

The Legal Status of Land Formed by Sedimentation and Lake Filling from the Perspective of the State's Right of Control

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ABSTRACT

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The increasing emergence of land formed through natural sedimentation and artificial lake filling has generated significant legal uncertainty regarding its ownership status and management under Indonesian land law. This issue becomes particularly complex when such land is claimed by private individuals despite its formation occurring within areas previously controlled by public water bodies. Accordingly, this study addresses two principal questions: (1) What is the legal status of land formed by sedimentation and lake filling under Indonesian land law? and (2) How should the State's Right of Control be interpreted in determining rights over such land? This research employs a normative juridical method using statutory, conceptual, and case approaches. Legal materials are analyzed through qualitative legal interpretation to examine the relationship between land formation processes and the constitutional doctrine of the State's Right of Control as stipulated in Article 33 paragraph (3) of the 1945 Constitution and relevant agrarian regulations. The findings reveal that land created through sedimentation and lake filling cannot automatically become private property merely because of physical occupation or utilization. Such land initially falls within the scope of the State's Right of Control, as it constitutes newly emerged land resulting from natural or artificial geographical changes. The state possesses the authority to regulate, allocate, and determine legal rights over the land while ensuring public welfare, environmental sustainability, and legal certainty. This study contributes to the development of agrarian law theory by clarifying the legal construction of newly emerged land and proposing a more coherent interpretation of the State's Right of Control to resolve ownership disputes and strengthen legal certainty in the management of sedimentation and reclaimed lands in Indonesia.



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Introduction

Lakes constitute important water resources with ecological, social, and economic functions. Under Article 33(3) of the 1945 Constitution of the Republic of Indonesia, lakes are subject to state control and must be utilized for the greatest benefit of the people.¹ However, many lakes in Indonesia have undergone physical changes due to natural sedimentation and human activities, such as dredging and landfilling,

¹ Ricko Anas Extrada and Kamarusdiana Kamarusdiana, "The Constitutionality of State Authority Over Water Resources Management Based on Human Rights Principles," *STAATSRECHT: Indonesian Constitutional Law Journal* 5, no. 1 (May 24, 2021), <https://doi.org/10.15408/sicl.v5i1.20769>.

resulting in the emergence of new land areas within former lake bodies.² Sedimentation and landfilling in lakes have created new land that is increasingly used for economic and development purposes. As seen in Lake Lido, Lake Rawa Pening, and Lake Ranau, this phenomenon raises legal questions regarding the status of the newly formed land and the State's Right of Control over former water areas.³

The State's Right of Control authorizes the state to regulate land and water resources for the greatest benefit of the people.⁴ However, existing laws and theories primarily address conventional land rights and water resource management,⁵ while the legal status of land formed through lake sedimentation and reclamation remains inadequately regulated, creating uncertainty regarding its ownership and utilization.⁶ The legal status of land formed through lake sedimentation and reclamation remains unclear. This study analyzes its status from the perspective of the State's Right of Control (HMN) under the 1945 Constitution and the Basic Agrarian Law (UUPA).⁷ This study examines the legal status of land formed through lake sedimentation and reclamation,⁸ identifies regulatory gaps that create legal uncertainty, and proposes a legal framework that balances legal certainty,⁹ environmental protection, and the public interest.¹⁰

Studies on the State's Right of Control (HMN) show that land formed through sedimentation is initially under state control and does not automatically become private property.¹¹ The absence of clear regulations creates legal uncertainty,¹² and rights over such land can only be obtained through a formal grant of rights by the state.¹³ In the context of reclaimed land, Suparji and Wanda Ayu, concluded that new land formed through human intervention remains under state control until land rights are established. This finding is

² Ahmad Muzaeni et al., "Analisis Sedimentasi Di Hulu Waduk Malahayu Kecamatan Banjarharjo Kabupaten Brebes" 2, no. 2 (2021): 40–48.

³ Alemseged Tamiru Haile et al., "Filling Streamflow Data Gaps through the Construction of Rating Curves in the Lake Tana Sub-Basin, Nile Basin," *Journal of Water and Climate Change* 14, no. 4 (April 1, 2023): 1162–75, <https://doi.org/10.2166/wcc.2023.372>.

⁴ Nasrudin Nasrudin, Nina Nursari, and Jujun Jamaludin, "Memahami Status Tanah Di Indonesia Antara Hak Milik Dan Hak Menguasai Negara," *Qanuniya: Jurnal Ilmu Hukum* 2, no. 2 (October 6, 2025): 61–75, <https://doi.org/10.15575/qanuniya.v2i2.2145>.

⁵ Christopher R. Mattheus, Ethan J. Theuerkauf, and Katherine N. Braun, "Sedimentary In-Filling of an Urban Great Lakes Waterfront Embayment and Implications for Threshold-Driven Shoreline Morphodynamics, Montrose Beach, SW Lake Michigan," *Journal of Great Lakes Research* 48, no. 5 (October 2022): 1147–58, <https://doi.org/10.1016/j.jglr.2022.06.008>.

⁶ Try Widiyono and Md Zubair Kasem Khan, "Legal Certainty in Land Rights Acquisition in Indonesia's National Land Law," *LAW REFORM* 19, no. 1 (August 9, 2023): 128–47, <https://doi.org/10.14710/lr.v19i1.48393>.

⁷ Giulia Wienhues et al., "From Desiccation to Wetlands and Outflow: Rapid Re-Filling of Lake Victoria during the Latest Pleistocene 14–13 Ka," *Journal of Great Lakes Research* 50, no. 3 (June 2024): 102246, <https://doi.org/10.1016/j.jglr.2023.102246>.

⁸ Irma Suryanti and Putu Ratih Wijayanti, "Peran Serta Masyarakat Pemeliharaan Bendungan Terhadap Sedimentasi Di Bendungan Benel Dan Palasari Kabupaten Jembrana," *International Journal of Community Service Learning* 7, no. 4 (March 11, 2024): 407–14, <https://doi.org/10.23887/ijcs.v7i4.64573>.

⁹ Zulfa Abkar Pradipta, Denny Nugroho Sugianto, and Muhammad Zainuri, "Efektivitas Jetty Sebagai Pengendali Sedimentasi Di Muara Sungai Bogowonto, Daerah Istimewa Yogyakarta," *Indonesian Journal of Oceanography* 7, no. 4 (November 22, 2025): 324–38, <https://doi.org/10.14710/ijoc.v7i4.28331>.

¹⁰ Ginnia Julianti Utomo et al., "Efektifitas Struktur Kerapatan Terhadap Laju Sedimentasi Dan Jenis Sedimen Pada Hybrid Engineering Di Desa Timbulsloko, Demak, Jawa Tengah," *Indonesian Journal of Oceanography* 4, no. 1 (February 25, 2022): 47–58, <https://doi.org/10.14710/ijoc.v4i1.13160>.

¹¹ Saberina Hasibuan et al., "Pengukuran Laju Sedimentasi Dan Kualitas Air Kolam Patin Menggunakan Sedimen Trap Di Kelurahan Rumbai Bukit," *PRIMA: Journal of Community Empowering and Services* 9, no. 2 (September 2, 2025): 81, <https://doi.org/10.20961/prima.v9i2.95772>.

¹² Achmad Syarifudin, "Model Aliran 2-D Untuk Memprediksi Gerusan Dan Sedimentasi Di Saluran Jakabaring Sport City (JSC) Palembang," *Jurnal Teknik Pengairan* 13, no. 1 (May 11, 2022): 90–99, <https://doi.org/10.21776/ub.pengairan.2022.013.01.08>.

¹³ Muh. Afif Mahfud and Sia Chin Chin, "Incongruence in the Definition of Land Rights in National Agrarian Law: A Path to Legal Uncertainty," *LAW REFORM* 20, no. 1 (February 29, 2024): 22–33, <https://doi.org/10.14710/lr.v20i1.49047>.

relevant to land created by lake filling, which shares similar characteristics.¹⁴ Furthermore, Siswoyo and Imran, assert that the state has the authority to regulate the acquisition, management, and distribution of land for the public interest.¹⁵ Meanwhile, Nasrudin et al., point out that land ownership remains subject to state regulation in order to ensure the social function of land.¹⁶

Based on previous research, numerous studies have been conducted on HMN, newly emerged land, and land reclamation. However, no study has specifically addressed the legal status of land formed as a result of sedimentation and lake filling from the perspective of HMN. Therefore, this study offers a novel contribution in the form of a legal framework regarding the status of newly emerged land to strengthen legal certainty and prevent land disputes.

Given these circumstances, this study aims to analyze the legal status of land formed as a result of lake sedimentation and accretion from the perspective of the State's Right of Control, and to formulate a legal framework that can provide legal certainty regarding its control and utilization. The novelty of this study lies in its examination of land resulting from lake sedimentation and filling as a new category of land (newly emerged land), a topic that has not been extensively discussed in Indonesian agrarian law literature. Thus, this study is expected to make a theoretical contribution to the development of the concept of the State's Right of Control, as well as a practical contribution to the resolution of disputes and the management of land resulting from lake sedimentation and filling in a manner that is fair and provides legal certainty.

Method

This study is a normative legal study that aims to analyze the legal status of land formed as a result of sedimentation and lake filling from the perspective of the State's Right of Control (HMN). The study employs a statutory approach, a conceptual approach, and a case-based approach. The statutory approach involves examining the 1945 Constitution of the Republic of Indonesia, Law No. 5 of 1960 on the Basic Agrarian Principles (UUPA), as well as regulations related to land and water resources. The conceptual approach was used to examine the concepts of HMN, alluvial land (aanslibbing), reclaimed land, and newly emerged land, while the case approach was conducted through an analysis of court decisions and relevant land practices. The legal materials used consist of primary legal sources, such as laws and regulations and court decisions; secondary legal sources, such as books, academic journals, and previous research findings; and tertiary legal sources, such as legal dictionaries and encyclopedias. The collection of legal materials was conducted through library research. Subsequently, all legal materials were analyzed qualitatively and prescriptively using methods of legal interpretation and argumentation to establish a legal framework regarding the status of land resulting from sedimentation and lake filling based on the principle of the State's Right of Sovereignty, as well as its implications for legal certainty in land matters.

Results and Discussion

A. Legal Status of Land Formed by Sedimentation and Lake Filling

Under Article 33(3) of the 1945 Constitution and Articles 1–2 of the UUPA, land, water, and natural resources are controlled by the state for the people's welfare.¹⁷ Consequently, newly formed land that has not been granted specific rights is classified as state land and remains under state control until rights are legally conferred.¹⁸ Sedimentation (aanslibbing) is the natural formation of new land through the accumulation of soil and sediment

¹⁴ Choirur Rosidah et al., "Pengaruh Waktu Aerasi Dan Sedimentasi Terhadap Penurunan Kadar Besi (Fe) Pada Air Sumur," *JERNIH: Journal of Environmental Engineering and Hygiene* 3, no. 1 (June 26, 2025): 1–11, <https://doi.org/10.31537/jernih.v3i1.2344>.

¹⁵ Dhina Lydia Lestari, "Infeksi Soil Transmitted Helminths Pada Anak," *Scientific Journal* 1, no. 6 (November 30, 2022): 423–33, <https://doi.org/10.56260/sciena.v1i6.75>.

¹⁶ Novia Dwianti, Adi Mawardin, and Eti Kurniati, "Pengaruh Sedimentasi Terhadap Fungsi Kapasitas Saluran Drainase Di Jalan Tongkol Kelurahan Seketeng Sumbawa Besar," *Journal of Applied Civil Engineering and Infrastructure Technology* 4, no. 2 (December 1, 2023): 11–18, <https://doi.org/10.52158/jaccit.v4i2.547>.

¹⁷ Anisa Nabila et al., "Analisa Laju Sedimentasi Di Dermaga 4 Pelabuhan Cigading 1 Provinsi Banten," *Indonesian Journal of Oceanography* 3, no. 1 (March 31, 2021): 36–43, <https://doi.org/10.14710/ijoc.v3i1.9901>.

¹⁸ Wulandari Pingkan Siwu, Sri Sangkawati, and Ignatius Sriyana, "KAJIAN DISTRIBUSI SEDIMENTASI TERHADAP UMUR RENCANA WADUK CIAWI DI KABUPATEN BOGOR," *Rang Teknik Journal* 4, no. 2 (June 4, 2021): 211–19, <https://doi.org/10.31869/rtj.v4i2.2321>.

along rivers or lakes.¹⁹ Although Article 638 of the Civil Code once granted such land to adjacent landowners, this rule has been superseded by the UUPA,²⁰ which places the regulation of newly formed land under the national agrarian law framework.²¹ Under the UUPA, land formed through sedimentation remains state land until rights are formally granted by the state, although adjacent landowners may receive priority in applying for such rights.²² Unlike sedimentation land, former lake land emerges from declining water levels, either through natural processes or planned reclamation for development purposes.²³ Former lake areas are classified as state land because lakes constitute state-controlled water resources under Indonesian law. Consequently, no private ownership rights arise automatically over such land.²⁴ Any lake drainage or reclamation must comply with environmental and spatial planning regulations, while the designation and use of former lake land remain under government authority.²⁵ Sedimentation land gives adjacent landowners priority in applying for rights, while rights over former lake land depend entirely on government policy. Consistent with the UUPA and Supreme Court jurisprudence, ownership cannot arise solely from physical possession; land rights must be formally granted by the state.²⁶ Under Indonesian agrarian law, land formed through sedimentation or lake drying is classified as state land. Private rights do not arise automatically and may only be obtained through procedures established by law, ensuring legal certainty and preventing land disputes.

B. The State's Right of Control as the Basis for Determining Rights over Newly Emerged Land

The State's Right of Control (HMN), based on Article 33(3) of the 1945 Constitution and Article 2 of the UUPA, gives the state authority to regulate and determine the status, control, and use of land.²⁷ Accordingly, HMN serves as the legal basis for determining the status of land formed through sedimentation and lake reclamation.²⁸ In the HMN framework, land formed through sedimentation and lake siltation remains under state control because it originates from state-controlled water areas. Therefore, ownership rights do not arise automatically and can only be obtained through procedures established by law.²⁹ HMN positions the state not as the private owner of land, but as a public authority responsible for regulating, managing, and supervising agrarian resources to ensure their

¹⁹ DA Rahman, A, Wahyuningsih, W, Andriyani, S, Mulada, "Socialization Of The Importance Of Formal Legality In Land Ownership In Senteluk Village, Batu Layar Sub-District, West Lombok District," *Jurnal Abdi Insani Universitas Mataram* 8, no. April (2021): 100–110.

²⁰ Kazi Masudul Alam et al., "A Blockchain-Based Land Title Management System for Bangladesh," *Journal of King Saud University - Computer and Information Sciences* 34, no. 6 (June 2022): 3096–3110, <https://doi.org/10.1016/j.jksuci.2020.10.011>.

²¹ Ahmad Ridwan Nasution, Syafruddin Syam, and Mhd Yadi Harahap, "Legalitas Tanah Garapan Sebagai Objek Jual Beli Dalam Perspektif Hukum Islam Dan Hukum Positif," *Jurnal Interpretasi Hukum* 4, no. 1 (April 24, 2023): 74–82, <https://doi.org/10.22225/juinhum.4.1.6756.74-82>.

²² Rico Handika, Mohammad Ikhwanuddin, and Thoat Setiawan, "Pendampingan Advokasi Hukum Legalitas Tanah Dan Bangunan Di Sekolah Dasar Negeri 3 Wringinanom Situbondo," *Aksiologi: Jurnal Pengabdian Kepada Masyarakat* 6, no. 4 (November 22, 2022): 636, <https://doi.org/10.30651/aks.v6i4.13843>.

²³ Choirun Niã™matus Saã™diyah, "IMPLIKASI YURIDIS LEGALITAS SERTIPIKAT KEPEMILIKAN HAK ATAS TANAH YANG MENGANDUNG CACAT HUKUM," *Jurnal Hukum Dan Kenotariatan* 6, no. 2 (July 6, 2022): 1012–19, <https://doi.org/10.33474/hukeno.v6i2.16468>.

²⁴ Martina Manara and Erica Pani, "Institutional Work: How Lenders Transform Land Titles into Collateral in Urban Tanzania," *Journal of Economic Geography* 23, no. 6 (November 23, 2023): 1213–36, <https://doi.org/10.1093/jeg/lbad019>.

²⁵ Abdul Rohim and Herawati, "LEGALITAS PERIZINAN PENGGALIAN TANAH GALIAN C MENJADI TANAH TIMBUN MENGGUNAKAN ALAT BERAT," *JUSTITABLE - Jurnal Hukum* 7, no. 2 (January 23, 2025): 1–9, <https://doi.org/10.56071/justitable.v7i2.1153>.

²⁶ Habib Ismail et al., "Pendampingan Legalitas Masjid Melalui Sertifikasi Tanah Wakaf Dalam Rangka Perlindungan Aset Keagamaan Di Desa Simbarwaringin, Kec. Trimurjo, Kab. Lampung Tengah," *Al-Khidmah Jurnal Pengabdian Masyarakat* 5, no. 3 (October 29, 2025): 797–808, <https://doi.org/10.56013/jak.v5i3.4726>.

²⁷ Addina Sabyla Ahsanicka et al., "Kepastian Hukum Penyelesaian Wanprestasi Perjanjian Jual Beli Tanah Di Wilayah Kabupaten Badung Provinsi Bali," *Indonesian Journal of Law and Justice* 1, no. 4 (June 26, 2024): 15, <https://doi.org/10.47134/ijlj.v1i4.2792>.

²⁸ Nur Fadhilah, "SENGKETA TANAH WAKAF DAN STRATEGI PENYELESAIANNYA," *De Jure: Jurnal Hukum Dan Syar'iah* 3, no. 1 (June 1, 2011), <https://doi.org/10.18860/j-fsh.v3i1.1321>.

²⁹ Ariandi Lumongga, "LEGALITAS SURAT KETERANGAN JUAL BELI TANAH YANG DIBUAT OLEH LURAH ATAU CAMAT," *Jurnal Sostekmas: Jurnal Ilmu Sosial, Teknologi, Dan Pengabdian Masyarakat* 1, no. 2 (October 23, 2024): 76–84, <https://doi.org/10.65434/jst.v1i2.15>.

use serves the public interest and the welfare of society.³⁰ Under the HMN principle, ownership of land formed through sedimentation or lake reclamation cannot arise solely from physical possession but must be granted by the state.³¹ The state has the authority to determine its status and use,³² taking into account public interests, environmental sustainability,³³ and the strategic value of the land.³⁴

In addition, the HMN also serves as a tool to prevent monopolies and unlawful land acquisition. Without clear state authority, land resulting from sedimentation and lake reclamation has the potential to become a target of speculation, which can lead to social conflict and inequities in land ownership.³⁵ In many land disputes, parties with greater economic power often attempt to take control of new land through informal means before its legal status is established by the state. This situation can harm local communities and run counter to the principle of social justice, which is the primary objective of national agrarian law. Therefore, HMN grants the state the authority to regulate and oversee all forms of new land use to ensure they do not deviate from the social function of land.³⁶ The implementation of HMN must align with the social function of land under Article 6 of the UUPA. Therefore, before granting rights over land formed through sedimentation or lake reclamation, the state must ensure that its use supports public interests, environmental sustainability, and ecosystem balance.³⁷ HMN also functions as a foundation for legal certainty by authorizing the state to determine the status of land formed through sedimentation and lake reclamation. Through this authority, the state can establish clear procedures for land identification, status determination, and the granting of rights, thereby preventing legal uncertainty and disputes.³⁸ The State's Right of Control (HMN) is the primary legal basis for determining the status of land formed through sedimentation and lake reclamation. It ensures legal certainty, social justice, environmental protection, and orderly land management, so that such land can be utilized sustainably for the greatest benefit of the people.³⁹

C. The Legal Framework for Land Formed by Sedimentation and Lake Filling in Achieving Legal Certainty

Legal certainty in agrarian law requires clear regulation of land status, rights holders, and procedures for acquiring rights. However, land formed through sedimentation and lake reclamation still gives rise to differing

³⁰ Muhammad Munsarif, "Analisis Legalitas Tanah Wakaf Muhammadiyah Jawa Tengah Dengan Menggunakan Algoritma ID3," *Elkom: Jurnal Elektronika Dan Komputer* 13, no. 1 (April 17, 2020): 1–7, <https://doi.org/10.51903/elkom.v13i1.134>.

³¹ Bandi Sasmito et al., "Pemodelan Sedimentasi Di Sub DAS Keduang Tahun 2022 - 2024: Aplikasi Soil and Water Assesment Tool (SWAT)," *Jurnal Penelitian Pengelolaan Daerah Aliran Sungai* 9, no. 2 (October 1, 2025): 181–200, <https://doi.org/10.59465/jppdas.2025.9.2.181-200>.

³² Malama Meleisea and Penelope Schoeffel, "Sāmoan Custom, Individual Rights, and the Three 2020 Acts: Reorganizing the Land and Titles Court," *The Journal of Pacific History* 57, no. 4 (October 2, 2022): 439–50, <https://doi.org/10.1080/00223344.2022.2058475>.

³³ Roziqin Roziqin, Muhammad Hakim, and Dimiyati Dimiyati, "Kepastian Hukum Pengaturan Hak Atas Tanah Dalam Pluralisme Hukum," *Journal de Facto* 11, no. 1 (July 30, 2024): 135–45, <https://doi.org/10.36277/jurnaldefacto.v11i1.228>.

³⁴ Seth Pipkin, "Dissolving 'Wicked' Problems: Beyond Institutional and Participatory Approaches to Land Title Regularization," *Journal of Planning Education and Research* 43, no. 1 (March 1, 2023): 94–105, <https://doi.org/10.1177/0739456X19856066>.

³⁵ Noor Rahmad and Deni Setiyawan, "PENIPUAN DALAM JUAL BELI KAVLING TANAH YANG DILAKUKAN PENGEMBANG PERUMAHAN KEPADA KONSUMEN," *JUSTISI* 8, no. 3 (September 11, 2022): 198–208, <https://doi.org/10.33506/jurnaljustisi.v8i3.1832>.

³⁶ Libby Porter, David Kelly, and Priya Kunjan, "Possessory Stratigraphy: Land Title, Dispossession and Housing Crisis," *International Journal of Housing Policy* 25, no. 3 (May 27, 2025): 499–528, <https://doi.org/10.1080/19491247.2024.2350143>.

³⁷ Tore Soderqvist et al., "Corrigendum to 'Cost-Benefit Analysis as a Part of Sustainability Assessment of Remediation Alternatives for Contaminated Land Title of Article' J. Environ. Manage. 157 (2015) 267-278," *Journal of Environmental Management* 361 (June 2024): 121031, <https://doi.org/10.1016/j.jenvman.2024.121031>.

³⁸ 丽峰和, "丽江宝山清雍正五年东巴文地契译释," *Journal of Chinese Writing Systems* 5, no. 4 (December 3, 2021): 219–29, <https://doi.org/10.1177/2513850219918661>.

³⁹ Hilary Nwaechefu, Victoria Ajibola Adeleke, and Temiloluwa Omidiji, "Addressing the Impediments to the Perfection of Land Title in Nigeria: A Comparative Discourse with England," *African Journal of International and Comparative Law* 32, no. 4 (November 2024): 543–57, <https://doi.org/10.3366/ajicl.2024.0504>.

interpretations, creating a need for a clear legal framework to determine its status and management.⁴⁰ Although the UUPA provides a general framework through the State's Right of Control (HMN), it does not specifically regulate land formed through lake sedimentation or reclamation. This regulatory gap creates legal uncertainty and increases the potential for disputes among communities, the government, and business entities.⁴¹ From a legal theory perspective, legal certainty can only be achieved if there are clear, consistent, and effectively enforceable rules. As Gustav Radbruch noted, legal certainty is one of the fundamental values of law that must be realized alongside justice and utility. In the context of land formed by sedimentation and lake filling, legal certainty will not be achieved if the legal status of such land is left subject to varying interpretations. Therefore, a legal framework is needed that can clearly define the status of such land within the national agrarian legal system.⁴²

The legal framework proposed in this study is based on the premise that land resulting from sedimentation and lake accretion constitutes a new category of land (newly emerged land) that did not previously exist as an object of land rights. Prior to sedimentation or accretion, the area was part of a body of water that was legally under state control. Thus, the emergence of new land does not automatically change the legal status of the area to private ownership by a specific party. Rather, the newly formed land must first be placed under the state's control regime based on the principle of the State's Right of Control as stipulated in Article 33, paragraph (3) of the 1945 Constitution of the Republic of Indonesia and Article 2 of the Land Administration Law (UUPA).⁴³ The classification of land resulting from sedimentation and lake filling as property under state control has several legal implications. First, the state is the party with the initial authority to determine the legal status of such land. This authority includes the identification, inventory, mapping, designation of function, and determination of land use in accordance with the public interest and the principles of sustainable development. Thus, no party may unilaterally claim ownership rights to such land without recognition or the grant of rights by the state.⁴⁴

This legal framework affirms that physical possession cannot serve as the primary basis for the creation of land rights. In land administration practice, it is often assumed that the party who first cultivates or utilizes land formed by sedimentation is entitled to ownership of that land.⁴⁵ Such a view contradicts the fundamental principles of Indonesian agrarian law, which establish that the legal grant of rights by the state is the primary requirement for the creation of land rights. Therefore, physical possession can only be regarded as a fact of possession that may be considered in the land administration process, but it does not automatically confer ownership rights.⁴⁶ The proposed legal framework places environmental sustainability as a key consideration in managing land formed through lake sedimentation and reclamation. Accordingly, legal certainty must address not only ownership status but also the preservation of ecological functions and sustainable development principles.⁴⁷ To ensure legal certainty, this legal framework also requires clear administrative mechanisms for land resulting from sedimentation and lake filling. These mechanisms should at least include the process of identifying and verifying the existence of new land,

⁴⁰ Shahrul Natasha Halid and Jady @ Zaidi Hassim, "A Comparative Analysis of Assurance Fund Vis-à-Vis Title Insurance: Which Offers Better Compensation for Victims of Land Disputes in Malaysia?," *Pacific Rim Property Research Journal* 27, no. 2 (May 4, 2021): 107–26, <https://doi.org/10.1080/14445921.2021.2001725>.

⁴¹ Rose Nakayi, "Certificate of Title: A Discussion of Contemporary Challenges to the Protection of Land Interests in Uganda," *Journal of African Law* 67, no. 1 (February 21, 2023): 23–43, <https://doi.org/10.1017/S0021855322000286>.

⁴² David S. Trigger, "Land Claim Legacies, Native Title, and the Rigours of Indigenous Politics," *The Australian Journal of Anthropology* 36, no. 1 (April 14, 2025): 55–72, <https://doi.org/10.1111/taja.70006>.

⁴³ Vanessa Maurizkha and Akhmad Budi Cahyono, "Legalitas Perjanjian Jual Beli Dengan Hak Membeli Kembali Pada Tanah Dan/Atau Bangunan (Studi Putusan-Putusan Pengadilan)," *Unes Journal of Swara Justisia* 8, no. 4 (February 1, 2025): 861–78, <https://doi.org/10.31933/2nsj3r37>.

⁴⁴ Agus Purwo Saputro and Miftakhul Huda, "KEPASTIAN HUKUM PEMBUATAN AKTA JUAL BELI OLEH PEJABAT PEMBUAT AKTA TANAH ATAS PEMBAYARAN HARGA TANAH YANG BELUM DILUNASI PEMBELL," *Collegium Studiosum Journal* 7, no. 2 (December 25, 2024): 374–80, <https://doi.org/10.56301/csj.v7i2.1310>.

⁴⁵ Suwito et al., "Contemplating the Morality of Law Enforcement in Indonesia," *Journal of Law and Sustainable Development* 11, no. 10 (October 25, 2023): e1261, <https://doi.org/10.55908/sdgs.v11i10.1261>.

⁴⁶ Vinsensius Tamelab, Maria Viviana Ero Payon, and Benediktus Peter Lay, "Kepastian Hukum Hak Atas Tanah Bagi Warga Baru Di Lokasi Perumahan Resettlemen Kelurahan Naiboan Kecamatan Kupang Timur Kabupaten Kupang," *Student Scientific Creativity Journal* 1, no. 5 (July 12, 2023): 115–29, <https://doi.org/10.55606/sscj-amik.v1i5.1942>.

⁴⁷ Desi Redhawati and Darmini Roza, "Pendaftaran Peralihan Hak Milik Atas Tanah Karena Pewarisan Dalam Rangka Menjamin Kepastian Hukum," *Ekasakti Legal Science Journal* 2, no. 2 (May 7, 2025): 152–63, <https://doi.org/10.60034/qc446855>.

establishing its initial status as land under state control, determining its function and zoning based on spatial planning, and procedures for granting rights to parties who meet the legal requirements. Clarity in these procedures is crucial to prevent conflicting claims and to provide legal protection for communities with an interest in the land.⁴⁸ This legal framework also contributes to efforts to prevent land disputes. Many conflicts arise due to a lack of clarity regarding the initial status of land formed as a result of changes in the landscape. By affirming that land resulting from sedimentation and lake filling is initially under state control, the legal basis for determining the rightful owner becomes clearer. This clarity will facilitate the government's land management efforts while providing certainty to the public regarding the procedures they must follow to obtain land rights.⁴⁹ Classifying land formed through sedimentation and lake reclamation as state-controlled newly emerged land is consistent with the principles of the UUPA and HMN. This framework provides legal certainty, prevents conflicts, protects public interests, and supports sustainable agrarian resource management for the welfare of the people.⁵⁰

Conclusion

This study concludes that land formed as a result of sedimentation and lake accretion constitutes "newly emerged land," the legal status of which cannot automatically become the property of the individual or party who first took possession of or utilized it. Pursuant to Article 33, paragraph (3) of the 1945 Constitution of the Republic of Indonesia and Article 2 of Law No. 5 of 1960 on the Basic Provisions of Agrarian Law, land that emerges as a result of changes in the natural landscape or human intervention is, in principle, subject to the State's Right of Control (HMN). Within this framework, the state has the authority to regulate, determine land use, manage, and establish legal relationships regarding land in order to achieve the greatest possible prosperity for the people. This study also found that the HMN serves as the legal basis for determining the status of and granting rights to land resulting from sedimentation and lake filling. Physical control over land does not automatically confer ownership rights; rather, such rights must be established through land administration mechanisms and the granting of rights by the state in accordance with applicable laws and regulations.

Thus, the state plays the primary role in ensuring that the utilization of new land is carried out fairly, in an orderly manner, and in harmony with the social functions of land and the principles of environmental protection. This study proposes a legal framework that classifies land formed by lake sedimentation and accretion as "newly emerged land," which, at the time of its formation, is under state control. This framework is based on three main principles, namely: (1) land resulting from lake sedimentation and accretion is initially an object under state control; (2) the granting of land rights can only be carried out through valid legal and land administration procedures; and (3) the utilization of land must take into account the public interest, social justice, and environmental sustainability. This framework is expected to fill the existing regulatory gap, strengthen legal certainty, prevent land disputes, and serve as a foundation for the development of more comprehensive regulations regarding the management of land resulting from lake sedimentation and dredging in Indonesia.

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