water cycle by diminishing the capacity of forests to control water movement,

resulting in heightened soil erosion and flooding. Indigenous groups, reliant on wood for sustenance and cultural customs, encounter forced relocation and the gradual destruction of their customary lifestyles (Igini, 2023). From an economic perspective, deforestation may offer immediate benefits in terms of timber and land for farming. However, it ultimately hampers long-term sustainability by exhausting resources and disrupting crucial environmental functions that are essential for agriculture, water availability, and climate control. To effectively tackle deforestation, it is necessary to adopt a comprehensive strategy that encompasses several aspects. This includes implementing more stringent measures to enforce environmental rules, promoting sustainable land management techniques, undertaking reforestation initiatives, and ensuring the protection of indigenous rights to safeguard forested areas.

Given the context, it should be noted that Indonesia plays a pivotal role in the global effort to manage deforestation due to its vast tropical forests, which are among the most biodiverse and extensive on Earth. As the world's largest producer of palm oil, Indonesia has faced intense deforestation pressures driven by agricultural expansion, particularly for palm oil plantations (Greenpeace, 2020). Species such as orangutans, tigers, and elephants are threatened by habitat destruction, leading to a decline in biodiversity that affects global ecological balance (Eyes on the Forest, 2019). Furthermore, Indonesia's peatlands, which store immense amounts of carbon, are often drained and burned for agricultural purposes, releasing vast quantities of carbon dioxide and creating transboundary haze that impacts air quality in neighboring countries. The Indonesian government's policies and initiatives, such as moratoriums on new forest clearances and efforts to restore degraded lands, are crucial for global environmental health. International collaborations and funding for sustainable development and conservation projects in Indonesia are essential to curtail deforestation and its adverse effects. Hence, Indonesia's success in managing deforestation has far-reaching consequences, influencing global climate stability, biodiversity conservation, and regional air quality, making it a linchpin in the fight against climate change and environmental degradation.

According to (Jong, 2021), although Indonesia witnessed a substantial decline in deforestation rates in 2020, this favorable trajectory may be endangered by complacency and future economic recovery. Indonesia had a significant decrease in deforestation in 2020, with a reduction of 75% compared to previous years. A total of 115,459 hectares of forest cover were lost during this period. This decline can be attributed to a combination of factors, including government regulations, higher levels of rainfall, lower palm oil prices, and the economic consequences of the COVID-19 epidemic. Furthermore, he contends that Indonesia's existing climate targets allow for significant deforestation, and they advocate for more aggressive objectives to effectively address climate change and promote reforestation initiatives. Overall, his article highlights the significance of sustainable development, which involves achieving economic progress while safeguarding the environment to maintain the long-term well-being of ecosystems.

According to (Shahreen, 2022), her paper explores the complex obstacles that Indonesia encounters in tackling deforestation, a pressing issue with profound worldwide consequences for biodiversity and climate equilibrium. Indonesia has pledged to decrease its emissions by 29% by 2030 as part of the Paris Agreement. This reduction will be achieved through efforts to enhance land utilization and promote clean energy. However, the country faces a challenge in balancing its environmental objectives with its economic growth. The varied responses from Indonesian officials towards global commitments to cease deforestation exemplify the ongoing challenge. In order to address these problems, the government has implemented a social forestry initiative with the objective of empowering local communities and advocating for sustainable land management methods. Her essay proposes that Indonesia could gain valuable insights by studying the experiences of other nations, such as India's implementation of ecological fiscal transfer and China's initiatives for reforestation, in order to improve its own approaches to sustainable forest management. Although deforestation rates have reportedly decreased, the country's forests are still at risk due to persistent challenges like illegal logging, palm oil extraction, and inadequate governance. Despite putting in place government measures such as a ban on issuing licenses for primary forests and peatlands, there are still considerable obstacles in effectively enforcing these

rules and ensuring compliance at the local level. The intricate interaction between economic interests, environmental deterioration, and social conflict adds more complexity to the task of safeguarding Indonesia's forests, which are crucial for maintaining ecological equilibrium and supporting the livelihoods of local communities.

Having said the aforementioned statements above, this paper wishes to analyse the current actions that have been enacted by the Indonesian government to address the issue of deforestation as well as examine the future policies that Indonesia could utilize to further manage the threat of deforestation in the future. As such, the author would like to propose the following research question - what has been done to tackle deforestation in Indonesia and What can be done to manage the deforestation issue in the future? This academic enquiry could serve the purpose of assisting this paper in figuring out all the contemporary measures that Indonesia has taken thus far to combat deforestation, along with engaging the topic towards the wider view of international cooperation.

THEORETICAL FRAMEWORK

To help analyze the given topic, it would be appropriate to utilize the framework of neoliberal institutionalism - an international relations theory that argues global cooperation and institutions are crucial for effectively addressing complex transnational challenges. Neoliberal institutionalism is a prominent theoretical paradigm in the field of international relations that highlights the importance of international institutions in promoting cooperation among states in a world without a central governing authority. According to (Keohane, 1984), he posits that even in the absence of a central controlling authority, states can attain significant and enduring cooperation by creating and strengthening international institutions (Keohane, 1984). Neoliberal institutionalism argues that institutions like the United Nations, the World Trade Organization, and multilateral treaties play a crucial role in reducing the costs of transactions, improving transparency, and promoting the exchange of information between countries (Keohane & Martin, 1995). Institutions play a crucial role in reducing the uncertainties and potential conflicts that exist in the international system by establishing norms and laws that

govern the behavior of states. Neoliberal institutionalism argues that international institutions can facilitate cooperation among nations and promote mutual advantages, in contrast to realism which focuses on power dynamics and competition (Keohane, 1984). This viewpoint emphasizes that institutions are not just places where power struggles occur, but rather they actively influence and limit the actions of states, ultimately leading to more predictable and organized international relations (Martin, 1992). Neoliberal institutionalism provides a positive perspective on global governance, asserting that carefully constructed institutions may improve collaboration and better tackle global issues.

Having said that, this concept is especially valuable for examining Indonesia's endeavours to control deforestation. Neoliberal institutionalism emphasizes the significance of institutions and cooperation procedures in supporting Indonesia's environmental endeavours. It underscores how international agreements, such as the Paris Agreement, and organizations like the United Nations Environment Program (UNEP) may provide assistance. This viewpoint emphasizes the importance of global collaborations and the enforcement of international environmental regulations and surveillance mechanisms. Viewed from this perspective, Indonesia's involvement in projects such as REDD+ (Reducing Emissions from Deforestation and Forest Degradation) is essential for obtaining technical and financial assistance, promoting the exchange of knowledge, and assuring adherence to global environmental standards (Gaveau et al, 2014). Neoliberal institutionalism emphasizes the significance of non-state players, such as Non-Governmental Organizations (NGO)s and multinational enterprises, in promoting sustainable practices and ensuring accountability. Through the application of this framework, an examination of Indonesia's deforestation management reveals the intricate relationship between domestic policies and international cooperation. This analysis underscores the role of global institutions and multilateral agreements in assisting Indonesia in strengthening its ability to address deforestation. Furthermore, it emphasizes the importance of aligning national interests with global environmental objectives and mobilizing the required resources for sustainable forest management (Rink, 2019).

METHOD

Content analysis is a systematic study approach that involves analyzing the content of communication, including text, images, or media, in order to find patterns, themes, or biases. This approach is based on the concepts of systematic observation and quantitative measurement. Its goal is to draw conclusions about the underlying signals provided by the material (Krippendorff, 2018). The procedure comprises many essential steps: formulating the research inquiry, choosing and readying the material for examination, categorizing the material into distinct groups, and subsequently scrutinizing the data to discern prevailing tendencies and patterns (Neuendorf, 2017). Furthermore, qualitative content analysis involves the interpretation of content to understand its meaning and context (Hsieh & Shannon, 2005). The researchers can use this methodological flexibility to investigate a diverse variety of problems and use the methodology in different fields such as media studies, sociology, and political science. Content analysis is a methodical approach to studying communication content. It enables academics to gain insights into how topics are presented, how social groupings are portrayed, and how public discourse changes over time (Mayring, 2014). The rigorous methodology used to analyze material yields useful insights into the construction and interpretation of information within a specific context.

In order to assess Indonesia's deforestation initiatives through the author's preferred approach of content analysis, the research methodology would entail a systematic examination of texts, documents, and media reports pertaining to deforestation policies and actions in Indonesia. This approach enables a thorough comprehension of the narratives, themes, and patterns that arise from diverse sources, offering a holistic perspective of the nation's deforestation policies.

Content analysis can be conducted by gathering an extensive array of data sources, such as government papers, policy documents, academic articles, news items, and NGO reports. The sources would be categorized to identify significant topics such as policy measures, enforcement difficulties, international partnerships, and the socio-economic effects of deforestation. For instance, coding could unveil

repeating patterns regarding the efficacy of the One Map Policy or the influence of public-private partnerships on the sustainable management of forests.

The research could additionally examine the linguistic patterns employed in these publications to evaluate the way deforestation issues are presented, the depiction of individuals or groups involved, and the prioritization of specific policy actions over alternatives. To enhance this qualitative study, it would be beneficial to use quantitative data, such as the frequency of particular terms or subjects, in order to detect patterns and changes over a period of time.

Through the utilization of content analysis, the research aims to get a comprehensive and detailed comprehension of Indonesia's present and future endeavors in addressing deforestation. This analysis will emphasize both accomplishments and persistent obstacles. This approach provides a strong and comprehensive structure for assessing the efficiency of different techniques and pinpointing areas that need enhancement in the implementation and enforcement of policies.

RESULTS AND DISCUSSIONS

With that being said, Indonesia has enacted many measures and regulations with the goal of curbing deforestation, demonstrating its dedication to sustainable development and environmental preservation. An important step is the moratorium on new forest and peatland removals, which was initially implemented in 2011 and has been renewed multiple times since then. The objective of this policy is to cease the granting of new permits for logging and plantation development in primary forest and peatland areas, with the intention of safeguarding these vital ecosystems (Rink, 2019). The Indonesian government has bolstered law enforcement efforts to address the issue of illicit logging and encroachment on forests. This has been achieved through the deployment of task forces and the implementation of advanced monitoring systems utilizing satellite technology. The One Map Policy is a notable effort aimed at addressing conflicting land claims and enhancing land-use planning by the creation of a comprehensive, precise, and transparent map of the nation's land and forest resources. Indonesia's involvement in the Reducing Emissions from Deforestation and Forest Degradation (REDD+) initiative

showcases its commitment to aligning with global climate objectives, garnering international financing and technical support to promote sustainable forest management practices (Gaveau et al, 2014). In addition, the government has actively encouraged the restoration of damaged areas and the rehabilitation of peatlands, with ambitious goals established for reforestation and peatland rewetting initiatives. Public-private partnerships and cooperation with non-governmental organizations (NGOs) are crucial for these endeavors, as they promote community engagement and establish sustainable economic choices for local populations that rely on forest resources. Indonesia's policies and activities demonstrate a comprehensive strategy to tackle deforestation, by finding a balance between economic growth and environmental protection, and by actively participating in global efforts to mitigate climate change.

As such, in order to successfully address deforestation in Indonesia in the future, it is crucial to adopt a comprehensive strategy that combines legislative change, enhanced governance, community involvement, and sustainable economic practices. First and foremost, it is crucial to include forest conservation policies into national land-use and economic goals. To resolve conflicts between conservation objectives and development requirements, it is important to harmonize these policies. This will ensure that forest preservation is given priority during the planning and execution phases (Margono et al., 2014). Land-use planning should integrate conservation principles into wider economic frameworks to achieve a balance between development and environmental sustainability.

Enhancing governance and enforcement systems is another crucial domain. Enhancing institutional structures and mitigating corruption are essential for the efficient management of forests. Improving accountability can be achieved by implementing measures that promote openness, such as providing public access to information regarding forest concessions and land usage (Gusmian et al., 2020). In addition, the implementation of sophisticated technologies, such as satellite surveillance and data analytics, can greatly enhance enforcement efforts by offering up-to-the-minute information on deforestation operations and facilitating prompt responses (Stolle et al., 2022). Providing local enforcement authorities

with improved resources and training is crucial for effectively addressing the issues of illicit logging and land encroachment.

It is crucial to expand and improve the REDD+ (Reducing Emissions from Deforestation and Forest Degradation) initiative. Increasing the reach of REDD+ and improving its interaction with local and national development strategies can enhance its effectiveness. Enhancements in the measurement, reporting, and verification (MRV) systems employed in REDD+ are imperative to ensure precise data on reductions in emissions and outcomes of forest conservation. This will bolster the reliability of Indonesia's commitments and attract greater international support and funding (Angelsen, 2019). In addition, implementing a more comprehensive and clearer REDD+ framework that actively involves a wide range of stakeholders, such as indigenous groups, has the potential to improve the program's efficiency.

Advocating sustainable agriculture methods is essential for mitigating deforestation pressures. Agroforestry systems, which combine agricultural operations with forest conservation, can help reduce the negative effects of farming on forest areas (Kusworo et al., 2021). Promoting certification programs for commodities like palm oil and lumber might stimulate the market for products obtained from sustainable sources, hence diminishing the motivations for deforestation (Butler et al., 2018). Providing financial and technical assistance to farmers and firms who implement these methods is crucial for shifting towards sustainable land use.

Enhancing public consciousness and fostering community engagement is equally crucial. Disseminating knowledge to the general population regarding the significance of forests and the consequences of deforestation might foster backing for conservation endeavors. Community-based Forest management programs, characterized by the involvement of local stakeholders in decision-making and stewardship, have demonstrated their effectiveness in many regions (Brown et al., 2016). It is essential to acknowledge and honor the land rights of indigenous communities, as their knowledge and practices frequently make a significant contribution to the successful management of forests (Dove, 2019).

Ultimately, establishing collaborations with global organizations, non-governmental organizations (NGOs), and the commercial sector can significantly bolster conservation endeavors. Collaborative projects can utilize extra resources, experience, and support to enhance the effectiveness of deforestation mitigation strategies (Sunderland et al., 2017). To effectively address deforestation in Indonesia, a holistic strategy is needed that encompasses policy restructuring, enhancements in governance, active involvement of communities, and adoption of sustainable practices. By focusing on these specific locations, Indonesia has the potential to achieve significant advancements in the conservation of its crucial forest ecosystems, ensuring their preservation for future generations.

Nonetheless, although Indonesia's efforts and strategies to reduce deforestation are praiseworthy, there are still significant obstacles and deficiencies that impede their success. The imposition of a moratorium on new forest and peatland removals, while noteworthy, has faced criticism due to its narrow extent and irregular implementation. According to reports, there are ongoing illicit logging and land conversions, which are frequently motivated by corruption and inadequate governance at the local level (Shahreen, 2022). The implementation of the One Map Policy, which aims to address land conflicts and enhance land-use planning, has been hindered by delays and technological challenges, hence restricting its effectiveness in mitigating deforestation. In addition, although the REDD+ program signifies a favorable advancement in global collaboration, its execution has been sluggish, and the allocation of monetary advantages to local people continues to pose difficulties (Gaveau et al, 2014). Furthermore, there is apprehension that the policy's emphasis on the palm oil and wood sectors frequently neglects the necessity for holistic and sustainable economic alternatives for indigenous communities that rely on forest resources. Despite ongoing endeavors to advocate for sustainable practices, there exists a continual conflict between the objectives of economic development and environmental preservation, wherein economic forces often undermine environmental policies (Wijaya et al., 2019). Furthermore, the magnitude of forestry and peatland restoration initiatives frequently fails to match the significant level of damage that has already taken place. Public-private partnerships, however advantageous, can prioritize corporate

interests at the expense of authentic sustainability and the requirements of the local population. Indonesia's efforts and strategies to combat deforestation demonstrate a dedication to the cause. However, their impact is hindered by difficulties in enforcing regulations, problems with governance, and the requirement for more comprehensive and inclusive methods.

Having said all that, Indonesia has achieved great advancements in its endeavors to control deforestation - showcasing a strong dedication to sustainable development and environmental preservation despite encountering substantial obstacles. The implementation of the moratorium on new forest and peatland clearances is a significant measure in safeguarding essential ecosystems, and the decision to extend this policy demonstrates the continued determination of the government. The delayed implementation of the One Map Policy signifies a significant endeavor to address land conflicts and enhance transparency in land-use planning. Indonesia's active involvement in the REDD+ initiative demonstrates its commitment to global climate objectives, ensuring international backing and financing to advance sustainable forest management methods. In addition, endeavors to strengthen law enforcement against unlawful logging, coupled with steps to revive depleted lands and rehabilitate peatlands, demonstrate a comprehensive strategy to tackle deforestation (Shahreen, 2022).

Nonetheless, the efficacy of these regulations is sometimes compromised by obstacles such as irregular implementation, bribery, and problems with local administration. Nevertheless, Indonesia's advancement is apparent in the growing acknowledgment of the importance of sustainable practices and the incorporation of environmental considerations into national policies. The inclusion of public-private partnerships and collaborations with non-governmental organizations (NGOs) has enhanced these initiatives, fostering community engagement and sustainable economic alternatives for individuals who depend on forest resources.

CONCLUSIONS

With that, the examination of this paper regarding Indonesia's current and future implementation of its deforestation policies uncovers an intricate interaction between domestic goals and global partnerships designed to mitigate the depletion of forests. Although there has been some advancement, such as a large reduction in deforestation rates and the introduction of regulatory actions like moratoriums and the One Map Policy, there are still ongoing difficulties in enforcing these measures, ensuring good governance, and finding a balance between economic growth and environmental sustainability. The provision of essential technical and financial assistance has been critical in international cooperation, facilitated by frameworks such as the Paris Agreement and projects like REDD+.

Furthermore, the involvement of non-state players, such as NGOs and private firms, highlights the significance of employing a comprehensive strategy to tackle deforestation. Indonesia must prioritize improving governance systems, ensuring strong policy implementation, and establishing international partnerships to accomplish sustainable forest management and satisfy global environmental objectives in the future.

Ultimately, despite the challenges faced, Indonesia's efforts to reduce deforestation demonstrate a notable transition towards sustainable forest management. To ensure the long-term success of Indonesia's deforestation measures, it is essential to have ongoing international support, enhanced governance, and a strong emphasis on comprehensive and inclusive approaches.

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