

The Constitutional Duty–Administrative Capacity Gap in Forest Governance: Indonesia and Brazil Compared

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Abstract

Environmental constitutionalism obliges states not only to recognise ecological rights and duties but also to equip administrative institutions with the capacity to give them effect. This article examines how constitutional environmental duties are translated into forest governance in Indonesia and Brazil, combining comparative doctrinal analysis with empirical evidence from UPTD KPH Region IV North Gorontalo. In both jurisdictions, constitutional recognition does not by itself secure forest protection, but the two systems manage the resulting gap differently. Indonesia's unitary-decentralised model concentrates broad protective mandates in provincial Forest Management Units while dispersing coercive authority and resources; in North Gorontalo, nine forest-police officers cover approximately 110,811 hectares. Brazil's federal model pairs common environmental competence with statutory cooperation instruments, satellite-based enforcement, and a constitutional jurisprudence that treats the erosion of enforcement capacity as a constitutional concern, although its record also shows that such capacity is reversible. The article conceptualises this mismatch as a constitutional duty–administrative capacity gap, specifies when such a gap becomes a problem of constitutional implementation, and derives three principles: responsibility–capacity correspondence, alignment of authority and accountability, and cooperative environmental administration. Environmental constitutionalism, it concludes, remains institutionally incomplete unless the constitutionalisation of environmental duties is matched by the institutionalisation of administrative capability.

KEYWORDS: *Environmental Constitutionalism; Forest Governance; Administrative Capacity; Decentralisation; Comparative Public Law*

Introduction

Forest protection has moved beyond the conventional domain of natural-resource regulation to become a question of constitutional governance. Forest ecosystems are indispensable to biodiversity conservation, climate stability, and the material conditions under which constitutional rights are exercised; their degradation therefore implicates not only regulatory policy but also the obligations that constitutions impose upon the state.¹ The constitutionalisation of environmental protection accordingly entails more than inserting ecological commitments into constitutional texts. It requires the state to distribute authority, mobilise administrative resources, establish systems of supervision, and ensure that public institutions possess the capacity to translate constitutional commitments into effective environmental protection.² Forest governance thus constitutes an institutional arena in which the substantive credibility of environmental constitutionalism is ultimately tested.

Yet the constitutional recognition of environmental protection does not guarantee its effective implementation. Constitutional rights and duties are operationalised through administrative organisations whose effectiveness depends upon the clarity of their authority, the adequacy of their human and financial resources, their territorial reach, and inter-institutional coordination.³ This problem becomes particularly acute in decentralised or multilevel systems of government. Decentralisation may bring government closer to ecological problems and local communities, but it may equally fragment responsibility where mandates are transferred or shared without corresponding authority, resources, and institutional support.⁴ The crucial constitutional question, therefore, is no longer simply whether the state recognises environmental protection, but whether the architecture of public administration enables that constitutional commitment to be effectively discharged.

¹ James R. May and Erin Daly, *Global Environmental Constitutionalism* (Cambridge: Cambridge University Press, 2014), <https://doi.org/10.1017/CBO9781139135559>; David R. Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (Vancouver: UBC Press, 2012).

² Stephen Holmes and Cass R. Sunstein, *The Cost of Rights: Why Liberty Depends on Taxes* (New York: W. W. Norton, 1999); Sandra Fredman, *Human Rights Transformed: Positive Rights and Positive Duties* (Oxford: Oxford University Press, 2008), <https://doi.org/10.1093/acprof:oso/9780199272761.001.0001>.

³ Francis Fukuyama, "What Is Governance?," *Governance* 26, no. 3 (2013): 347–68, <https://doi.org/10.1111/gove.12035>; Luciana Cingolani, "The Role of State Capacity in Development Studies," *Journal of Development Perspectives* 2, no. 1–2 (2018): 88–114, <https://doi.org/10.5325/jdevepers.2.1-2.0088>; Michael Mann, "The Autonomous Power of the State: Its Origins, Mechanisms and Results," *European Journal of Sociology* 25, no. 2 (1984): 185–213, <https://doi.org/10.1017/S0003975600004239>.

⁴ Jesse C. Ribot, Arun Agrawal, and Anne M. Larson, "Recentralizing While Decentralizing: How National Governments Reappropriate Forest Resources," *World Development* 34, no. 11 (2006): 1864–86, <https://doi.org/10.1016/j.worlddev.2005.11.020>; Anne M. Larson and Fernanda Soto, "Decentralization of Natural Resource Governance Regimes," *Annual Review of Environment and Resources* 33 (2008): 213–39, <https://doi.org/10.1146/annurev.enviro.33.020607.095522>.

Indonesia presents a particularly instructive case of this constitutional-administrative tension. Environmental protection is embedded within a constitutional framework that combines the right to a good and healthy environment with principles governing state control over natural resources and sustainable national development. In the forestry sector, however, these commitments must be implemented through a complex administrative structure involving central governmental authorities, provincial institutions, law-enforcement agencies, and Forest Management Units (Kesatuan Pengelolaan Hutan or KPH). KPHs operate at the point at which national and provincial forestry policies encounter forest landscapes and forest-dependent communities, and their responsibilities encompass forest protection and supervision, rehabilitation, community empowerment, social forestry, and coordination with other authorities.⁵ They can therefore be conceptualised as frontline environmental administrations whose performance indicates whether constitutional commitments to forest protection are translated into effective governance at the operational level.

The experience of the Forest Management Unit in North Gorontalo illustrates the structural difficulty of this translation. Field research on UPTD KPH Region IV shows that the unit undertakes routine patrols in areas vulnerable to illegal logging, records suspected logging sites, rehabilitates degraded land, facilitates social forestry, issues warnings to suspected violators, secures timber believed to originate from unlawful activities, and coordinates with competent law-enforcement authorities.⁶ Yet illegal logging has persisted in five sub-districts, and the unit's nine forest-police officers are responsible for a forest estate of approximately 110,811 hectares, parts of which are difficult to access with the limited vehicles and patrol facilities available.⁷ The empirical problem is therefore more complex than a simple dichotomy between effective and ineffective enforcement. It raises a more fundamental institutional question: to what extent can an administrative institution be expected to fulfil extensive environmental responsibilities when the authority, personnel, resources, and enforcement capacities available to it are not commensurate with the scope of those responsibilities?

The relevant scholarship, however, remains fragmented. A first body of literature on environmental constitutionalism has generated sophisticated accounts of environmental rights, green constitutionalism, ecological constitutional values, and judicial enforcement, demonstrating that environmental protection is not merely a

⁵ M. A. K. Sahide et al., "Decentralisation Policy as Recentralisation Strategy: Forest Management Units and Community Forestry in Indonesia," *International Forestry Review* 18, no. 1 (2016): 78–95, <https://doi.org/10.1505/146554816818206168>; Yeon-Su Kim et al., "Indonesia's Forest Management Units: Effective Intermediaries in REDD+ Implementation?," *Forest Policy and Economics* 62 (2016): 69–77, <https://doi.org/10.1016/j.forpol.2015.09.004>.

⁶ Tri Delvi GM. Nggilu, "Peran UPTD KPH Wilayah IV Gorontalo Utara dalam Tindakan Illegal Logging (Studi Kasus Gorontalo Utara)" (undergraduate thesis, Faculty of Law, Universitas Negeri Gorontalo, 2026), chap. 4. The empirical basis of this research is described in the Method section.

⁷ Interview with Khairul Ikhsan Sumardin, Head of the Administrative Sub-division, and Nawir Ali, forest-police officer, UPTD KPH Region IV North Gorontalo, 5 June 2026; UPTD KPH Wilayah IV Gorontalo Utara, "Data Luas Hutan Kabupaten Gorontalo Utara" (internal record, 2025), 10, both as documented in Nggilu, "Peran UPTD KPH Wilayah IV," chaps. 1 and 4.

matter of governmental discretion but may constitute a constitutional obligation.⁸ Much of this debate nevertheless remains centred on constitutional recognition, interpretation, and adjudication. Comparative empirical work has shown that the practical effect of constitutional environmental rights depends heavily on how they are implemented,⁹ yet comparatively little attention has been devoted to the administrative infrastructures through which such commitments must be delivered in everyday governance. Scholarship may thus explain why the constitution obliges the state to protect the environment without sufficiently examining whether the institutions entrusted with that obligation possess the capacity necessary to perform it.

A second body of scholarship examines environmental decentralisation, forest-management institutions, and enforcement against illegal logging. Studies of Indonesian Forest Management Units have documented their ambiguous position between decentralisation and recentralisation, their dependence on external support, and their limited personnel and budgets;¹⁰ studies of Brazil have measured the deterrent effect of satellite-based enforcement and the consequences of the erosion of federal environmental agencies.¹¹ Yet these studies generally approach decentralisation and enforcement as questions of policy design or governance effectiveness rather than of constitutional implementation, while studies of illegal logging tend to emphasise criminalisation, sanctions, policing, and corruption.¹² Such approaches remain

⁸ May and Daly, *Global Environmental Constitutionalism*; Louis J. Kotzé, *Global Environmental Constitutionalism in the Anthropocene* (Oxford: Hart Publishing, 2016); Tim Hayward, *Constitutional Environmental Rights* (Oxford: Oxford University Press, 2005), <https://doi.org/10.1093/0199278687.001.0001>; Jimly Asshiddiqie, *Green Constitution: Nuansa Hijau Undang-Undang Dasar Negara Republik Indonesia Tahun 1945* (Jakarta: Rajawali Pers, 2009).

⁹ Chris Jeffords and Joshua C. Gellers, “Constitutionalizing Environmental Rights: A Practical Guide,” *Journal of Human Rights Practice* 9, no. 1 (2017): 136–45, <https://doi.org/10.1093/jhuman/hux001>; Boyd, *Environmental Rights Revolution*.

¹⁰ Sahide et al., “Decentralisation Policy as Recentralisation Strategy”; M. A. K. Sahide et al., “Is Indonesia Utilising Its International Partners? The Driving Forces behind Forest Management Units,” *Forest Policy and Economics* 69 (2016): 11–20, <https://doi.org/10.1016/j.forpol.2016.04.002>; Kushartati Budiningsih et al., “Forest Management Units’ Performance in Forest Fire Management Implementation in Central Kalimantan and South Sumatra,” *Forests* 13, no. 6 (2022): 894, <https://doi.org/10.3390/f13060894>; Onrizal Affandi et al., “Institutional Analysis of Forest Governance after the Implementation of Law Number 23/2014 in North Sumatra Province, Indonesia,” *Forest and Society* 5, no. 2 (2021): 304–25, <https://doi.org/10.24259/fs.v5i2.8755>.

¹¹ Juliano Assunção, Clarissa Gandour, and Romero Rocha, “DETER-ing Deforestation in the Amazon: Environmental Monitoring and Law Enforcement,” *American Economic Journal: Applied Economics* 15, no. 2 (2023): 125–56, <https://doi.org/10.1257/app.20200196>; Jan Börner et al., “Post-Crackdown Effectiveness of Field-Based Forest Law Enforcement in the Brazilian Amazon,” *PLOS ONE* 10, no. 4 (2015): e0121544, <https://doi.org/10.1371/journal.pone.0121544>; Roberto Goulart Menezes and Ricardo Barbosa Jr., “Environmental Governance under Bolsonaro: Dismantling Institutions, Curtailing Participation, Delegitimising Opposition,” *Zeitschrift für Vergleichende Politikwissenschaft* 15, no. 2 (2021): 229–47, <https://doi.org/10.1007/s12286-021-00491-8>.

¹² Luca Tacconi, ed., *Illegal Logging: Law Enforcement, Livelihoods and the Timber Trade* (London: Earthscan, 2007); John F. McCarthy, “Changing to Gray: Decentralization and the Emergence of Volatile Socio-Legal Configurations in Central Kalimantan, Indonesia,” *World Development* 32, no. 7 (2004): 1199–1223, <https://doi.org/10.1016/j.worlddev.2004.02.002>.

important, but they risk treating illegal logging primarily as a problem of prohibited conduct rather than as a possible symptom of weaknesses within the institutional architecture responsible for preventing environmental harm. What remains insufficiently explored is the relationship between constitutional environmental duties, the allocation of administrative responsibility, and the actual capacity of frontline institutions to perform those duties. This missing connection constitutes the principal research gap addressed by this study.

Brazil is selected as the comparator because it offers the most informative contrast within a set of controlled similarities. Both countries hold globally significant tropical forests, face strong developmental pressures and persistent unlawful extraction of forest resources, are post-authoritarian democracies with justiciable constitutional environmental rights, and govern forests through multilevel administration.¹³ They differ, however, in the variable that matters most for this inquiry. Indonesia distributes forestry responsibilities within a unitary but decentralised state, whereas Brazil constitutionalises environmental protection as a common competence of every tier of its federation and has developed a statutory cooperation regime, a satellite-based enforcement system, and an extensive constitutional jurisprudence on environmental administration. This combination yields an insight that cannot be obtained from studying Indonesia alone. Brazil's experience over the past two decades—a sharp reduction of Amazon deforestation following the strengthening of monitoring and enforcement, a resurgence when enforcement capacity was eroded, and a renewed decline after its restoration—functions as a longitudinal test of the proposition that the effectiveness of constitutional environmental duties varies with administrative capacity even where the constitutional text remains unchanged.¹⁴ The comparison is functional rather than evaluative: it does not seek to determine which system provides the “better” model, but to examine how different constitutional arrangements translate environmental obligations into administrative authority.

Against this background, the article addresses two interrelated questions. First, how are constitutional environmental duties translated into the distribution of administrative authority for forest protection in Indonesia and Brazil? Second, to what extent does the relationship between decentralised responsibility and administrative capacity create or mitigate a constitutional duty–administrative capacity gap in forest governance?

The article makes three contributions. Conceptually, it develops the notion of the constitutional duty–administrative capacity gap: a condition in which the constitutional and legal order imposes substantial environmental responsibilities upon the state, while the institutions responsible for implementing them lack proportionate

¹³ On case selection, see Ran Hirschl, “The Question of Case Selection in Comparative Constitutional Law,” *American Journal of Comparative Law* 53, no. 1 (2005): 125–56, <https://doi.org/10.1093/ajcl/53.1.125>.

¹⁴ Felipe S. M. Nunes et al., “Lessons from the Historical Dynamics of Environmental Law Enforcement in the Brazilian Amazon,” *Scientific Reports* 14 (2024): 1828, <https://doi.org/10.1038/s41598-024-52180-7>; Assunção, Gandour, and Rocha, “DETER-ing Deforestation.” The deforestation data are discussed in Section 2 below.

authority, resources, personnel, territorial reach, or coordination mechanisms. Doctrinally, it specifies the conditions under which such a gap may be treated as a problem of constitutional implementation rather than merely of administrative policy. Comparatively, it derives from the Indonesia–Brazil comparison three principles of institutional design: responsibility–capacity correspondence, alignment of authority and accountability, and cooperative environmental administration. The central argument is that environmental constitutionalism remains institutionally incomplete unless the constitutionalisation of environmental duties is accompanied by the institutionalisation of the administrative capability required to realise them. Illegal logging is accordingly treated not merely as a criminal-law problem, but as an analytical entry point into that question.

Method

This study employs a comparative doctrinal legal research design situated at the intersection of constitutional law, administrative law, and environmental governance, combining constitutional, statutory, conceptual, and comparative approaches with case-oriented empirical contextualisation. The constitutional approach examines how environmental protection is normatively constructed as a public obligation within the constitutional orders of Indonesia and Brazil; the statutory approach traces the legal distribution of authority for forest governance, environmental supervision, and enforcement across levels and institutions of government; and the conceptual approach develops and tests the analytical category of the constitutional duty–administrative capacity gap. The comparative approach is functional rather than merely descriptive: the two jurisdictions are compared as different institutional responses to a common problem, namely the protection of ecologically interconnected forests through territorially divided public administration.¹⁵ Following the logic of case selection in comparative constitutional law, Brazil was selected because it shares with Indonesia the background conditions described in the Introduction while differing in constitutional structure (federal rather than unitary) and in the density of its cooperative and judicial mechanisms, which allows the relationship between institutional design and administrative capacity to be observed more clearly.¹⁶

The legal materials were examined for the period from the establishment of the current constitutional frameworks—Brazil's 1988 Constitution and the 1999–2002 amendments to Indonesia's 1945 Constitution—to mid-2026, with particular attention to the post-2014 reallocation of forestry authority in Indonesia and the post-2011 cooperation regime in Brazil. For Indonesia, the primary materials comprise

¹⁵ Konrad Zweigert and Hein Kötz, *An Introduction to Comparative Law*, 3rd ed., trans. Tony Weir (Oxford: Clarendon Press, 1998); Ralf Michaels, “The Functional Method of Comparative Law,” in *The Oxford Handbook of Comparative Law*, ed. Mathias Reimann and Reinhard Zimmermann (Oxford: Oxford University Press, 2006), 339–82, <https://doi.org/10.1093/oxfordhb/9780199296064.013.0011>.

¹⁶ Hirschl, “Question of Case Selection”; Vicki C. Jackson, “Methodological Challenges in Comparative Constitutional Law,” *Penn State International Law Review* 28, no. 3 (2010): 319.

Articles 18, 18A, 28H(1), 28I(4), 33(3), and 33(4) of the 1945 Constitution; Law No. 41 of 1999 on Forestry; Law No. 32 of 2009 on Environmental Protection and Management; Law No. 18 of 2013 on the Prevention and Eradication of Forest Destruction; Law No. 23 of 2014 on Regional Government; Law No. 30 of 2014 on Government Administration; Government Regulation No. 23 of 2021 on Forestry Administration; and relevant decisions of the Constitutional Court and the Supreme Court. For Brazil, they comprise Articles 23 and 225 of the 1988 Constitution; Law No. 6.938/1981 on the National Environmental Policy; Law No. 9.605/1998 on Environmental Crimes; Law No. 11.284/2006 on Public Forest Management; Law No. 12.651/2012 (Forest Code); Complementary Law No. 140/2011; Decree No. 6.514/2008; and decisions of the Federal Supreme Court (STF), notably ADI 4757, ADPF 708, ADO 59, and ADPF 760. Official deforestation-monitoring data (INPE's PRODES and DETER systems) and documents of the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm) were used to document how Brazilian institutions operate in practice. Secondary materials comprise peer-reviewed scholarship on environmental constitutionalism, state and administrative capacity, decentralisation, multilevel governance, and forest law enforcement.

The Indonesian empirical material derives from prior legal-empirical research on UPTD KPH Region IV North Gorontalo conducted by the author at Universitas Negeri Gorontalo.¹⁷ That research combined three techniques. First, semi-structured, face-to-face interviews were conducted on 5 June 2026 with officials directly responsible for forest supervision—the Head of the Administrative Sub-division of UPTD KPH Region IV and a forest-police officer of the unit—selected by purposive sampling on the basis of their authority and operational experience. Second, direct observation was undertaken at the unit's office, its patrol facilities, and accessible forest areas, and recorded in field notes. Third, the unit's internal documents were analysed, including forest-area data, the list of villages classified as vulnerable to illegal logging, and incident reports. The empirical material therefore reflects the institution's own account of its functions and constraints in 2025–2026. To mitigate the risk of self-reporting bias, interview statements were triangulated with the unit's documents, with published research on illegal logging in North Gorontalo,¹⁸ and with provincial-level information on forest-police capacity.¹⁹

The empirical material is not used to generalise statistically about Indonesian forest governance, but as contextual evidence integrated into the doctrinal analysis in

¹⁷ Nggilu, “Peran UPTD KPH Wilayah IV,” chap. 3 (research design, data sources, purposive sampling, and data-collection techniques) and chap. 4 (findings).

¹⁸ Supriatna, “Strategi Pencegahan Illegal Logging di Kabupaten Gorontalo Utara,” *Jurnal Multidisiplin Indonesia* 2, no. 9 (2023): 2570–75, <https://doi.org/10.58344/jmi.v2i9.505>.

¹⁹ Redaksi Dulohupa, “Meski Minim Personel, Polhut Gorontalo Diminta Tetap Perangi Illegal Logging,” *Dulohupa.id*, 20 June 2025, <https://dulohupa.id/meski-minim-personel-polhut-gorontalo-diminta-tetap-perangi-illegal-logging/>.

three steps. The environmental duties recognised in each legal order are first identified; the distribution of those duties among institutions is then mapped and, for Indonesia, compared with the functions the KPH actually performs and the resources available to it; finally, the resulting correspondence or mismatch is assessed against the doctrinal standards of each system and compared across the two jurisdictions. Throughout, the analysis distinguishes descriptive findings (what institutions do and possess), normative propositions (what constitutional environmental duties require), and policy recommendations (how institutional design should respond). The principal limitation is that the Indonesian evidence concerns a single Forest Management Unit, while the Brazilian analysis relies on official data and secondary studies rather than original fieldwork. The findings are therefore offered as analytically generalisable propositions rather than as a comprehensive evaluation of either national system.

Constitutionalising Forest Protection: Environmental Duties and the Architecture of State Responsibility in Indonesia and Brazil

The constitutionalisation of forest protection marks a fundamental transformation in the legal conception of the environment: forests cease to be understood merely as economic resources subject to governmental management and instead become part of the constitutional conditions necessary for the continuity of human life, ecological integrity, and intergenerational justice. This transformation is normatively significant because constitutional environmental protection changes both the status of environmental interests and the character of state responsibility. Once ecological protection is incorporated into the constitutional order, governmental intervention can no longer be conceived solely as an exercise of discretionary environmental policy; it becomes, at least in part, the performance of a constitutionally grounded public duty. Such a duty carries an institutional implication. A constitutional commitment to environmental protection has limited practical significance unless it is accompanied by public institutions capable of preventing degradation, supervising the exploitation of natural resources, restoring damaged ecosystems, and coordinating the multiple governmental actors involved in environmental governance. Environmental constitutionalism should therefore be understood not simply as the constitutional recognition of ecological values, but as a normative demand for an architecture of state responsibility capable of converting those values into effective administrative action.²⁰

Indonesia's constitutional framework provides a distinctive foundation for such an understanding. Article 28H(1) of the 1945 Constitution expressly recognises the right of every person to a good and healthy environment, while Article 33(3) subjects land, water, and the natural resources contained therein to state control for the greatest

²⁰ Kotzé, *Global Environmental Constitutionalism in the Anthropocene*; May and Daly, *Global Environmental Constitutionalism*.

prosperity of the people.²¹ Article 33(4) further requires the national economy to be organised according to principles that include sustainability and environmental awareness. Read systematically rather than in isolation, these provisions reveal an important constitutional relationship between rights, state control over natural resources, social welfare, and ecological sustainability. Environmental protection is therefore not external to Indonesia's constitutional political economy; it constitutes one of the normative limits within which the state's authority over natural resources must be exercised. The constitutional mandate of prosperity cannot legitimately be reduced to the extraction of economic value from natural resources, because the same constitutional framework demands environmentally sustainable governance and guarantees environmental quality as an individual constitutional entitlement.

This relationship carries a deeper philosophical implication for the meaning of the Indonesian doctrine of state control over natural resources. If Article 33(3) were interpreted exclusively as conferring governmental power to allocate and exploit natural resources, the provision could paradoxically become a constitutional justification for ecological depletion. A more coherent reading places state control within a structure of constitutional stewardship: the state's authority is simultaneously a power and a responsibility, exercised for public welfare under the ecological constraints established by Articles 28H(1) and 33(4). The Constitutional Court has given this reading doctrinal form: state control under Article 33(3) comprises the functions of policy-making (*beleid*), administration (*bestuursdaad*), regulation (*regelendaad*), management (*beheersdaad*), and supervision (*toezichthoudensdaad*),²² and its prosperity mandate is measured by benchmarks that include the benefit of natural resources for the people and respect for the traditional rights of communities.²³ The constitutional beneficiaries of forest governance are consequently not limited to present economic actors, because environmental sustainability necessarily introduces a temporal dimension into constitutional responsibility. Forests must be governed in a manner that preserves the ecological conditions upon which both contemporary communities and future generations depend. Indonesian scholarship has accordingly associated Articles 28H(1) and 33(4) with the development of a green constitution, connecting environmental rights to constitutionally mandated sustainable development.²⁴ From this perspective, failures of forest governance may implicate more than deficient sectoral administration; they may expose a failure in the institutional realisation of constitutional commitments.

²¹ Undang-Undang Dasar Negara Republik Indonesia Tahun 1945 [1945 Constitution of the Republic of Indonesia], arts. 28H(1), 33(3), 33(4).

²² Constitutional Court of the Republic of Indonesia, Decision No. 001-021-022/PUU-I/2003, 15 December 2004 (review of the Electricity Law).

²³ Constitutional Court of the Republic of Indonesia, Decision No. 3/PUU-VIII/2010, 16 June 2011 (review of the Coastal Areas and Small Islands Law); see also Decision No. 35/PUU-X/2012, 16 May 2013 (customary forests).

²⁴ Asshiddiqie, *Green Constitution*.

Brazil provides an even more explicit formulation of environmental constitutional responsibility. Article 225 of the 1988 Constitution recognises an ecologically balanced environment as a right of all and places upon both public authorities and society the duty to defend and preserve it for present and future generations. Its constitutional structure therefore combines right, public duty, collective responsibility, and intergenerational protection within a single environmental provision. Moreover, Article 23 establishes environmental protection and the preservation of forests, fauna, and flora as common competences of the Union, States, Federal District, and Municipalities. Environmental responsibility in Brazil is consequently not constitutionally monopolised by the federal government but embedded within the architecture of the federation itself. The protection of forests becomes a shared constitutional undertaking, requiring governmental responsibility to operate vertically across different levels of public authority rather than solely through a central environmental administration.²⁵

Yet the breadth of constitutional responsibility in Brazil also exposes an important paradox of multilevel environmental constitutionalism. A constitutional system may broaden responsibility by assigning environmental protection simultaneously to several governmental entities, but the multiplication of responsible actors does not automatically guarantee effective governance. Shared competence may facilitate administrative proximity, institutional complementarity, and intervention by the governmental level best positioned to address a particular environmental harm. Conversely, poorly coordinated overlapping authority can generate uncertainty, duplication, administrative displacement, or strategic diffusion of responsibility. Brazil addresses this problem institutionally through Complementary Law No. 140/2011, which regulates cooperation among the Union, States, Federal District, and Municipalities in exercising their common administrative competences concerning environmental protection and the preservation of forests, fauna, and flora.²⁶ Its significance extends beyond administrative convenience: it demonstrates that constitutionally shared environmental responsibility requires a secondary institutional architecture capable of transforming abstract common competence into coordinated administrative action.

The two constitutional orders can be compared systematically along five dimensions, which are summarised in Table 1.

Constitutional environmental rights. Both constitutions recognise an environmental right. Article 28H(1) of the 1945 Constitution guarantees every person a good and healthy environment, while Article 225 of the Brazilian Constitution guarantees everyone an ecologically balanced environment as a good of common use. The similarity is substantive; the difference lies in formulation. The Brazilian provision

²⁵ Constituição da República Federativa do Brasil de 1988 [Constitution of the Federative Republic of Brazil], arts. 23(VI)–(VII) and 225, https://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm.

²⁶ Lei Complementar No. 140, de 8 de dezembro de 2011 [Complementary Law No. 140 of 8 December 2011], arts. 1 and 4, https://www.planalto.gov.br/ccivil_03/leis/lcp/lcp140.htm.

integrates the right with an intergenerational duty and an enumerated list of obligations of public authorities, whereas the Indonesian right is located in the human-rights chapter and derives its ecological content partly from a systematic reading with Article 33(4).

Constitutional state duties. In Indonesia, the state's duty is constructed indirectly. Article 28I(4) makes the protection, advancement, enforcement, and fulfilment of human rights the responsibility of the state, especially the government, and the Constitutional Court's reading of Article 33(3) converts state control over natural resources into a bundle of regulatory, administrative, managerial, and supervisory functions. In Brazil, the duty is explicit: Article 225 imposes on public authorities and society the duty to defend and preserve the environment, and the STF has treated the non-performance of that duty as a potential unconstitutional omission.²⁷ Both systems therefore recognise a duty that includes supervision and enforcement, but only Brazil has thus far articulated its administrative consequences through constitutional adjudication.

Distribution of environmental competence. Indonesia allocates forestry affairs by statute rather than by the Constitution. Under Law No. 23 of 2014, forestry is divided between the central government and the provinces; regencies retain only the management of grand forest parks (*Taman Hutan Raya*), while provinces administer protection and production forests through KPHs.²⁸ Brazil allocates competence constitutionally: Article 23(VI) and (VII) make environmental protection and the preservation of forests common competences of the Union, the states, the Federal District, and the municipalities. Indonesia has thus consolidated forestry authority at the provincial level, whereas Brazil maintains concurrent responsibility across all tiers of the federation.

Institutional responsibility. In Indonesia, frontline responsibility rests with provincial KPHs, while criminal investigation rests with forestry civil-servant investigators (PPNS) and the police, and prosecution and adjudication with other bodies. The special police powers of forestry officials under Article 51 of the Forestry Law are limited to patrol, inspection of documents, receipt of reports, collection of evidence, and arrest in flagrante delicto.²⁹ In Brazil, IBAMA and ICMBio exercise federal environmental police power and may impose administrative sanctions directly, including fines, embargoes, and seizures, while state environmental agencies authorise

²⁷ Supremo Tribunal Federal [STF], ADPF 708/DF, Rapporteur Min. Luís Roberto Barroso, judgment concluded 1 July 2022 (Informativo STF 1061); STF, ADO 59/DF, Rapporteur Min. Rosa Weber, 3 November 2022 (Informativo STF 1104). See Joana Setzer and Délton Winter de Carvalho, "Climate Litigation to Protect the Brazilian Amazon: Establishing a Constitutional Right to a Stable Climate," *Review of European, Comparative & International Environmental Law* 30, no. 2 (2021): 197–206, <https://doi.org/10.1111/reel.12409>.

²⁸ Law No. 23 of 2014 on Regional Government (State Gazette 2014 No. 244), art. 14 and Annex (forestry affairs); Government Regulation No. 23 of 2021 on Forestry Administration (State Gazette 2021 No. 33).

²⁹ Law No. 41 of 1999 on Forestry (State Gazette 1999 No. 167), arts. 51 and 77, as amended, most recently by Law No. 6 of 2023 (State Gazette 2023 No. 41).

most vegetation clearance on private rural land and exercise enforcement over the activities they license.³⁰ The Brazilian frontline agency therefore controls a larger segment of the enforcement chain than its Indonesian counterpart.

Mechanisms of intergovernmental coordination. Indonesian forest governance relies primarily on hierarchical coordination through central regulation and on case-by-case cooperation among KPHs, the forestry law-enforcement apparatus (Gakkum), and the police. Brazil has institutionalised coordination: Complementary Law No. 140/2011 provides for tripartite commissions, public consortia, cooperation agreements, and delegation; establishes that each activity is licensed by a single federative entity; and assigns primary enforcement authority to the licensing entity while preserving the common power of other entities to act.³¹ The STF has further held that another entity may act supplementarily where enforcement by the competent body is shown to be omitted or insufficient,³² a rule that makes deficient administrative capacity a legal trigger for the reallocation of enforcement competence.

Table 1. Constitutional architecture of forest protection in Indonesia and Brazil

Dimension	Indonesia	Brazil	Comparative observation
Constitutional environmental rights	Art. 28H(1): right to a good and healthy environment; ecological content reinforced by Art. 33(4)	Art. 225: right to an ecologically balanced environment as a good of common use, for present and future generations	Similar substance; Brazil integrates right and duty in a single provision
Constitutional state duties	Implicit: Art. 28I(4) state responsibility for protection, enforcement, and fulfilment; Art. 33(3) as policy, administration, regulation, management, and supervision (MK Decision 001-021-022/PUU-I/2003)	Explicit: Art. 225 duty of public authorities and society; enumerated obligations; non-performance reviewable as unconstitutional omission (ADPF 708, ADO 59)	Both include supervision and enforcement; only Brazil has judicially articulated administrative consequences
Distribution of competence	Statutory: Law No. 23 of 2014 divides forestry between centre and provinces; regencies limited to grand forest parks	Constitutional: Art. 23(VI)–(VII) common competence of Union, states, Federal District, and municipalities	Provincial consolidation (Indonesia) versus concurrent responsibility (Brazil)
Institutional responsibility	Provincial KPHs at the frontline; investigation by PPNS and police; limited forest-police powers (Law No. 41 of 1999, art. 51)	IBAMA, ICMBio, and state agencies with police power and direct administrative sanctions (Law No. 9.605/1998; Decree No. 6.514/2008)	Brazilian frontline agencies control a larger share of the enforcement chain

³⁰ Lei No. 7.735/1989 (IBAMA), art. 2; Lei No. 11.516/2007 (ICMBio), art. 1; Decreto No. 6.514/2008 (administrative infractions and sanctions), art. 3; LC 140/2011, arts. 8(XVI) and 17.

³¹ LC 140/2011, arts. 4, 13, and 17.

³² STF, ADI 4757/DF, Rapporteur Min. Rosa Weber, 12 December 2022 (Informativo STF 1079).

Dimension	Indonesia	Brazil	Comparative observation
Intergovernmental coordination	Hierarchical and case-by-case coordination among KPH, Gakkum, and police	LC 140/2011: tripartite commissions, consortia, agreements, single licensing, supplementary action (ADI 4757)	Brazil treats insufficient enforcement as a trigger for reallocating competence

Source: compiled by the author from the constitutional, statutory, and judicial materials cited in this section.

As Table 1 shows, the comparison between Indonesia and Brazil reveals two different constitutional pathways toward a common problem. Indonesia operates within a unitary but decentralised constitutional order in which environmental rights, state control over natural resources, sustainability, and administrative decentralisation intersect. Brazil, by contrast, constitutionalises environmental protection within a federal order in which environmental responsibility is expressly distributed among multiple federative entities. These institutional differences should not obscure their functional similarity: in both systems, environmental constitutionalism ultimately depends upon the translation of higher-order normative commitments into a complex chain of administrative authority. The relevant question is consequently not whether one constitution contains a stronger environmental vocabulary than the other. A textual ranking of constitutional provisions would reveal little about how forests are actually protected. The more consequential comparative inquiry concerns the mechanisms through which constitutional responsibility travels from constitutional norm, to allocation of governmental competence, to administrative institution, and ultimately to action at the forest frontier.

This perspective also requires a critical reconsideration of the conventional distinction between constitutional law and administrative law. Constitutional environmental rights are sometimes treated as normatively complete at the moment of constitutional recognition, leaving questions of implementation to the supposedly secondary domain of administration. Such a separation is difficult to sustain in forest governance. An environmental right that cannot be supervised, protected, enforced, or restored through functioning administrative institutions remains constitutionally significant but materially precarious. Administrative institutions therefore do not merely execute environmental constitutionalism; they constitute part of the institutional conditions of its effectiveness. The capacity to patrol extensive territories, regulate forest utilisation, prevent unlawful extraction, rehabilitate degraded areas, involve forest-dependent communities, exchange information, and coordinate enforcement agencies becomes relevant to whether constitutional environmental commitments acquire practical meaning. The decisive analytical movement is thus from constitutional entitlement to constitutional capability: the effectiveness of environmental rights must be assessed in relation to the institutional arrangements through which the state is expected to secure them.

Accordingly, the constitutionalisation of forest protection in Indonesia and Brazil should be understood as imposing a dual requirement upon the state. The first is normative: the constitutional order must establish environmental protection as a right, value, limitation upon governmental power, or affirmative public obligation. The second is institutional: the state must organise authority and administrative capacity in a manner reasonably capable of fulfilling that obligation. The failure to distinguish these dimensions risks equating constitutional ambition with constitutional effectiveness. Conversely, examining them together makes visible the central proposition developed in this article: environmental constitutionalism becomes substantively credible only when constitutional duties are matched by a coherent and capable architecture of administrative responsibility. This proposition provides the analytical bridge to the subsequent examination of decentralisation in Indonesia and Brazil—where the central issue is no longer merely what environmental duties the constitutions recognise, but how those duties are distributed among institutions and whether that distribution strengthens or fragments the state's capacity to protect forests.

Decentralising Forest Governance: Administrative Authority, Institutional Fragmentation, and Multilevel Environmental Governance

Decentralisation fundamentally reshapes the institutional meaning of environmental constitutionalism because constitutional duties rarely operate through a single administrative authority. Once environmental protection is dispersed across multiple levels of government, the effectiveness of constitutional commitments depends upon how responsibility is allocated, coordinated, and supported institutionally. Decentralisation is often normatively justified by the principle of administrative proximity: governmental institutions situated closer to ecosystems and affected communities are presumed to possess greater knowledge of local conditions, to respond more rapidly to environmental threats, and to facilitate meaningful public participation. Yet proximity alone does not produce effective governance. The transfer or distribution of environmental responsibilities may instead create an asymmetry between responsibility and capability, particularly where subnational institutions receive extensive operational obligations without equivalent regulatory authority, financial resources, enforcement instruments, or mechanisms for intergovernmental coordination. Forest decentralisation must therefore be assessed not simply by asking how much authority has been transferred, but by examining whether the resulting distribution of competences produces an integrated system of environmental protection or, conversely, institutional fragmentation.

The Indonesian experience illustrates this ambiguity particularly clearly. Although Indonesia remains constitutionally a unitary state, decentralisation has

produced a layered system of governmental responsibility in which forestry governance involves central and provincial authorities as well as specialised institutions operating at the forest-management level. Government Regulation No. 23 of 2021 situates Forest Management Units (Kesatuan Pengelolaan Hutan, KPH) within both the national forest-administration system and provincial government, while distinguishing among conservation, protection, and production KPHs. In particular, the regulation provides that organisations managing protection and production KPHs are established by governors, whereas conservation KPHs remain institutionally connected to central governmental authority. The same regulatory framework encompasses forest planning, utilisation, rehabilitation, social forestry, forest protection, supervision, and administrative sanctions. This arrangement reveals that Indonesian forest decentralisation is neither an unqualified transfer of authority nor a purely centralised model. Rather, it constitutes a differentiated administrative system in which responsibility is distributed according to forest functions, governmental levels, and particular regulatory instruments.³³

Within this architecture, the KPH occupies a distinctive and somewhat paradoxical institutional position. It is expected to act as the state's operational presence at the forest frontier, where abstract national forestry policies must be translated into surveillance, protection, rehabilitation, community engagement, and day-to-day management. The North Gorontalo case demonstrates this breadth of responsibility. UPTD KPH Region IV undertakes routine patrols and monitoring in areas vulnerable to illegal logging, records potentially unlawful activities, participates in securing suspected illegally harvested timber, undertakes rehabilitation, facilitates social forestry, and coordinates with other law-enforcement institutions.³⁴ At the same time, its authority does not encompass the entire enforcement chain: criminal investigation and adjudication necessarily depend upon other authorised bodies. This institutional separation is not inherently defective—functional specialisation may safeguard legality and prevent excessive concentration of administrative power—but it becomes problematic when coordination is weak or when the frontline institution is held substantively responsible for environmental outcomes without possessing corresponding control over the legal instruments necessary to secure them.

³³ Government Regulation No. 23 of 2021, art. 40; Sahide et al., "Decentralisation Policy as Recentralisation Strategy," 78–95.

³⁴ Interview with Khairul Ikhsan Sumardin, Head of the Administrative Sub-division, UPTD KPH Region IV North Gorontalo, 5 June 2026; interview with Nawir Ali, forest-police officer, UPTD KPH Region IV North Gorontalo, 5 June 2026; Nggilu, "Peran UPTD KPH Wilayah IV," sec. 4.1.

Brazil offers a contrasting model in which multilevel environmental administration is embedded more explicitly within federal constitutionalism. Article 23 of the Brazilian Constitution establishes environmental protection and the preservation of forests, fauna, and flora as common competences of the Union, States, Federal District, and Municipalities. Complementary Law No. 140/2011 subsequently gives administrative structure to this constitutional allocation by regulating cooperation among the federative entities in the exercise of their shared environmental responsibilities. The Brazilian model therefore makes an important conceptual distinction between shared constitutional responsibility and organised administrative cooperation. The former establishes that environmental protection belongs to more than one governmental level; the latter attempts to prevent shared responsibility from deteriorating into overlapping, contradictory, or evasive administration. Brazilian forest governance consequently illustrates an institutional proposition of broader comparative significance: multilevel environmental competence is sustainable only when the legal system also develops mechanisms capable of allocating operational responsibility and regulating cooperation among competent authorities.

This proposition becomes particularly visible in the decentralisation of Brazilian forest management. Complementary Law No. 140/2011 assigns to the states the authorisation of vegetation clearance on most private rural properties, while federal agencies retain responsibility for federal lands and conservation units, and Law No. 11.284/2006 created the Brazilian Forest Service to manage public forests and forest concessions. The institutional logic is one of differentiated competences within a broader cooperative framework rather than a complete withdrawal of one level of government from environmental governance. The significance of this arrangement lies less in the formal existence of multiple competent authorities than in the recognition that environmental problems frequently exceed administrative borders. Deforestation, timber supply chains, biodiversity loss, watershed degradation, and ecological externalities rarely conform to jurisdictional boundaries. Forest governance therefore demands not simply decentralisation, but cooperative decentralisation capable of reconciling territorial proximity with ecological interdependence.

In practice, Brazilian forest governance operates through an enforcement system in which monitoring, sanctioning, and territorial targeting are institutionally linked. The National Institute for Space Research (INPE) operates DETER, which generates near-real-time satellite alerts transmitted to IBAMA to guide field operations, and PRODES, which provides the official annual deforestation rate against which policy is evaluated. Econometric evidence indicates that DETER-enabled enforcement

significantly reduced Amazon deforestation,³⁵ and field-based sanctioning by IBAMA has been found to deter clearing where operations are credible.³⁶ Since 2004, these instruments have been coordinated under the PPCDAm, now in its fifth phase (2023–2027), which sets the objective of eliminating deforestation by 2030.³⁷ Territorial targeting extends to municipalities: under Decree No. 6.321/2007, the federal government publishes a list of priority municipalities with high deforestation, subjecting rural properties there to additional registration and authorisation requirements and conditioning exit from the list on monitoring and reduced clearing.³⁸ Federal resources also build subnational capacity; an Amazon Fund project with the environmental secretariat of Pará, for example, supported environmental offices in 82 municipalities and trained 480 municipal officials.³⁹

The Brazilian record also demonstrates that administrative capacity is contingent rather than guaranteed. The annual deforestation rate in the Legal Amazon fell from 27,772 km² in 2004 to 4,571 km² in 2012, rose again to between 10,129 and 13,038 km² in 2019–2022, and declined to 6,518 km² in 2024 following the reactivation of the PPCDAm and the Amazon Fund.⁴⁰ The intervening rise coincided with a contraction of enforcement capacity: IBAMA's field inspectors declined from 1,311 in 2010 to 691 in 2020, and embargoes and seizures fell sharply in 2019–2020.⁴¹ Scholars have characterised this period as one of deliberate dismantling of environmental institutions.⁴² Brazil therefore offers not a model of consistently sufficient capacity, but evidence that the same constitutional text can produce markedly different environmental outcomes depending on the administrative capability that sustains it.

The comparison also reveals why decentralisation cannot be normatively equated with democratisation or effectiveness. Local and subnational institutions may indeed possess superior territorial knowledge and greater opportunities for engagement with forest-dependent communities. However,

³⁵ Assunção, Gandour, and Rocha, “DETER-ing Deforestation,” 125–56.

³⁶ Börner et al., “Post-Crackdown Effectiveness,” e0121544.

³⁷ Ministério do Meio Ambiente e Mudança do Clima, “Plano de Ação para Prevenção e Controle do Desmatamento na Amazônia Legal (PPCDAm),” <https://www.gov.br/mma/pt-br/assuntos/controle-a-desmatamento-queimadas-e-ordenamento-ambiental-territorial/controle-do-desmatamento-1/amazonia-ppcdam-1>; Decreto No. 11.367, de 1º de janeiro de 2023.

³⁸ Decreto No. 6.321, de 21 de dezembro de 2007, arts. 2, 11, and 14, https://www.planalto.gov.br/ccivil_03/_ato2007-2010/2007/decreto/d6321.htm.

³⁹ Fundo Amazônia, “Semas Pará” (project page), <https://www.fundoamazonia.gov.br/pt/projeto/Semas-Para/>; Decreto No. 11.368, de 1º de janeiro de 2023 (reactivating the Amazon Fund).

⁴⁰ Instituto Nacional de Pesquisas Espaciais (INPE), PRODES annual deforestation rates for the Legal Amazon, TerraBrasilis, <https://terrabrasilis.dpi.inpe.br>; INPE, “Nota técnica: Estimativa PRODES 2025” (15 October 2025), https://data.inpe.br/wp-content/uploads/sites/3/2025/10/20251015Nota_tecnica_EstimativaPRODES_2025_F.pdf.

⁴¹ Nunes et al., “Lessons from the Historical Dynamics,” 1828.

⁴² Menezes and Barbosa, “Environmental Governance under Bolsonaro,” 229–47; Luciana Gomes Barbosa, Maria Alice Santos Alves, and Carlos Eduardo Viveiros Grelle, “Actions against Sustainability: Dismantling of the Environmental Policies in Brazil,” *Land Use Policy* 104 (2021): 105384, <https://doi.org/10.1016/j.landusepol.2021.105384>.

decentralisation can simultaneously expose public administration to uneven fiscal capacity, differences in institutional professionalism, regulatory capture, political pressure, and disparities in enforcement infrastructure. Centralisation generates its own risks—bureaucratic distance, insufficient sensitivity to local conditions, and excessive concentration of authority—but decentralisation without capacity may merely relocate administrative weakness. The real constitutional problem is therefore not a binary choice between central and local control. It concerns the vertical and horizontal alignment of competence: which governmental actor possesses the legal authority to act, which institution has access to information and territory, who controls enforcement resources, how decisions are coordinated across agencies, and which body can ultimately be held accountable when forest protection fails. In this respect, good multilevel governance requires responsibility to be traceable rather than merely dispersed.

A further difficulty arises from the fragmentation of the enforcement continuum itself. Forest protection combines administrative management, preventive supervision, licensing and authorisation, community-based governance, administrative sanctions, criminal investigation, and judicial enforcement. These functions cannot necessarily be concentrated within a single institution, nor would such concentration always be constitutionally desirable. Nevertheless, institutional differentiation requires reliable interfaces between agencies. The North Gorontalo evidence is instructive because it demonstrates that frontline officials can identify vulnerable areas, conduct patrols, issue warnings, secure forest products, and initiate coordination, while subsequent coercive legal processes depend on other institutional actors. The analytical issue is therefore not simply whether each institution formally performs its own statutory function, but whether the combined institutional chain generates effective protection. A fragmented system may satisfy legality at the level of individual competence yet remain ineffective as a governance system if information, authority, resources, and responsibility do not move coherently between institutions.

The Indonesian–Brazilian comparison, summarised in Table 2, consequently suggests that the constitutional value of decentralisation lies not in the quantity of authority devolved but in the quality of the institutional relationships through which environmental responsibility is exercised. Effective forest governance requires administrative proximity without institutional isolation, differentiated competence without responsibility gaps, and decentralised implementation without the loss of systemic coordination. Brazil's constitutionally shared competence and statutory architecture of intergovernmental cooperation, and Indonesia's integration of provincial forest-

management institutions within a broader national regulatory system, represent different attempts to solve the same underlying constitutional problem: how to govern ecologically interconnected resources through territorially divided public institutions. The decisive question is thus whether multilevel governance aligns responsibility with authority and capacity. Where it does, decentralisation may transform local institutions into effective agents of environmental constitutionalism; where it does not, the dispersion of responsibilities risks becoming a structure through which constitutional obligations are formally allocated but institutionally under-delivered. This tension provides the foundation for examining, in the following section, whether the persistence of illegal logging in frontline governance settings reflects merely an enforcement problem or a deeper constitutional duty–administrative capacity gap.

Table 2. Administrative architecture of forest governance in Indonesia and Brazil

Dimension	Indonesia	Brazil
Competence	Forestry divided between central government and provinces (Law No. 23 of 2014); protection and production KPHs under provinces; conservation KPHs under central government	Common competence of all federative tiers (Art. 23); operational division by LC 140/2011 (e.g., states authorise most clearance on private land)
Institutional structure	Provincial KPHs as technical implementing units (UPTD) at the forest frontier; Ministry of Forestry and its law-enforcement directorate (Gakkum) at the centre	National Environmental System (SISNAMA): IBAMA and ICMBio (federal), state environmental agencies, municipal bodies; Brazilian Forest Service for public forests
Enforcement authority	Forest police: patrol, inspection, evidence, arrest in flagrante; investigation by PPNS and police; KPH cannot impose criminal sanctions	Environmental agencies impose fines, embargoes, and seizures directly; duty to investigate infractions on pain of co-responsibility (Law No. 9.605/1998, art. 70 §3)
Coordination	Hierarchical and case-by-case inter-agency coordination; no dedicated forestry cooperation framework comparable to LC 140/2011	LC 140/2011 instruments (tripartite commissions, consortia, agreements, delegation, single licensing, supplementary action); PPCDAm interministerial coordination; priority-municipality list
Administrative capacity	North Gorontalo KPH IV: nine forest-police officers for approx. 110,811 ha; limited vehicles and patrol facilities; 33 certified forest-police officers across seven KPHs province-wide	Satellite monitoring (DETER, PRODES) integrated with enforcement; IBAMA field inspectors declined from 1,311 (2010) to 691 (2020); capacity support through the Amazon Fund

Source: compiled by the author from the statutory and judicial materials, official data, and field research.

When Constitutional Duties Exceed Administrative Capacity: Illegal Logging and the Frontline Governance Gap

The persistence of illegal logging in a jurisdiction with an extensive regulatory framework should not be interpreted exclusively as evidence of weak

criminal deterrence or insufficient legal prohibition. Such an interpretation risks reducing a complex governance failure to the conduct of offenders while overlooking the institutional conditions under which environmental law is expected to operate. In forest governance, the state acts through frontline administrative bodies that must monitor vast territories, detect violations, engage local communities, coordinate with enforcement agencies, and maintain ecological functions under conditions of limited personnel and resources. Where these operational responsibilities exceed institutional capability, the problem may cease to be merely one of enforcement effectiveness and become a question of constitutional implementation—a characterisation that, as argued below, requires explicit doctrinal justification. The central issue is therefore whether the administrative state has been institutionally equipped to discharge the environmental duties that the constitutional and legislative order assigns to it.

The experience of UPTD KPH Region IV North Gorontalo provides an important empirical illustration of this problem. The institution has undertaken routine patrols in areas identified as vulnerable to illegal logging, monitored forest activities, recorded suspected locations of unlawful logging, issued warnings, secured timber suspected of originating from illegal activities, coordinated with competent law-enforcement authorities, implemented forest and land rehabilitation, and facilitated social forestry as a preventive and community-based strategy.⁴³ These activities demonstrate that the frontline administration is not institutionally absent. On the contrary, it performs a broad set of protective, preventive, restorative, and coordinative functions. The unit's records classify ten villages in five sub-districts as vulnerable to illegal logging—four in Tolinggula, two each in Sumalata and Atinggola, and one each in Monano and Biau—and officers report that logging has continued in these areas over the preceding three years.⁴⁴ The continued occurrence of illegal logging despite these interventions suggests that the critical question is not whether the institution acts, but whether the scope and intensity of its responsibilities are realistically matched by the administrative capacity available to it.

That mismatch is particularly visible in the relationship between institutional responsibility and material capability. Interviews with the unit's officials indicate that only nine forest-police officers support its forest-protection functions, while the unit's records place the forest estate of North Gorontalo at

⁴³ Interview with Khairul Ikhsan Sumardin, Head of the Administrative Sub-division, UPTD KPH Region IV North Gorontalo, 5 June 2026; interview with Nawir Ali, forest-police officer, UPTD KPH Region IV North Gorontalo, 5 June 2026; Nggilu, "Peran UPTD KPH Wilayah IV," sec. 4.1.

⁴⁴ UPTD KPH Wilayah IV Gorontalo Utara, list of villages vulnerable to illegal logging (internal record), and interview with Nawir Ali, 5 June 2026, as documented in Nggilu, "Peran UPTD KPH Wilayah IV," chap. 1 and sec. 4.1.1.

approximately 110,811.29 hectares—roughly one officer for every 12,300 hectares, including areas that are difficult to access.⁴⁵ The figure is not anomalous: the head of the provincial Environment and Forestry Office has reported only 33 certified forest-police officers across Gorontalo's seven KPHs,⁴⁶ and the Ministry of Forestry, reporting approximately 4,800 forest-police officers under its authority nationwide, announced in 2026 the phased recruitment of 23,000 more in order to approach a ratio of one officer per 5,000 hectares.⁴⁷ Operational vehicles and patrol facilities are also limited, with the consequence that supervision cannot be conducted uniformly across the entire jurisdiction and must be concentrated on areas already identified as vulnerable.⁴⁸ This creates what may be described as a resource–territorial asymmetry: the legal responsibility to protect the forest extends across the whole administrative territory, while the institution's actual capacity to maintain a continuous governmental presence is geographically selective. Such asymmetry is potentially constitutionally relevant because environmental duties are ultimately meaningful only when the institutions entrusted with them possess a reasonable capacity to reach the spaces in which those duties must be performed.

A second dimension concerns the separation between responsibility and coercive authority. The North Gorontalo KPH can conduct supervision, undertake preventive measures, secure suspected forest products, and initiate coordination, but it does not control the entire chain of criminal enforcement. Investigation and subsequent coercive legal processes depend on other authorised institutions, while adjudication remains within the judicial sphere.⁴⁹ The handling of a 2017 forestry offence in Potanga village, Biau sub-district, illustrates the practical consequence: the case was processed by forest police in cooperation with the regional forestry law-enforcement office, but the distance from the provincial capital and the limited personnel in the field prolonged its handling.⁵⁰ Functional differentiation of this kind is not inherently problematic;

⁴⁵ Joint interview with Khairul Ikhsan Sumardin and Nawir Ali, UPTD KPH Region IV North Gorontalo, 5 June 2026; UPTD KPH Wilayah IV Gorontalo Utara, "Data Luas Hutan Kabupaten Gorontalo Utara," 10; Nggilu, "Peran UPTD KPH Wilayah IV," sec. 4.2.1. The ratio is calculated by the author.

⁴⁶ Redaksi Dulohupa, "Meski Minim Personel." The figure refers to certified forest-police officers of the provincial Environment and Forestry Office.

⁴⁷ CNN Indonesia, "Kemenhut Buka Rekrutmen 23 Ribu Polisi Hutan dalam 3 Tahun ke Depan," 16 July 2026, <https://www.cnnindonesia.com/nasional/20260716101451-20-1381346/kemenhut-buka-rekrutmen-23-ribu-polisi-hutan-dalam-3-tahun-ke-depan>.

⁴⁸ Interview with Nawir Ali, 5 June 2026; field observation of patrol facilities, as documented in Nggilu, "Peran UPTD KPH Wilayah IV," sec. 4.2.1.

⁴⁹ Law No. 41 of 1999, arts. 51(2) and 77; joint interview with Khairul Ikhsan Sumardin and Nawir Ali, 5 June 2026.

⁵⁰ Laporan Kejadian No. LK.05/LK/PHR-GAKUM/III/2017, 31 March 2017, as documented in Nggilu, "Peran UPTD KPH Wilayah IV," chap. 1.

indeed, the separation of administrative management, investigation, prosecution, and adjudication is consistent with legality and institutional checks. The difficulty arises when frontline institutions are expected to secure environmental outcomes while remaining dependent upon actors over which they have limited organisational control. Under such conditions, legal responsibility may be formally distributed, but operational accountability becomes fragmented. The resulting authority gap is therefore not the absence of legal power in an absolute sense, but the discontinuity between the institution that first encounters environmental harm and the institutions capable of escalating that encounter into coercive enforcement.

The governance problem is further complicated by the social context in which illegal logging occurs. The underlying research identifies economic dependency on forest resources and relatively low levels of legal awareness among parts of the surrounding population as continuing obstacles to forest protection.⁵¹ These findings are significant because they demonstrate the limits of an enforcement-centred conception of environmental governance. Where unlawful logging is linked to livelihood insecurity and embedded social practices, the effectiveness of administrative intervention cannot be measured solely by the number of patrols, warnings, or criminal cases. It also depends upon whether the state can create lawful economic alternatives and restructure the relationship between local communities and forest resources. Social forestry is therefore analytically important: it reflects an attempt to move from a purely prohibitive model of governance toward one that combines ecological protection with legal access and socio-economic inclusion.⁵² The persistence of illegal logging consequently reveals not merely a compliance deficit but the interaction between administrative capacity, social vulnerability, and the legitimacy of environmental regulation.

These empirical conditions support the concept developed in this article of a constitutional duty–administrative capacity gap. The gap arises when the constitutional and legal order imposes environmental obligations of substantial breadth, while frontline institutions lack commensurate authority, personnel, infrastructure, territorial reach, or coordination mechanisms. In North Gorontalo, this gap can be disaggregated into at least five dimensions: a responsibility gap, where broad forest-protection duties are assigned to the institution; an authority gap, where decisive enforcement powers are institutionally dispersed; a resource gap, reflected in limited personnel and

⁵¹ Interview with Khairul Ikhsan Sumardin, 5 June 2026; Nggilu, “Peran UPTD KPH Wilayah IV,” sec. 4.2.2.

⁵² Interviews with Khairul Ikhsan Sumardin and Nawir Ali, 5 June 2026; Nggilu, “Peran UPTD KPH Wilayah IV,” secs. 4.1.3 and 4.2.2.

operational facilities; a territorial gap, produced by the disparity between administrative coverage and physical accessibility; and a coordination gap, where effective intervention depends upon institutional actors beyond the direct control of the frontline unit. These dimensions demonstrate that administrative capacity is not a single variable but a relational condition linking legal mandate, organisational resources, territorial presence, and inter-agency cooperation.

The conceptual importance of this framework lies in its challenge to the conventional attribution of environmental failure. Persistent illegal logging is often framed as the consequence of weak sanctions, insufficient policing, corruption, or low public compliance. Those explanations may be relevant, but they are incomplete if they ignore whether the institutional system itself is capable of carrying the burden placed upon it. Where a frontline agency is required to supervise extensive forest territories with limited staff, depends upon other institutions for coercive enforcement, and operates within communities facing significant socio-economic dependence on forest resources, environmental outcomes cannot be assessed solely through a narrow model of organisational performance. A more appropriate standard asks whether constitutional responsibility, statutory authority, and operational capability are institutionally aligned. This shifts the analysis from blaming individual agencies for underperformance toward evaluating whether the architecture of the administrative state enables or constrains constitutional fulfilment.

These findings do not, by themselves, establish a constitutional failure. Administrative shortfalls are endemic to public administration, and not every deficit of personnel or equipment raises a constitutional question.⁵³ The move from administrative limitation to constitutional implementation therefore requires a doctrinal justification, which both legal orders supply, albeit in different forms.

In Indonesia, three doctrinal elements support the characterisation. First, Article 28I(4) of the 1945 Constitution assigns the protection, advancement, enforcement, and fulfilment of human rights—including the environmental right in Article 28H(1)—to the state, especially the government.⁵⁴ The inclusion of enforcement (*penegakan*) and fulfilment (*pemenuhan*) signifies that the constitutional duty extends beyond abstention to the positive organisation of state capacity, consistent with the comparative doctrine of positive obligations, under which states must establish an effective legislative and administrative framework against environmental hazards.⁵⁵ Second, the Constitutional Court's construction of Article 33(3) includes supervision

⁵³ Xavier Fernández-i-Marín et al., "Bureaucratic Quality and the Gap between Implementation Burden and Administrative Capacities," *American Political Science Review* 118, no. 3 (2024): 1240–60, <https://doi.org/10.1017/S0003055423001090>.

⁵⁴ 1945 Constitution, arts. 28H(1) and 28I(4).

⁵⁵ Fredman, *Human Rights Transformed*; *Öneryıldız v. Turkey* [GC], no. 48939/99, ECHR 2004-XII (30 November 2004).

(*toezichthoudensdaad*) and administration (*bestuursdaad*) among the constitutive functions of state control over natural resources.⁵⁶ Supervision of forests is thus part of the constitutional content of state control rather than an optional policy; a state that asserts control over forests while lacking the means to supervise them exercises the power without discharging the corresponding responsibility. Third, statutory law operationalises these duties and renders their non-performance legally cognisable. Article 63 of Law No. 32 of 2009 assigns supervision and environmental law enforcement to central, provincial, and regency governments, while Law No. 30 of 2014 defines governmental action to include the failure to act, which, following Supreme Court Regulation No. 2 of 2019, may be challenged before the administrative courts.⁵⁷ Indonesian courts have also framed governmental omission in forest protection as unlawful: in the Central Kalimantan forest-fire citizen lawsuit, the district court, the high court, and the Supreme Court at cassation held that the government had acted unlawfully in its handling of the 2015 forest fires and ordered institutional measures, although the Supreme Court annulled these rulings on case review in 2022.⁵⁸ The reversal shows that the doctrine remains contested, but the earlier rulings confirm that administrative incapacity in forest protection is capable of being articulated as a constitutional-legal question.

Brazilian doctrine is more explicit. Article 225 imposes a duty on public authorities, and Article 70 §3 of Law No. 9.605/1998 obliges any environmental authority that becomes aware of an infraction to investigate it immediately, on pain of co-responsibility.⁵⁹ The STF has translated these duties into justiciable standards of administrative performance. In ADPF 708, it held that the executive has a constitutional duty to make the Climate Fund operate and to allocate its resources annually;⁶⁰ in ADO 59, it found an unconstitutional omission in the paralysis of the Amazon Fund and ordered its reactivation;⁶¹ and in ADPF 760 and ADO 54, while declining to declare an “unconstitutional state of affairs”, it recognised structural failures in the federal deforestation-control policy and ordered the Union to implement the PPCDAm, to reduce deforestation in the Legal Amazon to 3,925 km² per year by

⁵⁶ Constitutional Court, Decision No. 001-021-022/PUU-I/2003.

⁵⁷ Law No. 32 of 2009 on Environmental Protection and Management (State Gazette 2009 No. 140), art. 63; Law No. 30 of 2014 on Government Administration (State Gazette 2014 No. 292), art. 1(8); Supreme Court Regulation No. 2 of 2019 on Guidelines for Resolving Disputes over Governmental Action and the Authority to Adjudicate Unlawful Acts by Government Bodies and/or Officials.

⁵⁸ Palangka Raya District Court, Decision No. 118/Pdt.G/LH/2016/PN.Plk, 22 March 2017; Palangka Raya High Court, Decision No. 36/PDT/2017/PT PLK, 19 September 2017; Supreme Court, Decision No. 3555 K/Pdt/2018, 16 July 2019; annulled on case review by Supreme Court, Decision No. 980 PK/Pdt/2022 (2022). See Resti Fauzi, “Perbuatan Melawan Hukum Pemerintah dalam Peristiwa Kebakaran Hutan,” *Jurnal Yudisial* 17, no. 1 (2024): 61–80, <https://doi.org/10.29123/jy/v17i1.611>.

⁵⁹ CF/1988, art. 225; Lei No. 9.605, de 12 de fevereiro de 1998 (Environmental Crimes Law), art. 70 §3.

⁶⁰ STF, ADPF 708/DF (Informativo STF 1061). See Maria Antonia Tigre and Joana Setzer, “Human Rights and Climate Change for Climate Litigation in Brazil and Beyond: An Analysis of the Climate Fund Decision,” *Georgetown Journal of International Law* 54, no. 4 (2023): 593–637.

⁶¹ STF, ADO 59/DF (Informativo STF 1104).

2027, and to strengthen the institutional capacity of its environmental and indigenous-affairs agencies.⁶² These rulings accord with a broader literature that treats structural remedies as the constitutional response to persistent administrative incapacity,⁶³ and that regards administrative agencies as primary implementers of constitutional norms rather than as mere executors of constitutional choices made elsewhere.⁶⁴

Drawing on both systems, an administrative capacity deficit may be characterised as a problem of constitutional implementation—rather than merely an administrative or policy problem—when four conditions are met: (i) the affected function is the performance of a constitutionally grounded duty, such as the supervision and enforcement required to protect the environmental right; (ii) the deficit is structural and persistent rather than incidental; (iii) it results from the state's own allocation of mandates and resources rather than from factors wholly beyond its control; and (iv) it materially impairs the protective function that the duty requires. The standard is one of reasonable rather than perfect capacity, and it leaves the choice of means to the legislature and the executive. Measured against these conditions, the North Gorontalo evidence indicates—but cannot alone prove—a problem of constitutional implementation. Supervision is a constitutionally grounded function; the personnel and territorial constraints are structural; they derive from the allocation of forest-protection responsibilities to provincial units without commensurate resources; and they compel the unit to confine supervision to hotspots already identified. What remains to be established is the extent to which this pattern is replicated across other KPHs, a question that the provincial and national data on forest-police numbers suggest deserves systematic investigation.

Seen in this light, illegal logging functions as an institutional stress test of environmental constitutionalism. It reveals whether constitutional commitments can survive the transition from normative promise to administrative practice at the forest frontier. The North Gorontalo case suggests that the central challenge lies not in the complete absence of governmental action, but in the structural possibility that public responsibility has expanded more rapidly than administrative capability. This distinction is crucial. Environmental constitutionalism may be normatively ambitious while remaining institutionally fragile if frontline administrations are expected to deliver ecological protection without adequate resources, authority, territorial reach, and coordinated enforcement support. The problem to be resolved is therefore not simply how to intensify enforcement against illegal logging, but

⁶² STF, ADPF 760/DF and ADO 54/DF, Rapporteur Min. Cármen Lúcia, judgment written by Min. André Mendonça, 14 March 2024 (Informativo STF 1132).

⁶³ César Rodríguez-Garavito, "Beyond the Courtroom: The Impact of Judicial Activism on Socioeconomic Rights in Latin America," *Texas Law Review* 89 (2011): 1669; David Landau, "The Reality of Social Rights Enforcement," *Harvard International Law Journal* 53, no. 1 (2012): 189.

⁶⁴ Gillian E. Metzger, "Administrative Constitutionalism," *Texas Law Review* 91 (2013): 1897; Holmes and Sunstein, *Cost of Rights*.

how to design an administrative system in which the duties imposed by constitutional environmental commitments are matched by the institutional capability required to realise them.

From Constitutional Promise to Administrative Capability: Comparative Lessons for Reconstructing Forest Governance

The comparison between Indonesia and Brazil demonstrates that the effectiveness of environmental constitutionalism ultimately depends less on the rhetorical strength of constitutional commitments than on the institutional architecture through which those commitments are implemented. Both legal systems recognise environmental protection as a matter of public responsibility, yet they organise that responsibility through different constitutional and administrative structures. Indonesia relies on a unitary but decentralised model in which forestry responsibilities are distributed across central and provincial authorities and operationalised through institutions such as Forest Management Units. Brazil, by contrast, embeds environmental responsibility within a federal structure characterised by shared competences and intergovernmental cooperation. These differences should not be reduced to a question of institutional superiority. Their comparative value lies in revealing a common structural challenge: constitutional environmental duties become effective only when responsibility, authority, resources, territorial reach, and accountability are institutionally aligned. The central task of forest-governance reform is therefore not simply to strengthen legal prohibitions, but to ensure that the administrative state possesses the capability necessary to transform constitutional commitments into sustained ecological protection. The discussion below distinguishes three levels of claim: descriptive findings about how each system operates, normative propositions about what constitutional environmental duties require, and policy recommendations for institutional design. Table 3 sets out how each principle is derived from the evidence of both jurisdictions.

The Indonesian experience illustrates the risks that arise when frontline responsibility is institutionally broader than operational capacity. Forest Management Units are positioned close to forest landscapes and are consequently expected to perform supervision, prevention, rehabilitation, community empowerment, and coordination with law-enforcement bodies. In North Gorontalo, these functions are performed through patrols, monitoring of vulnerable areas, rehabilitation programmes, social forestry, warnings to suspected offenders, protection of suspected illegally harvested timber, and inter-agency coordination. Yet the same empirical evidence reveals constraints in personnel, facilities, territorial accessibility, and direct control over subsequent

enforcement processes. The comparative implication is significant. Decentralisation may successfully relocate responsibility toward institutions that possess superior local knowledge, but unless this relocation is accompanied by adequate authority and institutional support, decentralisation risks producing proximity without capability. In such circumstances, the state is administratively present at the forest frontier but insufficiently empowered to guarantee the environmental outcomes for which it is normatively responsible.

Brazil offers a different institutional response by embedding environmental protection within a framework of shared governmental responsibility and cooperative administration. The comparative lesson is not that shared competence automatically resolves enforcement problems, but that decentralisation must be accompanied by legal mechanisms capable of organising cooperation among different levels of government. Shared responsibility without coordination may simply multiply actors while obscuring accountability.⁶⁵ Conversely, clearly structured cooperative arrangements can allow different governmental institutions to perform complementary functions according to their territorial position, technical competence, and enforcement capacity. For Indonesia, this suggests that strengthening forest governance requires more than transferring additional responsibilities to provincial or frontline institutions. It requires a clearer architecture for linking forest management, administrative supervision, investigation, sanctions, ecological restoration, and community-based governance into a coherent institutional chain.

This comparison supports a first principle for reconstructing forest governance: the principle of responsibility–capacity correspondence. Public institutions should not be assigned environmental obligations that materially exceed their capacity to perform them. This principle does not imply that every administrative agency must possess unlimited resources or complete enforcement authority. Rather, it requires a reasonable institutional relationship between the scope of a legal mandate and the personnel, financial resources, technical infrastructure, territorial access, and organisational support available for its implementation. In constitutional terms, the principle protects environmental duties from becoming merely aspirational. If a constitution obliges the state to preserve ecological integrity while the administrative institutions responsible for forest protection remain structurally incapable of maintaining territorial supervision, detecting violations, or responding effectively to environmental harm, the constitutional promise is weakened not

⁶⁵ Arun Agrawal and Jesse Ribot, "Accountability in Decentralization: A Framework with South Asian and West African Cases," *Journal of Developing Areas* 33, no. 4 (1999): 473–502.

because its normative content is defective, but because its institutional conditions of fulfilment are inadequate. The principle is derived from both cases. Descriptively, the Indonesian evidence shows a frontline unit whose mandate covers approximately 110,811 hectares while nine officers are available to supervise it. The Brazilian experience contributes longitudinal evidence that the same constitutional duty yields markedly different outcomes as enforcement capacity expands or contracts, and the orders in ADPF 760 show that a constitutional court can treat the restoration of agency capacity as part of the duty itself.⁶⁶ Normatively, the principle requires the state to maintain a reasonable relationship between mandate and means. As a policy matter, it implies that the assignment of forest-protection functions to provincial KPHs should be accompanied by minimum staffing and operational standards linked to forest area and risk, and by budget allocations protected from discretionary reduction.

A second principle is the alignment of authority and accountability. Modern environmental governance inevitably requires institutional differentiation, but differentiation becomes problematic when responsibility for outcomes is disconnected from the legal authority necessary to influence those outcomes. The North Gorontalo case is instructive because the KPH carries substantial responsibility for prevention and supervision while important stages of coercive enforcement depend upon other authorised institutions. Such arrangements can be constitutionally legitimate, but accountability must reflect the actual distribution of authority. A frontline institution should not be treated as solely responsible for persistent environmental harm where decisive enforcement powers, budgets, or prosecutorial mechanisms are located elsewhere. More broadly, forest governance should be designed so that each institution's legal responsibility is identifiable, its authority is sufficient for the function assigned to it, and institutional interfaces are sufficiently clear to prevent responsibility from disappearing between administrative boundaries. Brazil contributes a legal technique for achieving this alignment: Complementary Law No. 140/2011 ties primary enforcement authority to the entity that licenses an activity, and the STF's reading of that law permits another entity to act where enforcement by the competent body is omitted or insufficient.⁶⁷ Normatively, accountability should follow authority. As a policy matter, Indonesian law could strengthen the procedural link between KPH findings and investigation by PPNS and the police, for example through binding

⁶⁶ STF, ADPF 760/DF and ADO 54/DF (Informativo STF 1132); Nunes et al., "Lessons from the Historical Dynamics."

⁶⁷ LC 140/2011, art. 17; STF, ADI 4757/DF.

referral timelines and shared case-tracking, so that frontline detection is not lost at institutional boundaries.

A third principle is cooperative environmental administration. Forest ecosystems do not conform to jurisdictional borders, and the causes of illegal logging rarely fall within the competence of a single institution. Effective governance therefore requires horizontal cooperation among environmental agencies, forest managers, police, investigators, licensing authorities, and social-development institutions, as well as vertical coordination among different levels of government. This cooperative approach must also extend beyond enforcement. The empirical findings from North Gorontalo demonstrate that economic dependency and community practices influence the persistence of unlawful forest use, while social forestry is employed as an alternative pathway for providing lawful access and improving community involvement in forest management. Forest governance should therefore integrate coercive capacity with preventive and distributive strategies. Administrative effectiveness is not achieved merely by increasing the state's ability to punish; it also depends upon its ability to construct lawful social and economic conditions under which compliance becomes realistically sustainable. Here the two systems contribute complementary elements. Brazil demonstrates the institutionalisation of cooperation through tripartite commissions, consortia, and agreements, the integration of satellite monitoring with field enforcement, and federal funding of municipal environmental capacity; Indonesia demonstrates, through social forestry, how forest-dependent communities can be converted from targets of enforcement into partners in protection. Normatively, cooperative administration is a condition for discharging a duty whose object crosses jurisdictional boundaries; as a policy matter, it points toward a formal cooperation framework linking KPHs, forestry law enforcement, the police, and regional development agencies, combined with the expansion of social-forestry access in villages classified as vulnerable.

Table 3. Derivation of the three principles from the Indonesia–Brazil comparison

Principle	Descriptive finding: Indonesia	Descriptive finding: Brazil	Normative proposition	Policy recommendation
Responsibility–capacity correspondence	Broad KPH mandate; nine forest-police officers for approx. 110,811 ha; supervision confined to hotspots	Deforestation fell and rose with enforcement capacity under the same constitutional text; ADPF 760 orders capacity restoration	The state must maintain a reasonable relationship between constitutional mandate and administrative means	Minimum staffing and operational standards linked to forest area and risk; protected budget lines
Alignment of authority and accountability	KPH detects harm but depends on PPNS, police, and courts for coercive enforcement	LC 140/2011 links enforcement to licensing; supplementary action where enforcement is omitted or insufficient (ADI 4757)	Accountability for outcomes should follow the distribution of legal authority	Binding referral timelines and shared case-tracking between KPH, PPNS, and police
Cooperative environmental administration	Case-by-case coordination; social forestry used to reduce community dependence on illegal logging	Tripartite commissions, consortia, satellite-linked enforcement, Amazon Fund support for municipal capacity	Cooperation is a condition for discharging a duty whose object crosses jurisdictional boundaries	Formal cooperation framework among forestry, enforcement, and regional agencies; expanded social forestry in vulnerable villages

Source: compiled by the author.

These principles also require a reconsideration of how environmental constitutionalism itself is evaluated. Conventional constitutional analysis often focuses on whether environmental rights are recognised, whether courts enforce them, or whether legislation provides sufficiently strong sanctions. These questions remain important, but they capture only part of constitutional effectiveness. The Indonesia–Brazil comparison demonstrates that environmental constitutionalism must also be assessed through the institutional conditions of administrative delivery. A constitutional environmental right that is strongly worded yet implemented through fragmented, under-resourced, or poorly coordinated institutions may offer less practical protection than a system in which constitutional commitments are connected to robust administrative structures. The relevant measure of constitutional effectiveness is therefore not textual ambition alone, but the extent to which constitutional duties generate institutions capable of producing sustained ecological governance.

The broader theoretical lesson is that the constitutionalisation of environmental protection must be accompanied by the institutionalisation of administrative capability. This proposition reframes the relationship between constitutional law and administrative law: the latter is not merely a technical domain responsible for implementing constitutional choices after they have been made, but an essential component of whether those choices become effective at all. Forest governance exposes this relationship with particular clarity because constitutional environmental commitments encounter physical territory, limited resources, social inequality, illegal economic activity, and fragmented governmental authority at the frontline level. Reconstructing forest governance therefore requires more than stricter criminal sanctions or broader administrative mandates. It requires an institutional design in which constitutional duty, decentralised authority, operational capacity, cooperative enforcement, and public accountability are mutually reinforcing. Without such alignment, environmental constitutionalism risks remaining normatively ambitious but administratively under-delivered; with it, constitutional promises can acquire the institutional capability necessary to protect forests as a shared ecological inheritance for present and future generations.

Conclusion

In answer to the first research question, this article finds that Indonesia and Brazil both constitutionalise environmental protection as a public duty but translate it into administrative authority in different ways. Indonesia does so indirectly and statutorily: the duty derives from Articles 28H(1), 28I(4), and 33 of the 1945 Constitution and is allocated by legislation to central and provincial authorities, with frontline responsibility concentrated in provincial Forest Management Units and coercive enforcement dispersed among other bodies. Brazil does so explicitly and constitutionally: Article 225 imposes the duty on all public authorities, Article 23 makes forest protection a common competence of every federative tier, and Complementary Law No. 140/2011, together with the jurisprudence of the STF, converts that shared competence into rules of cooperation and enforceable standards of administrative performance. In answer to the second research question, decentralised responsibility creates a constitutional duty–administrative capacity gap where mandates are devolved without commensurate authority, resources, and coordination, as the North Gorontalo case illustrates; it mitigates the gap where devolution is accompanied by cooperation instruments, integrated monitoring and enforcement, and capacity support—conditions that Brazil has built but has also shown to be reversible.

The article's conceptual contribution is the notion of the constitutional duty–administrative capacity gap, disaggregated into responsibility, authority, resource,

territorial, and coordination dimensions. Its doctrinal contribution is the specification of four conditions under which a capacity deficit becomes a problem of constitutional implementation: a constitutionally grounded function, a structural and persistent deficit, attribution to the state's own allocation of mandates and resources, and material impairment of protection. Its comparative contribution consists of three principles—responsibility–capacity correspondence, alignment of authority and accountability, and cooperative environmental administration—which together imply that environmental constitutionalism remains institutionally incomplete unless the constitutionalisation of environmental duties is accompanied by the institutionalisation of administrative capability.

In practical terms, the findings suggest that Indonesian forest policy should link the functions assigned to KPHs to minimum standards of staffing and operational capacity, establish binding procedures connecting frontline detection to investigation and prosecution, and develop a cooperation framework among central, provincial, and enforcement institutions that performs functions comparable to those of Brazil's statutory cooperation regime, while protecting such capacity from the kind of contraction that Brazil experienced after 2019. Because the Indonesian evidence concerns a single Forest Management Unit, future research should test the framework across other KPHs and jurisdictions.

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