

Forest Loss and Authority: A Portrait of the Implementation of Law No. 23 of 2014

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ABSTRACT

Deforestation in Indonesia represents not only an ecological challenge but also reflects changes in policy and governance arrangements, particularly following the reallocation of forestry management authority. This study examines the implementation of Law No. 23 of 2014 on Regional Government in forestry management in Dumai City and explores its relationship with deforestation within a multi-level governance framework. The law shifted substantial forestry authority from district and city governments to provincial levels, reshaping coordination mechanisms and local oversight capacity.

This study adopts a descriptive qualitative approach. Data were collected through in-depth interviews with key stakeholders in the forestry sector, including provincial government officials, the Forest Management Unit (Kesatuan Pengelolaan Hutan/KPH), and the Dumai City government, complemented by document analysis of policy regulations and forestry reports. The analysis employs George C. Edward III's policy implementation framework, focusing on communication, resources, implementer disposition, and bureaucratic structure.

The findings indicate that the transfer of authority has led to weakened intergovernmental coordination, limited operational resources, uneven

commitment among policy implementers, and increased bureaucratic complexity. These conditions constrain the capacity of KPH to effectively manage and supervise forest areas, thereby contributing to continued forest loss in Dumai City. The study concludes that Edward III's framework requires supplementation with a multi-level governance perspective to better capture the complexity of forestry governance in Indonesia. The findings offer insights for developing forestry policies that are more adaptive, coordinated, and sustainable.

INTRODUCTION

Forests are ecosystems consisting of expanses of land containing natural biological resources and dominated by trees in a natural environment, where each element is interrelated and inseparable from one another (Susanti et al., 2023). From an ecological and sustainable development perspective, forests have a strategic function as carbon sinks, guardians of climate balance, supporters of biodiversity, and providers of environmental services and livelihoods for local communities (Anwar & Farhaby, 2021). Therefore, forest sustainability is not only an environmental issue, but also an issue of governance and intergenerational justice.

In recent decades, forest loss has become one of the most serious environmental problems in Indonesia, especially in areas with high pressure for development and exploitation of natural resources, such as Sumatra and Kalimantan. This phenomenon shows that existing forestry regulations and policies have not been fully effective in curbing deforestation. Data from Global Forest Watch (2024) shows that in 2020, the city of Dumai had around 130,000 hectares of natural forest, covering more than 50 percent of its land area. However, in 2024, Dumai City lost approximately 2,600 hectares of natural forest. Furthermore, during the period 2002–2024, Dumai City lost approximately 88,000 hectares of wet primary forest, which directly contributed to deforestation and environmental degradation. This data represents an ecological phenomenon that does not stand alone, but is closely related to the dynamics of forest management policies and authority at the regional level (GFW, 2025).

As a coastal area in Riau Province, Dumai City faces double pressure, namely industrial expansion, land clearing, and the vulnerability of mangrove and peat ecosystems. Prior to the enactment of Law No. 23 of 2014 on Regional Government, district/city governments had relatively broad authority in issuing permits and supervising forestry activities. However, after the law came into effect, most forestry authority was transferred to the provincial level. In practice, this transfer has created a gap between decision-makers and the reality on the ground, resulting in weaker oversight at the local level. This phenomenon is reflected in the increase in illegal land clearing, mangrove forest degradation, and peatland fires, which have a direct impact on air quality, public health, and the sustainability of residents' livelihoods (Sari et al., 2024).

These changes in forestry governance cannot be separated from the dynamics of decentralization in Indonesia. The enactment of Law No. 23 of 2014 marked a significant shift in the division of government affairs, particularly in the forestry sector, from district/city governments to provincial and central governments (Hidayat, 2020; Kurniawan et al., 2021). Forest management authority in Indonesia is divided among the central government, provincial governments, and district/city governments. The change from Law No. 32 of 2004 to Law No. 23 of 2014 has altered the landscape of decentralization, particularly in terms of the transfer of authority in Indonesia. Law No. 23/2014 reformed the division of government affairs/duties. Several authorities that were previously the responsibility of regencies/cities, including forestry affairs, were then transferred to the central and provincial levels, creating semi-centralization (Pramesti et al., 2023).

Various studies show that centralization of authority without strengthening institutional capacity and cross-governmental coordination mechanisms has the potential to create new problems (Evitasari & Sukendah, 2023). In the context of forestry, district/city governments, which are closest to resources and communities, have lost their strategic role in oversight, while provincial governments face limitations in human resources, budgets, and the scope of their oversight of large areas. As a result, there is fragmentation of responsibilities, conflicts of interest between levels of government, and weak integrated forest management (Daud et al., 2023; Hidayat, 2020; Nadjib, 2020; Yanto, 2023)

Based on these conditions, there is a research gap. Most previous studies tend to examine the impact of Law 23/2014 normatively or macro-level, without directly linking it to empirical data on forest loss at the local level. In addition, there are still limited studies that integrate spatial data on forest loss (such as Global Forest Watch) with analysis of policy implementation and the dynamics of local government authority. In fact, this approach is important for understanding how changes in authority in forest governance contribute to the phenomenon of forest loss in real terms.

Thus, the novelty of this research lies in its attempt to empirically link spatial-based forest loss data with an analysis of the implementation of Law No. 23 of 2014 at the local level, particularly in the city of Dumai. This research not only captures forest destruction as an ecological phenomenon, but also as a reflection of governance and government authority distribution problems. This approach is in line with research trends in reputable international journals (Scopus) that emphasize the relationship between environmental governance, multi-level governance, and natural resource sustainability.

Academically, this research contributes to the enrichment of public administration and environmental policy knowledge, particularly in understanding the implications of decentralization and recentralization of authority on forest management. In practical terms, the results of this study are expected to form the basis for the formulation of forestry governance policies that are more adaptive, collaborative, and environmentally equitable, with local governments and communities as important actors in forest protection and environmental sustainability.

This study aims to analyze the implementation of Law No. 23 of 2014 on Regional Government in forestry management in Dumai City and its relationship with the phenomenon of forest loss, highlighting the dynamics of authority transfer, supervisory capacity, and local government governance as a portrait of the relationship between forest loss and authority within the framework of multi-level governance.

LITERATURE REVIEW

1. Decentralization Policy and Natural Resource Management

Decentralization in Indonesia aims to bring public services closer to the community and give regions the authority to manage their natural resources. According to (Hidayat, 2020), decentralization is the process of redistributing power

from the central government to regional governments so that development policies are more in line with local needs. In the context of natural resource management, decentralization is expected to increase efficiency, accountability, and public participation.

However, several studies show that decentralization has not been fully successful in achieving its objectives. (Kurniawan et al., 2021) states that weak local institutional capacity and overlapping authorities often result in inefficient forest management. In addition, decentralization also has the potential to give rise to the misuse of permits and corruption of natural resources if it is not accompanied by strong oversight mechanisms (Pramesti et al., 2023).

The policy change from Law Number 32 of 2004 to Law Number 23 of 2014 was an important milestone in the effort to reorganize the local government system. Law No. 23 of 2014 transferred some of the affairs of forestry, marine affairs, energy, and mining from the regency/city government to the provincial government. The aim was to strengthen integrated natural resource management and reduce the potential for abuse of authority at the local level (Daud et al., 2023).

However, this policy has created new problems, particularly related to coordination across levels of government, the unpreparedness of provincial bureaucratic structures, and the weakening of supervisory functions at the district/city level (Evitasari & Sukendah, 2023). In the context of forest management in Dumai City, this shift in authority has resulted in a longer decision-making process, while the region's capacity for field supervision remains inadequate.

2. Challenges in Implementing Law No. 23 of 2014 in the Forestry Sector

The implementation of Law No. 23 of 2014 has fundamentally changed the mechanism of forest management in Indonesia. Provincial governments are now responsible for the management of production, conservation, and protection forests, while district/city governments only play a role in the management of forest parks (Tahura) and reforestation activities (Pradana et al., 2023).

Nadjib highlights that this shift in authority has weakened the effectiveness of forest supervision in the regions because provincial governments have to manage vast areas with limited human resources and budgets (Nadjib, 2020). As a result, many forest supervision, rehabilitation, and fire control activities are not running optimally. Yanto adds that cross-regional and cross-sectoral coordination is also not running well due to differences in priorities and limited communication between agencies (Yanto, 2023).

The case in Dumai City shows that weak coordination and supervision after the implementation of Law No. 23 of 2014 contributed to an increase in illegal land clearing and deforestation activities. This is in line with the findings of Sari et al. (2024), which state that field supervision has become slower because administrative decisions must go through the province. As a result, the response to cases of land fires or forest encroachment has been delayed.

3. Policy Implementation According to George C. Edward III

George C. Edward III (1980) argues that the implementation of public policy is influenced by four indicators, namely: communication, resources, disposition, and bureaucratic structure (Sujianto, 2008).

- a. Communication relates to the extent to which policies are understood and communicated effectively by implementers at all levels. Ineffective communication can lead to misinterpretation of policies and prevent them from running as intended.
- b. Resources include human resources, finances, facilities, and adequate authority to support policy implementation.

- c. The disposition or attitude of implementers relates to their willingness, commitment, and motivation in carrying out policies.
- d. Bureaucratic structure relates to institutional governance, coordination systems, and procedures that support effective policy implementation.

Edward III's model is relevant for analyzing the implementation of the forestry authority transfer policy in Dumai because it describes the relationship between institutional structure and actor behavior in policy implementation. Edward also emphasizes that successful implementation depends not only on the content of the policy but also on the ability of the bureaucracy and implementers at the field level to adapt the policy to the actual conditions in the community..

METHODOLOGY

This study uses a descriptive qualitative approach to gain an in-depth understanding of the dynamics of forestry policy implementation in Dumai City. Qualitative research is based on post-positivism philosophy, which is used to examine the characteristics of natural objects (Ardieansyah et al., 2023). Data were collected through in-depth interviews with officials from the Riau Provincial Forestry Service, the Forest Management Unit (KPH), and the city government, as well as through a documentation study of policy reports and forestry statistics. Informants were selected using a purposive sampling strategy. Purposive sampling, according to Creswell (2015), is a sampling technique that involves selecting subjects or participants who can help researchers understand the issues and phenomena being studied in greater depth (Creswell, 2015).

Data analysis was carried out through the stages of data reduction, data presentation, and conclusion drawing. Data validity was obtained through source and technique triangulation.

RESULTS AND DISCUSSION

This study analyzes the implementation of Law Number 23 of 2014 concerning Regional Government in the context of forest management in Dumai City using George C. Edward III's policy implementation theory Edward III's policy implementation theory, which emphasizes four main indicators, namely communication, resources, disposition, and bureaucratic structure (Sujianto, 2008). Based on interviews with stakeholders in the forestry sector, it was found that the transfer of authority from the regency/city to the province had a significant impact on the effectiveness of forestry policy implementation at the local level. This transfer of authority not only changed institutional relations but also had direct implications for forestry supervision and governance capacity, which ultimately correlated with the phenomenon of forest loss in Dumai City within the framework of multi-level governance (Hooghe & Marks, 2010; Larson et al., 2009)

1. Communication

The results of the study show that changes in the forest management authority system after the enactment of Law No. 23 of 2014 had a real impact on the pattern of communication between government agencies. Before this policy came into effect, the pattern of communication was more decentralized, where district/city

governments had ample space to interact directly with the community and the private sector in forest resource management. However, after the policy was implemented, there was a shift towards a more centralized communication pattern, in which strategic decisions were largely determined by the central and provincial governments.

Interview findings show that vertical communication between the central, provincial, and local governments has become less effective due to increased bureaucratic distance and reduced authority at the local level. The Forest Management Units (KPH), designed as the spearhead of policy communication at the field level, have not functioned optimally due to limited personnel and logistical support (Adiwibowo et al., 2013; Larson et al., 2009). These communication barriers have weakened the relationship between the government and local communities, which in turn has reduced community participation in forestry decision-making (Howlett et al., 2009)

In line with Edward III (1980), effective policy communication requires clarity of message, consistency of policy, and effective feedback mechanisms between levels of government. In the context of Dumai City, these three elements have not been adequately fulfilled, so that fragmented coordination and weak policy feedback contribute to the low effectiveness of controlling activities that have the potential to trigger forest loss (Hill & Hupe, 2021)

2. Resources

The interviews revealed that the main obstacle to the implementation of Law No. 23 of 2014 is not the substance of the policy, but rather the limited supporting resources. KPH as the implementing institution at the field level faces a shortage of technical personnel, limited operational budgets, a lack of field facilities, and weak infrastructure support. These conditions have an impact on the low effectiveness of forest supervision and slow response to violations. These resource constraints are exacerbated by narrow operational authority at the regional level, where strategic decisions such as licensing and enforcement of forestry violations must go through the provincial or central government. As a result, responses to local issues such as illegal land clearing and forest fires have been less adaptive and contextual (Adiwibowo et al., 2013).

Edward III (1980) asserts that the successful implementation of policies is highly dependent on the availability of resources, including human resources, budget, information, facilities, and formal authority. The findings of this study show that almost all of these components are still limited, which has a direct implication on the increased risk of forest cover loss in Dumai City.

3. Disposition (Attitude of Policy Implementers)

This finding is in line with the concept of street-level bureaucracy proposed by (Lipsky, 2010), whereby the attitudes, interpretations, and discretion of policy implementers at the field level greatly influence the effectiveness of implementation. Although there are individuals who are highly concerned about the environment, this positive attitude has not been systematically internalized

within the forestry bureaucracy, resulting in inconsistent supervision and weak law enforcement.

4. Bureaucratic Structure

The enactment of Law No. 23 of 2014 brought fundamental changes to the bureaucratic structure of forest management, whereby authority that was previously at the district/city level was transferred to the provincial level, while the central government retained strategic control. This change has created a longer and more complex bureaucratic structure with a slow chain of coordination. Field findings show overlapping authorities between levels of government and limited institutional capacity at the provincial level to manage large areas. The establishment of cross-administrative forest management units also poses coordination challenges due to geographical factors and limited support facilities. This condition contradicts Edward III's (1980) principle, which emphasizes the importance of a simple and efficient bureaucratic structure. The complexity of the forest management bureaucracy in Dumai City contributes to weakening field supervision and increasing forest loss in the context of multi-level governance (Hooghe & Marks, 2010).

CONCLUSION

This study shows that the implementation of Law No. 23 of 2014 on Regional Government has brought fundamental changes to forestry governance in Dumai City, particularly through the transfer of forest management authority from district/city governments to provincial governments. These changes have impacted inter-agency coordination patterns, decision-making mechanisms, and supervisory capabilities at the field level. Using Edward III's policy implementation framework, this study found that communication between actors has not been optimal, resources are still limited, policy implementation support is uneven, and the bureaucratic structure tends to be complex. These conditions limit the role of the Forest Management Unit (KPH) in carrying out its functions of sustainable forest management and supervision.

This study has limitations because it only focuses on one study area and uses a qualitative approach, so the results cannot be generalized broadly. In addition, this study did not include quantitative data on changes in forest cover or in-depth perspectives from non-governmental actors. Therefore, this study recommends strengthening coordination between provincial governments, district/city governments, and KPHs so that forest management at the field level is more responsive and integrated. Provincial governments are expected to strengthen policy support and resources, while FMUs need to improve institutional capacity, utilize monitoring technology, and strengthen partnerships with local communities. For future researchers, it is recommended to develop studies using quantitative or mixed approaches, expand the research location, and integrate spatial and policy analysis to obtain a more complete picture of forest governance in Indonesia

REFERENCES

- Adiwibowo, S., Kartodihardjo, H., & others. (2013). *Kembali Ke Jalan Lurus. Kritik Penggunaan Ilmu dan Praktek Kehutanan Indonesia*.
- Anwar, M. S., & Farhaby, A. M. (2021). Analisis Kebijakan Pemanfaatan Lahan dalam

- Wilayah Hutan Mangrove di Provinsi Bangka Belitung. *University of Bengkulu Law Journal*, 6(1), 20–38.
- Ardieansyah, Asmugin, & Latip. (2023). *Metodologi Penelitian Sosial* (1st ed.). Deepublish.
- Creswell, J. W. (2015). Penelitian Kualitatif & Desain Riset: Memilih di Antara Lima Pendekatan. In S. Z. Qudsy (Ed.), *Ahmad Lintang Lazuardi, Yogyakarta: Pustaka Pelajar*. Pustaka Pelajar.
- Daud, T. O. N., Puluhalawa, F. U., & Tome, A. H. (2023). Faktor Penghambat Kewenangan Pemerintah Daerah di Bidang Kehutanan Pasca Undang-Undang Nomor 23 Tahun 2014 Tentang Pemerintahan Daerah di Masa Otonomi Daerah. *Journal Of Comprehensive Science*, 4(5), 1356–1375.
- Evitasari, D., & Sukendah. (2023). Dampak Degradasi dan Strategi Hutan Mangrove dalam Menjaga Ekosistem. *Jurnal Ilmu Pertanian Dan Perkebunan*, 5(1), 39–46.
- GFW. (2025). *Indonesia Deforestation Rates & Statistics*. Global Forest Watch.
- Hidayat, A. (2020). Implikasi Yuridis Terhadap Peralihan Urusan Kehutanan Dari Kabupaten Ke Propinsi Berdasarkan Undang-Undang Nomor 23 Tahun 2014 Tentang Pemerintahan Daerah. *JIHAD*, 2(1), 27–40.
- Hill, M., & Hupe, P. (2021). *Implementing public policy: An introduction to the study of operational governance*.
- Hooghe, L., & Marks, G. (2010). Types of multi-level governance. In *Handbook on multi-level governance*. Edward Elgar Publishing.
- Howlett, M., Ramesh, M., Perl, A., & others. (2009). *Studying public policy: Policy cycles and policy subsystems* (Vol. 3). Oxford university press Oxford.
- Kurniawan, A., Wulandari, C., Febryano, I. G., Kaskoyo, H., Harianto, S. P., & Setiawan, A. (2021). Implikasi Terbitnya Undang – Undang Nomor 23 Tahun 2014 Terhadap Sumber Daya Manusia Pada UPTD Kesatuan Pengelolaan Hutan Produksi Gedong Wani Provinsi Lampung. *Jurnal Hutan Tropis*, 9(2), 354–365.
- Larson, A. M., Ribot, J. C., & others. (2009). Lessons from forestry decentralisation. *Realising REDD+: National Strategy and Policy Options*, 175–187.
- Lipsky, M. (2010). *Street-level bureaucracy: Dilemmas of the individual in public service*. Russell sage foundation.
- Nadjib, F. N. (2020). Kewenangan Pemerintah Dalam Mengelolah Wilayah Laut Menurut Undang-Undang Nomor 23 Tahun 2014 Tentang Pemerintahan Daerah. *Lex Et Societatis*, 8(2), 168–175. <https://doi.org/10.35796/les.v8i2.28502>
- Pradana, S. A., Achmad, D., & Rosita, R. (2023). Depresiasi Makna Konkuren dalam Undang-Undang Pemerintahan Daerah Terhadap Daerah Kepulauan. *Al-Adalah: Jurnal Hukum Dan Politik Islam*, 8(1), 29–43. <https://doi.org/10.30863/ajmpi.v1i1.2546>
- Pramesti, F., Purbaningrum, D. G., & Tanjung, N. F. (2023). Analisis Substansi Undang-undang Nomor 23 Tahun 2014 Tentang Pengalihan Urusan Kehutanan dari Pemerintah Kabupaten/Kota Kepada Pemerintah Provinsi. *As-Syirkah*, 2(2), 303–316. <https://doi.org/10.56672/assyirkah.v2i2.119>
- Sari, N., Sujianto, S., Mayarni, M., & As'ari, H. (2024). Kebijakan Pemerintah dalam Pengelolaan Hutan dan Lahan Studi Kasus Pengelolaan Hutan Mangrove di Kota Dumai. *Prosiding Seminar Psikologi (PROSEPSI)*, 1(1), 16–33.
- Sujianto. (2008). *Implementasi Kebijakan Publik Konsep, Teori dan Praktik*. Alaf Riau.
- Susanti, Di. R., Musfianawari, Nail, M. H., & Mufid, F. L. (2023). Tinjauan Perizinan Wisata Air Terjun Tancak Panti (Kajian atas PP RI Nomor 3 Tahun 2008 Tentang Perubahan atas PP Nomor 6 Tahun 2007 Tentang Tata Hutan Dan Penyusunan Rencana Pengelolaan. *Welfare State*, 2(April), 19–42.

Yanto, H. N. (2023). Telaah Kasus: Dampak Pelaksanaan Undang-Undang Nomor 23 Tahun 2014 Terhadap Penataan Organisasi Di Dinas Lingkungan Hidup Dan Kehutanan Provinsi Bengkulu. *Masyarakat Demokrasi Jurnal Ilmiah Administrasi Publik*, 1(1), 31–41.