

Legal Protection Of Endangered Flora And Fauna From Extinction In Indonesia's Biodiversity Conservation Law

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ARTICLE INFORMATION	ABSTRACT
Keywords: <i>Biodiversity; Endangered Species; Wildlife Crime; Conservation Law; Extinction</i>	<i>Indonesia is one of the world's most biodiverse countries, yet many of its plants and animals face a real risk of extinction from habitat loss, poaching and illegal trade. This article examines how Indonesian law protects endangered flora and fauna from extinction. It asks how the legal framework is structured, how protected species and prohibited acts are regulated and enforced, and what gaps still limit effective protection. Using normative juridical research with statute and conceptual approaches, and drawing on legislation, scholarly writing and official data as secondary materials, the article finds that protection rests on Law No. 5 of 1990 as amended by Law No. 32 of 2024, supported by the constitutional right to a good and healthy environment, ratified international agreements and a ministerial list of protected species. The 2024 amendment strengthens the framework through heavier criminal penalties, additional sanctions for restoration and rehabilitation, funding provisions, recognition of community roles and rules on genetic resources. Three weaknesses remain: legal uncertainty caused by frequent changes to the protected species list, fragmented authority among institutions, and the limited recognition of indigenous and local communities as subjects of conservation. Wildlife crime is also shifting to online platforms and transnational networks, which tests enforcement capacity. The article recommends a science-based and transparent procedure for listing species, transitional provisions for changes in status, better coordination among ministries and enforcement bodies, and participatory conservation arrangements that involve local and indigenous communities.</i>

A. Introduction

Indonesia is widely recognised as a megadiverse country. The Convention on Biological Diversity (CBD) defines biological diversity as the variability among living organisms from all sources, including diversity within species, between species and of ecosystems.¹ Indonesia ratified the Convention through Law No. 5 of 1994,² and the richness of its flora and fauna is both an ecological asset and a legal responsibility. That richness is under pressure. According to the Ministry of Forestry, the population of the Javan rhinoceros (*Rhinoceros sondaicus*) is estimated at between 87 and 100 individuals, and that of the Sumatran rhinoceros (*Dicerorhinus sumatrensis*) is below 100; both are listed as critically endangered on the Red List

¹Convention on Biological Diversity, June 5, 1992, 1760 U.N.T.S. 79, art. 2.

²Law No. 5 of 1994 on the Ratification of the United Nations Convention on Biological Diversity.

of the International Union for Conservation of Nature (IUCN) and face threats beyond poaching.³ Illegal trade adds to the pressure: the Ministry of Environment reports that in 2025 law enforcement officers rescued 54,488 wild animals from illegal trade.⁴

Indonesia's legal response has long rested on Law No. 5 of 1990 on the Conservation of Biological Natural Resources and Their Ecosystems (Law 5/1990). After about seven years on the national legislative agenda, the House of Representatives approved its amendment on 9 July 2024, and Law No. 32 of 2024 (Law 32/2024) was announced on 7 August 2024.⁵ The Government states that the amendment changes 21 of the 45 articles of the 1990 law.⁶ Scholars had earlier argued that Law 5/1990 was centralistic and needed substantial revision and harmonisation with related laws.⁷ Existing studies have also examined the changes to the list of protected species and their consequences for conservation.⁸ However, the effect of the 2024 amendment on the protection of endangered flora and fauna as a whole, taken together with species listing, enforcement and institutional arrangements, appears to have received less attention.

This article therefore addresses three questions. First, how is the legal framework for protecting flora and fauna from extinction structured after the 2024 amendment? Second, how are protected species and prohibited acts regulated and enforced? Third, what gaps still limit effective protection, and how can they be addressed? The article argues that Indonesia now has a stronger statutory basis, but that preventing extinction depends as much on legal certainty in species listing, coordination among institutions and community participation as on heavier criminal penalties. Its contribution lies in linking these elements in one analysis, with the precautionary principle as the common thread.

³"Indonesia Reveals Critical Decline of Native Rhino Species," *ANTARA News*, September 22, 2025, <https://en.antaranews.com/news/381452/indonesia-reveals-critical-decline-of-native-rhino-species>.

⁴"Melawan Perdagangan Satwa Liar demi Masa Depan Indonesia," Kementerian Lingkungan Hidup/Badan Pengendalian Lingkungan Hidup, August 5, 2026, <https://kemenlh.go.id/news/detail/melawan-perdagangan-satwa-liar-demi-masa-depan-indonesia>.

⁵"UU No. 32 Tahun 2024 tentang Perubahan UU Konservasi Sumber Daya Alam Hayati dan Ekosistemnya (UU 'Perubahan' Konservasi)," Pusat Studi Lingkungan Hidup UGM, <https://pslh.ugm.ac.id/uu-no-32-tahun-2024-tentang-perubahan-uu-konservasi-sumber-daya-alam-hayati-dan-ekosistemnya-uu-perubahan-konservasi/>.

⁶"Terbitnya UU 32 Tahun 2024 Perkuat Konservasi Sumber Daya Alam Hayati dan Ekosistemnya di Tingkat Tapak," Balai Kliring Keamanan Hayati, Kementerian Lingkungan Hidup, September 20, 2024, <https://balaikliringkehati.kemenlh.go.id/2024/09/20/terbitnya-uu-32-tahun-2024-perkuat-konservasi-sumber-daya-alam-hayati-dan-ekosistemnya-di-tingkat-tapak/>.

⁷Samedi Samedi, "Konservasi Keanekaragaman Hayati di Indonesia: Rekomendasi Perbaikan Undang-Undang Konservasi," *Jurnal Hukum Lingkungan Indonesia* 2, no. 2 (2015): 1–28, <https://doi.org/10.38011/jhli.v2i2.23>.

⁸M. A. A. Afinnas, "Menyoal Perubahan Daftar Jenis Tumbuhan dan Satwa yang Dilindungi di Indonesia," *Binamulia Hukum* 13, no. 1 (2024): 71–81, <https://doi.org/10.37893/jbh.v13i1.694>.

B. Methods

This study uses normative juridical research. It applies a statute approach, examining the 1945 Constitution, Law 5/1990 as amended by Law 32/2024, and related laws, regulations and international agreements, and a conceptual approach, drawing on principles of environmental law such as precaution, sustainability and participation.⁹ Legal materials are supplemented by scholarly writing, official statements and reputable media reports, which are used to describe conditions and are reported as published, without independent verification. The materials were analysed qualitatively and deductively. The article first maps the legal framework, then examines protected species, prohibited acts and enforcement, and finally discusses the remaining gaps before offering conclusions. It does not analyse court decisions or sentencing data.

C. Results and Discussion

The analysis shows that Indonesia's framework for protecting flora and fauna is broad and has become stricter since 2024, but that its effectiveness is limited by uncertainty in how species are listed, by divided institutional authority, and by the incomplete recognition of local and indigenous communities. Each point is developed in turn below.

1. The Legal Framework for Protecting Flora and Fauna

The constitutional starting point is Article 28H(1) of the 1945 Constitution, which guarantees the right to a good and healthy environment, together with Article 33(3) and (4), which place natural resources under state control and require the national economy to observe sustainability and an environmental perspective.¹⁰ Asshiddiqie describes these provisions as giving the Constitution a "green" character.¹¹ Law No. 32 of 2009 on Environmental Protection and Management (UUPPLH) builds on this by treating the conservation of natural resources as part of environmental maintenance and by listing biodiversity and precaution among its principles.¹²

Law 5/1990 is the specialised statute. The Government describes its three pillars as the protection of life-support systems, the preservation of the diversity of plant and animal species and their ecosystems, and

⁹Peter Mahmud Marzuki, *Penelitian Hukum*, rev. ed. (Jakarta: Kencana, 2014).

¹⁰Constitution of the Republic of Indonesia of 1945, arts. 28H(1) and 33(3)–(4).

¹¹Jimly Asshiddiqie, *Green Constitution: Nuansa Hijau Undang-Undang Dasar Negara Republik Indonesia Tahun 1945* (Jakarta: Rajawali Pers, 2009).

¹²Law No. 32 of 2009 on Environmental Protection and Management, State Gazette 2009 No. 140, Supplement No. 5059 (hereafter UUPPLH), arts. 2 and 57.

the sustainable use of biological natural resources.¹³ Under this law, more than 25 million hectares of land and sea have been placed in the system of protected areas.¹⁴ Indonesia is also bound by international instruments: it is party to the CBD, to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) through Presidential Decree No. 43 of 1978,¹⁵ and to the Nagoya Protocol on access to genetic resources through Law No. 11 of 2013.¹⁶ The global yardstick is now the Kunming-Montreal Global Biodiversity Framework of 2022, whose first goal is to halt human-induced extinction of known threatened species.¹⁷

Law 32/2024 modernises the national statute in several ways. First, it states that conservation is the responsibility and obligation of the Government, regional governments and the community, and it adds a new Article 5A that places conservation activities in specified areas, including a category of preservation areas (*areal preservasi*), which appears to extend conservation beyond formal protected areas.¹⁸ Second, it requires adequate and sustainable funding and provides for a conservation trust fund.¹⁹ Third, it makes criminal sanctions heavier, including for corporations, and adds sanctions of compensation, ecosystem restoration costs, and the rehabilitation, translocation and release of animals.²⁰ Fourth, it regulates genetic resources and access and benefit-sharing, which the earlier law did not cover and which follows Indonesia's commitment under the Nagoya Protocol.²¹ Fifth, it recognises the role of the community, including customary law communities, in conservation.²² Critics note, however, that the amendment does not yet treat indigenous peoples as subjects of conservation in their own right.²³ Table 1 summarises the principal instruments.

¹³“Terbitnya UU 32 Tahun 2024 Perkuat Konservasi Sumber Daya Alam Hayati dan Ekosistemnya di Tingkat Tapak,” PPID Kementerian Lingkungan Hidup dan Kehutanan, <https://ppid.menlhk.go.id/berita/siaran-pers/7883/terbitnya-uu-32-tahun-2024-perkuat-konservasi-sumber-daya-alam-hayati-dan-ekosistemnya-di-tingkat-tapak>.

¹⁴Samedi, “Konservasi Keanekaragaman Hayati”.

¹⁵Presidential Decree No. 43 of 1978 on the Ratification of the Convention on International Trade in Endangered Species of Wild Fauna and Flora; Convention on International Trade in Endangered Species of Wild Fauna and Flora, March 3, 1973, 993 U.N.T.S. 243.

¹⁶Law No. 11 of 2013 on the Ratification of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity.

¹⁷Conference of the Parties to the Convention on Biological Diversity, *Kunming-Montreal Global Biodiversity Framework*, Decision 15/4, December 19, 2022, UN Doc. CBD/COP/DEC/15/4.

¹⁸Law No. 32 of 2024 on the Amendment of Law No. 5 of 1990 on the Conservation of Biological Natural Resources and Their Ecosystems (hereafter Law 32/2024), arts. 4 and 5A.

¹⁹Law 32/2024, art. 36A.

²⁰“Terbitnya UU 32 Tahun 2024,” Balai Kliring.

²¹“UU 32 Tahun 2024, Kemajuan atau Kemunduran Pengelolaan KSDAHE?,” *Garda Animalia*, July 16, 2025, <https://gardaanimalia.com/uu-32-tahun-2024-kemajuan-atau-kemunduran-pengelolaan-ksdahe/>.

²²Law 32/2024, art. 37.

²³“UU No. 32 Tahun 2024,” PSLH UGM.

Table 1. Principal Legal Instruments for Protecting Flora and Fauna

No.	Legal instrument	Relevance to protection of flora and fauna
1	1945 Constitution, arts. 28H(1), 33(3)–(4)	Right to a good and healthy environment; state control of natural resources subject to sustainability.
2	Law No. 5 of 1994 (CBD); Law No. 11 of 2013 (Nagoya Protocol)	Ratification of the Convention on Biological Diversity and of the rules on access to genetic resources and benefit-sharing.
3	Presidential Decree No. 43 of 1978 (CITES)	Regulation of international trade in endangered species.
4	Law No. 5 of 1990, as amended by Law No. 32 of 2024	Core conservation law: protection, preservation and sustainable use; prohibited acts; criminal and additional sanctions; funding; community roles; genetic resources.
5	Law No. 32 of 2009 (UUPPLH)	Conservation as part of environmental maintenance; principles of biodiversity and precaution.
6	Ministerial Regulation P.20/2018, as amended by P.92/2018 and P.106/2018	Lists of protected plant and animal species.

Table 1 shows that protection comes from several layers: constitutional guarantees, international agreements, a specialised conservation statute, the general environmental statute and an executive list of protected species. The list is the point where the law meets individual species, and it is therefore examined next.

2. Protected Species, Prohibited Acts, and the Response to Wildlife Crime

Law 5/1990 divides plants and animals into protected and non-protected species, and the list is set by ministerial regulation. The current list is contained in Ministerial Regulation P.20/2018 as amended by P.92/2018 and P.106/2018, which replaced Government Regulation No. 7 of 1999.²⁴ The original 2018 list was based on the considerations of the scientific authority.²⁵ It is important to distinguish two things here. An IUCN category, such as vulnerable, endangered or critically endangered, is a scientific assessment of extinction risk,²⁶ whereas legal protection in Indonesia follows from a species being listed in the ministerial regulation. A species that is threatened on the Red List but absent from the national list does not enjoy the statutory prohibitions.

²⁴“Peraturan Menteri Lingkungan Hidup dan Kehutanan Nomor P106 Tahun 2018,” *Garda Animalia*, January 30, 2019, <https://gardaanimalia.com/peraturan-menteri-lingkungan-hidup-dan-kehutanan-no-p106-tahun-2018/>.

²⁵Indonesian Center for Environmental Law (ICEL), “Perbaikan Regulasi Penetapan Status Perlindungan Spesies guna Menjamin Urgensi Pengawetan dan Perlindungan Hukum bagi Masyarakat Pemanfaat,” Policy Brief 3, n.d., <https://icel.or.id/media/pdf/PerbaikanRegulasiPenetapanStatusPerlindunganSpesiesGunaMenjaminUrgensiPengawetandanPerlindunganHukumbagiMasyarakatPemanfaat.pdf>.

²⁶IUCN, “The IUCN Red List of Threatened Species,” <https://www.iucnredlist.org>.

For protected animals, the prohibited acts include catching, injuring, killing, keeping, possessing, storing, carrying, transporting and trading them, whether alive or dead, and their parts. Exceptions exist for research, science and rescue of the species concerned, and where the animal endangers human life.²⁷ Under Law 32/2024, violations of Article 21(2)(a) and (b) carry imprisonment of three to fifteen years and a fine in categories IV to VII.²⁸ By comparison, Article 40(2) of the 1990 law capped imprisonment at five years and the fine at IDR 100 million.²⁹ The amendment also addresses the digital market: commercial display of protected animals in electronic media without a permit is punishable by two to four years' imprisonment and a fine in categories III to IV.³⁰ For corporations, destroying a nature reserve area is punishable by up to twenty years' imprisonment and a fine of up to IDR 200 billion.³¹

These provisions show a clear shift towards deterrence and restoration. Whether they prevent extinction, however, depends on enforcement. Recent official data show the scale of the problem: 54,488 animals were rescued from illegal trade in 2025.³² In March 2025 the forestry law enforcement directorate (*Gakkum Kehutanan*) stopped the online shipment of 94 specimens of protected animals abroad, including to the United States and the United Kingdom, after receiving information from the United States Fish and Wildlife Service about a seized shipment.³³ The Director General of Forestry Law Enforcement described crimes against protected wild plants and animals as transnational and among the most lucrative crimes in the world.³⁴ The case illustrates three points: trade has moved to online platforms, which the 2024 electronic-media provision is meant to address; cross-border information sharing under CITES is decisive; and the additional sanctions of restoration and rehabilitation will only matter if prosecutors and courts actually apply them. This article did not review sentencing data, so how far courts use the higher maximum penalties remains a question for further research.

3. Remaining Gaps: Legal Certainty, Institutional Coordination, and Community Participation

The first gap concerns legal certainty in species listing. The list changed three times within one year: Regulation P.20/2018 in June, P.92/2018 in August, which removed five bird species from protection,

²⁷“Jerat Hukum Pelaku Penangkapan Satwa yang Dilindungi,” *Klinik Hukumonline*, July 24, 2025, <https://www.hukumonline.com/klinik/a/jerat-hukum-pelaku-penangkapan-satwa-yang-dilindungi-lt5451c73bd26e5/>.

²⁸“Jerat Hukum Pelaku Penangkapan Satwa,” *Klinik Hukumonline*.

²⁹Law No. 5 of 1990 on the Conservation of Biological Natural Resources and Their Ecosystems, State Gazette 1990 No. 49, Supplement No. 3419 (hereafter Law 5/1990), art. 40(2).

³⁰Law 32/2024, art. 40A.

³¹“Terbitnya UU 32 Tahun 2024,” Balai Kliring.

³²“Melawan Perdagangan Satwa Liar”.

³³“Gakkum Kehutanan Gagal Penyelundupan 94 Spesimen Satwa Dilindungi ke Amerika Serikat dan Inggris,” *Media Indonesia*, March 19, 2025, <https://mediaindonesia.com/humaniora/753535/gakkum-kehutanan-gagal-penyelundupan-94-spesimen-satwa-dilindungi-ke-amerika-serikat-dan-inggris>.

³⁴“Gakkum Kehutanan Gagal Penyelundupan 94 Spesimen,” *Media Indonesia*.

and P.106/2018 in December, which removed ten plant species.³⁵ The Indonesian Center for Environmental Law (ICEL) argues that the later changes disregarded the considerations of the scientific authority and contained almost no transitional provisions, so that rapid changes in protection status create uncertainty for conservationists, users and law enforcers alike.³⁶ Afinnas finds the removal of several plants problematic because it does not match their conservation status in nature and may open the way to trade.³⁷ From the perspective of the precautionary principle, which holds that lack of full scientific certainty should not delay measures to prevent serious or irreversible damage,³⁸ reducing protection should require stronger, published scientific justification than increasing it, and should be accompanied by transitional rules.

The second gap is institutional. Authority over species is shared among agencies. In 2020 the Ministry of Marine Affairs and Fisheries (KKP) had become the CITES management authority for fish, so the status of the twenty fish species in the forestry ministry's regulation had to be harmonised.³⁹ Today, conservation and forestry law enforcement are exercised by the Ministry of Forestry through the Directorate General for Natural Resources and Ecosystem Conservation and the Directorate General for Forestry Law Enforcement, while the Ministry of Environment also reports on wildlife trade.⁴⁰ Conservation practice also involves other actors. For example, the Ministry of Forestry has teamed up with the Defence Forces and the Indonesian Rhino Foundation to relocate Javan rhinos within Ujung Kulon National Park.⁴¹ Such multi-actor arrangements are useful, but they need clear legal bases and coordination rules. Samedi's call for deep harmonisation between the conservation law and related laws remains relevant after the amendment.⁴²

The third gap concerns communities. Law 32/2024 recognises community roles, including those of customary communities,⁴³ but critics observe that indigenous peoples are not yet treated as subjects of

³⁵"Permen LHK Nomor P106 Tahun 2018," *Garda Animalia*.

³⁶ICEL, "Perbaikan Regulasi".

³⁷Afinnas, "Menyoal Perubahan Daftar".

³⁸United Nations Conference on Environment and Development, *Rio Declaration on Environment and Development*, June 14, 1992, principle 15, UN Doc. A/CONF.151/26 (Vol. I); Philippe Sands et al., *Principles of International Environmental Law*, 3rd ed. (Cambridge: Cambridge University Press, 2012); UUPPLH, art. 2.

³⁹"KLHK Buka Peluang Tumbuhan dan Satwa Masuk Daftar Dilindungi," *Betabita*, 2020, <https://betabita.id/news/lipsus/5698/klhk-buka-peluang-tumbuhan-dan-satwa-masuk-daftar-dilindungi.html>.

⁴⁰"Critical Decline of Native Rhino Species," *ANTARA News*; "Gakkum Kehutanan Gagal Penyelesaian 94 Spesimen," *Media Indonesia*; "Melawan Perdagangan Satwa Liar".

⁴¹"Critical Decline of Native Rhino Species," *ANTARA News*.

⁴²Samedi, "Konservasi Keanekaragaman Hayati".

⁴³Law 32/2024, art. 37.

conservation.⁴⁴ This matters because conservation that excludes the people who live with wildlife invites conflict. The law permits an animal that endangers human life to be caught or killed, and this exception is understood broadly, covering disturbance to daily life and damage to land and crops.⁴⁵ Without practical mechanisms for preventing and compensating human–wildlife conflict, the exception can become a source of pressure on threatened species. The new rules on genetic resources add a further task: their effectiveness will depend on implementing regulations that give substance to benefit-sharing with the communities that hold the relevant knowledge and resources.⁴⁶

D. Conclusion

Indonesia's protection of flora and fauna from extinction rests on the constitutional right to a good and healthy environment, Law 5/1990 as amended by Law 32/2024, the UUPPLH, ratified international agreements and a ministerial list of protected species. The 2024 amendment strengthens this framework through heavier criminal penalties, additional sanctions for restoration and rehabilitation, funding provisions, recognition of community roles and rules on genetic resources. The framework still has three main weaknesses: legal uncertainty in the listing and delisting of species, divided institutional authority, and the incomplete recognition of local and indigenous communities. Wildlife crime is moving online and across borders, which tests enforcement capacity.

Five suggestions follow. First, the Government should codify a science-based and transparent procedure for listing and delisting species, requiring the published recommendation of the scientific authority, public consultation and transitional provisions, and reducing protection only on strong evidence. Second, enforcement should be integrated among forestry law enforcement, the police, customs, quarantine and cyber patrol units, with continued cooperation under CITES, and prosecutors should use the additional sanctions of restoration and rehabilitation. Third, the Government should issue the implementing regulations of Law 32/2024 on funding, preservation areas and genetic resources, and should harmonise the authority of the forestry, environment and marine affairs institutions, including for fish and plant species. Fourth, indigenous and local communities should be treated as partners with clear rights and benefit-sharing, together with mechanisms for preventing human–wildlife conflict. Fifth, further research should examine court decisions and sentencing to test whether the stricter law is deterring wildlife crime.

⁴⁴“UU No. 32 Tahun 2024,” PSLH UGM.

⁴⁵“Jerat Hukum Pelaku Penangkapan Satwa,” *Klinik Hukumonline*.

⁴⁶“Kemajuan atau Kemunduran Pengelolaan KSDAHE?,” *Garda Animalia*.

Bibliography

Journal Article References:

- Afinnas, M. A. A. "Menyoal Perubahan Daftar Jenis Tumbuhan dan Satwa yang Dilindungi di Indonesia." *Binamulia Hukum* 13, no. 1 (2024): 71–81. <https://doi.org/10.37893/jbh.v13i1.694>.
- Samedi, Samedi. "Konservasi Keanekaragaman Hayati di Indonesia: Rekomendasi Perbaikan Undang-Undang Konservasi." *Jurnal Hukum Lingkungan Indonesia* 2, no. 2 (2015): 1–28. <https://doi.org/10.38011/jhli.v2i2.23>.

Books:

- Asshiddiqie, Jimly. *Green Constitution: Nuansa Hijau Undang-Undang Dasar Negara Republik Indonesia Tahun 1945*. Jakarta: Rajawali Pers, 2009.
- Marzuki, Peter Mahmud. *Penelitian Hukum*. Rev. ed. Jakarta: Kencana, 2014.
- Rahmadi, Takdir. *Hukum Lingkungan di Indonesia*. Jakarta: Rajawali Pers, 2011.
- Sands, Philippe, Jacqueline Peel, Adriana Fabra, and Ruth MacKenzie. *Principles of International Environmental Law*. 3rd ed. Cambridge: Cambridge University Press, 2012.

Online resources:

- ANTARA News. "Indonesia Reveals Critical Decline of Native Rhino Species." September 22, 2025. <https://en.antaranews.com/news/381452/indonesia-reveals-critical-decline-of-native-rhino-species>.
- Balai Klining Keamanan Hayati, Kementerian Lingkungan Hidup. "Terbitnya UU 32 Tahun 2024 Perkuat Konservasi Sumber Daya Alam Hayati dan Ekosistemnya di Tingkat Tapak." September 20, 2024. <https://balaikliringkehati.kemenlh.go.id/2024/09/20/terbitnya-uu-32-tahun-2024-perkuat-konservasi-sumber-daya-alam-hayati-dan-ekosistemnya-di-tingkat-tapak/>.
- Betahita. "KLHK Buka Peluang Tumbuhan dan Satwa Masuk Daftar Dilindungi." 2020. <https://betahita.id/news/lipsus/5698/klhk-buka-peluang-tumbuhan-dan-satwa-masuk-daftar-dilindungi.html>.
- Garda Animalia. "Peraturan Menteri Lingkungan Hidup dan Kehutanan Nomor P106 Tahun 2018." January 30, 2019. <https://gardaanimalia.com/peraturan-menteri-lingkungan-hidup-dan-kehutanan-no-p106-tahun-2018/>.
- Garda Animalia. "UU 32 Tahun 2024, Kemajuan atau Kemunduran Pengelolaan KSDAHE?" July 16, 2025. <https://gardaanimalia.com/uu-32-tahun-2024-kemajuan-atau-kemunduran-pengelolaan-ksdahe/>.
- Indonesian Center for Environmental Law (ICEL). "Perbaikan Regulasi Penetapan Status Perlindungan Spesies guna Menjamin Urgensi Pengawetan dan Perlindungan Hukum bagi Masyarakat Pemanfaat." Policy Brief 3. n.d. <https://icel.or.id/media/pdf/PerbaikanRegulasiPenetapanStatusPerlindunganSpesiesGunaMenjaminUrgensiPengawetandanPerlindunganHukumbagiMasyarakatPemanfaat.pdf>.
- IUCN. "The IUCN Red List of Threatened Species." <https://www.iucnredlist.org>.

Kementerian Lingkungan Hidup/Badan Pengendalian Lingkungan Hidup. “Melawan Perdagangan Satwa Liar demi Masa Depan Indonesia.” August 5, 2026.
<https://kemenlh.go.id/news/detail/melawan-perdagangan-satwa-liar-demi-masa-depan-indonesia>.

Klinik Hukumonline. “Jerat Hukum Pelaku Penangkapan Satwa yang Dilindungi.” July 24, 2025.
<https://www.hukumonline.com/klinik/a/jerat-hukum-pelaku-penangkapan-satwa-yang-dilindungi-lt5451c73bd26e5/>.

Media Indonesia. “Gakkum Kehutanan Gagal Penyelundupan 94 Spesimen Satwa Dilindungi ke Amerika Serikat dan Inggris.” March 19, 2025.
<https://mediaindonesia.com/humaniora/753535/gakkum-kehutanan-gagalkan-penyelundupan-94-spesimen-satwa-dilindungi-ke-amerika-serikat-dan-inggris>.

PPID Kementerian Lingkungan Hidup dan Kehutanan. “Terbitnya UU 32 Tahun 2024 Perkuat Konservasi Sumber Daya Alam Hayati dan Ekosistemnya di Tingkat Tapak.”
<https://ppid.menlhk.go.id/berita/siaran-pers/7883/terbitnya-uu-32-tahun-2024-perkuat-konservasi-sumber-daya-alam-hayati-dan-ekosistemnya-di-tingkat-tapak>.

Pusat Studi Lingkungan Hidup UGM. “UU No. 32 Tahun 2024 tentang Perubahan UU Konservasi Sumber Daya Alam Hayati dan Ekosistemnya (UU ‘Perubahan’ Konservasi).”
<https://pslh.ugm.ac.id/uu-no-32-tahun-2024-tentang-perubahan-uu-konservasi-sumber-daya-alam-hayati-dan-ekosistemnya-uu-perubahan-konservasi/>.

Others (Legal Materials and International Instruments):

Constitution of the Republic of Indonesia of 1945.

Government Regulation No. 7 of 1999 on the Preservation of Plant and Animal Species.

Indonesia. Law No. 11 of 2013 on the Ratification of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity.

Indonesia. Law No. 32 of 2009 on Environmental Protection and Management. State Gazette 2009 No. 140, Supplement No. 5059.

Indonesia. Law No. 32 of 2024 on the Amendment of Law No. 5 of 1990 on the Conservation of Biological Natural Resources and Their Ecosystems.

Indonesia. Law No. 5 of 1990 on the Conservation of Biological Natural Resources and Their Ecosystems. State Gazette 1990 No. 49, Supplement No. 3419.

Indonesia. Law No. 5 of 1994 on the Ratification of the United Nations Convention on Biological Diversity.

Presidential Decree No. 43 of 1978 on the Ratification of the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

Regulation of the Minister of Environment and Forestry No.
P.20/MENLHK/SETJEN/KUM.1/6/2018 on Protected Plant and Animal Species, as

amended by Regulation No. P.92/MENLHK/SETJEN/KUM.1/8/2018 and Regulation No. P.106/MENLHK/SETJEN/KUM.1/12/2018.

United Nations. Convention on Biological Diversity. June 5, 1992. 1760 U.N.T.S. 79.

United Nations. Convention on International Trade in Endangered Species of Wild Fauna and Flora. March 3, 1973. 993 U.N.T.S. 243.

Conference of the Parties to the Convention on Biological Diversity. *Kunming-Montreal Global Biodiversity Framework*. Decision 15/4. December 19, 2022. UN Doc. CBD/COP/DEC/15/4.

United Nations Conference on Environment and Development. *Rio Declaration on Environment and Development*. June 14, 1992. UN Doc. A/CONF.151/26 (Vol. I).