

The Implementation of CITES to Prevent Endangered Species Extinction in Indonesia

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Abstract

The extinction of flora and fauna species can be caused by a variety of factors, one of which is the outrageous conduct of some individuals despite the carefully regulated international trade in endangered species. The international community is concerned about this issue, and their concern stems from the need to combat the extinction of endangered species. The purposes of this article are as follows: 1) to assess the efficacy of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in preventing the extinction of endangered animals and plants; 2) to learn about Indonesia's efforts to conserve endangered species. This is a normative research with a statutory approach; it makes use of secondary data from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and other sources. The results indicate that the implementation of CITES in Indonesia is carried out through the establishment of various laws and regulations to conserve species and the delegation of responsibilities to a management authority and a scientific authority.

Key Words: Endangered Species; Implementation; Extinction

Introduction

The issue of extinction of flora and wildlife has become a major worry for members of the International Union for Conservation of Nature and Natural Resources (IUCN). It was out of this concern that the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was born. The purpose of this convention is to protect wild plants and animals against commercialization of their specimens, which endangers their survival.

There are several reasons why a species may go extinct. Despite the fact that these elements may be examined and categorized, extinction continues to occur due to the following reasons:

- a. **Destruction of Habitat**
Changes in the earth's environment are constantly causing changes in the habitats of living creatures. Natural changes are generally gradual and have minimal impact on species. When there is a rapid shift, however, the species cannot react and adapt to the new conditions as rapidly as required. This can result in tragedy, such as the extinction of species. Human involvement is one example of the causes of fast change.
- b. **Exotic Species Introduction**
Exotic species can be thought of as intruders brought to a new ecosystem by humans, either purposefully or unintentionally. Exotic species can upset the ecological equilibrium and have a number of negative repercussions.
- c. **Overexploitation**
Overexploitation of species put their survival in jeopardy, with some potentially facing extinction.
- d. **Additional factors**
Disease, pollution, and limited range are some factors that might endanger species' existence.¹

According to WWF-Indonesia data, since 2012, 36 adult elephants have been discovered dead in forest regions and former forests in the province of Nanggroe Aceh Darussalam. The majority of elephant deaths are the result of poisoning, while some are the result of electrocution or snares in oil palm fields. There were 208 elephant deaths as a result of poaching between 1999 and 2005. Another case in point is the arrest of a yellow-crested cockatoo smuggler in March 2015 at the port of Surabaya. In 2014, 13 tiger skin carriers were apprehended in Jambi, and 12 elephant ivory carriers were apprehended in Riau in 2015.²

The following are the goals of animal trade: 1) consumption; 2) manufacture of traditional Chinese medicine; 3) serving as pets; 4) decoration; and 5) collection. The utilization of natural resources derived from biodiversity has increased in the previous 30 years. For example, 10 of the world's top 25 pharmaceutical businesses get their chemicals from biologically diverse sources, such as plants and wildlife.³ According to data from the Ministry of Forestry in 2010, the export value of wild creatures, such as mammals, amphibians, corals, crocodiles, and fish, exceeds IDR 2 billion. The biggest export value was gained from arowana fish exports, which totaled IDR 1.989 billion. These data show that the attention of the government and law enforcement personnel should be directed at wildlife crimes.

The widespread illegal trade in wild animals and plants has resulted in the scarcity and even extinction of endangered species in Indonesia. It is ironic that Indonesia is one of the world's biodiversity hotspots while simultaneously being one of the world's major markets for trade in wild animals and plants. For this reason, the conservation of endangered species is urgently needed, and it is necessary to establish rules that bind linked parties to the preservation of live natural resources. Therefore, stringent rules governing the conservation of endangered species are required, which will have a positive impact on the sustainability of the country's ecology.

CITES states that each member country must establish national legislation prohibiting trade in specimens that contravene the terms of the Convention, providing fines for infractions and allowing the confiscation of specimens traded or owned illegally. CITES has been ratified in Indonesia by Government Decree No. 43 of 1978. According to Government Regulation Number 8 of 1999, CITES is represented in Indonesia by the Ministry of Forestry as the CITES management authority and the Indonesian Institute of Sciences (LIPI) as the CITES scientific authority. Furthermore, the CITES standard became the basis for the formation of Law Number 5 of 1990 concerning Conservation of Natural Resources and Government Regulation Number 8 of 1999 concerning the Utilization of Wild Plants and Animals. Nonetheless, there are still many hurdles in executing these legislation, resulting in continued infractions and a failure to produce a deterrent impact for violators.

Materials and Method

This is a normative legal study that takes a statutory approach. The data used are secondary data, which include both primary and secondary legal materials. The primary legal documents are those from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Law Number 5 of 1990 concerning Natural Resource Conservation, and Government Regulation Number 8 of 1999 about Utilization of Wild Plants and Animals. Books, journals, and diverse literature sources relevant to this subject are examples of secondary legal materials. The data were gathered through a literature review and were examined qualitatively utilizing the deductive technique of reasoning.

Result and Discussion

1. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

International environmental law is a branch of public international law that establishes that the existence of the environment cannot be denied in human life. Every government must pay close attention to and manage the environment since environmental harm will have a negative influence on human life.⁴ International environmental law governs a state's rights and obligations to protect the natural environment, including the environment of other countries. One of the principles of international environmental law is the protection of species and natural reserves in order to preserve their diversity because they represent common heritages of mankind.⁵

Countries have begun to hold numerous meetings on the environment, particularly biodiversity, and develop international treaties or conventions based on the principles of environmental law. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is one of the international treaties signed by 80 countries on March 3, 1973, in Washington, DC, based on the resolutions of the International Union for Conservation of Nature and Natural Resources (IUCN). CITES is a global agreement that focuses on the protection of wild animals and plants against international trade that is not in conformity with existing standards, which may jeopardize the preservation of wild plants and animals. The goal of CITES is to safeguard wild flora and fauna that are on the verge of extinction as a result of the outrageous activities of some individuals despite the carefully regulated international trade. CITES is a multilateral agreement that offers an international structure to govern international wildlife commerce. It is essentially a set of conventions, regulations, or procedures.⁶

The establishment of CITES is based on four major factors, which are as follows:

- a. Humans require long-term conservation of plants and animals.
- b. There is a need to achieve increased value of plant and wildlife resources for humans.
- c. The community and government have roles to play in attempts to safeguard plants and animals.
- d. International collaboration is required to preserve endangered species from overexploitation through international trade rules.

Article 2 of CITES regulates the classification of species, as follows:

- a. Appendix I shall include all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances.
- b. Appendix II shall include:

1. all species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilization incompatible with their survival; and
2. other species which must be subject to regulation in order that trade in specimens of certain species referred to in sub-paragraph (a) of this paragraph may be brought under effective control.
- c. Appendix III shall include all species which any Party identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation, and as needing the co-operation of other Parties in the control of trade.

Appendix 1 contains a list of over 8,000 animals and plants that are illegal to trade in. Meanwhile, Appendix 2 lists over 30,000 species that are regulated and whose international commerce is tracked. Every Convention member country must keep track of traded animals and plants included in Appendix 2 and report to the CITES secretariat on a regular basis.⁷

As a legally binding international agreement, CITES must be implemented by participating countries through the formation of national laws and regulations; it is a framework that the parties must uphold in implementing measures that help to protect plants and animals against extinction at the country level. According to Article 14 of CITES, each member state must establish national rules capable of preventing trade in species that contravene the terms of the Convention, penalizing infractions, and allowing for the confiscation of illegally traded or held animals. Members of the Convention are also required to establish or designate two institutions, namely a management authority and a scientific authority. The management authority has the power to restrict the export and import of tradable animals and plants. This organization is also in charge of keeping track of all transactions. Meanwhile, the scientific authority has the mandate to conduct scientific investigations and weigh in on the determination of trade quotas for animals and plants.⁸

2. The Effectiveness of CITES in Preventing the Extinction of Endangered Species

CITES is legally obligatory on the parties, but it is not a substitute for national law; rather, it provides a framework that must be upheld by the parties in order to implement measures that help to protect plants and animals against extinction at the national level. Often, there is no legislation at the national level to protect wild plants and animals (especially in countries that have not ratified CITES), so the penalties applied are disproportionate to the level of crime, and there is even a lack of law enforcement against trade in wild animals and plants.

To determine if CITES has been adequately implemented, Juan Carlos Vasquez argued that CITES must go through three steps, as follows:⁹



a. Implementation

A state's CITES obligations are implemented in three stages. First, national implementation measures, such as legislative and economic rules, information systems, management strategies, and law enforcement units, are implemented. Second, there is a need to confirm that the national criteria have been reached in accordance with the jurisdiction's circumstances. Third, it is necessary to meet CITES secretariat requirements, such as reporting trade volumes and actions that may have an impact on international obligations.

b. Compliance

There are two dimensions to this stage. At the international level, it refers to what member countries have done to fulfill their commitments under the convention. At the national level, it refers to the actions taken by individuals or legal entities, such as corporations or government agencies, to meet their national commitments.

c. Enforcement

Law enforcement refers to activities carried out by member governments to prevent or impede unlawful trade. At the same time, it is meant to discover violations and inflict consequences on those who violate national conventions or legislation.

CITES requires member countries to adopt four crucial policies:

- a. the presence of a national management authority and a scientific authority,
- b. rules forbidding trade in CITES-protected wild plants and animals,
- c. legal punishments for traders, and
- d. evidence confiscation laws.

CITES is the only convention that uses international trade tools to conserve wild animals and plants.¹⁰ This is consistent with Symon Lyster's assertion that CITES is perhaps the most successful of all international treaties concerned with the conservation of wildlife. Its success is explained primarily by its basic principles. The basic principles of CITES are quite-straight forward. It regulates international trade in wild animals and plants that are listed in three appendixes to the convention.

The success of CITES is evident not only in its ability to avert population reduction. There are two further markers of CITES' performance. First, the presence of import restrictions is critical for the preservation of endangered species in the exporting country. Second, CITES imposes trade restrictions on non-participating countries. This restriction will aid in the enforcement of the existing reciprocal system between the importing and exporting countries. According to CITES, an export permit for the species classified in Appendix II is only given if and only if the following conditions are met:

- a. a scientific authority of the state of export has advised that such an export will not be detrimental to the survival of that species;

- b. a management authority of the state of export is satisfied that the specimen was not obtained in contravention of the laws of that state for the protection of flora and fauna; and
- c. a management authority of the state of export is satisfied that any living specimen will be so prepared and shipped as to minimize the risk of injury, damage to health or cruel treatment.

Therefore, export limitations are justified on the basis of ecological interests, and they should not be seen as hidden trade restrictions because export restrictions imposed in a balanced manner do not result in discrimination. In the case of awarding an import license, CITES specifies that the license is only issued for non-commercial uses. Similarly, the issuance of export licenses adheres to the specifications outlined in the export standards, which are not primarily for business interests.¹¹

3. Follow-up by the Indonesian Government on Endangered Species Extinction Based on CITES

Indonesia ratified CITES with Presidential Decree Number 43 of 1978, making it the 48th CITES participant country. Therefore, Indonesia is required to implement one of CITES' mandates, namely the adaptation of domestic policy in national legislation. It took the government 12 years to pass a law on CITES' ratification procedure; the law in question is Law Number 5 of 1990 concerning Natural Resource Conservation, which may also be called Conservation Law for brevity. This legislation contains provisions whose primary purpose is to conserve biological resources and ecosystems, especially those relating to species protection. As a result, the requirements in this law are fairly generic; thus, detailed arrangements are established and enacted as regulations for the purpose of easy execution. For the purpose of implementation, the Indonesian government has established several implementing regulations, as follows:

- a. Government Regulation Number 13 of 1994 concerning Hunting for Hunting Animals;
- b. Government Regulation Number 7 of 1999 concerning Preservation of Plants and Animals;
- c. Government Regulation Number 8 of 1999 concerning the Utilization of Wild Plants and Animals;
- d. Government Regulation Number 36 of 2010 concerning Nature Tourism Business in Wildlife Sanctuaries, National Parks, Grand Forest Parks and Nature Tourism Parks;
- e. Government Regulation Number 28 of 2011 concerning Management of Nature Reserve Areas and Nature Conservation Areas.

There is a classification of rare plants and animals under Law Number 5 of 1990. According to Article 20, rare plants and animals are divided into two

categories, namely protected and unprotected plants and animals. Plants and animals that are protected are divided into two categories, namely those at risk of extinction and those whose populations are small in Indonesia. Protected animal species classifications are designed to keep creatures from becoming extinct. The management authority can amend this decision at any time based on the severity of the situation, which is established by the level of extinction threat that the species in question faces.¹²

The classification attempts to provide legal certainty for the conservation and use of wild animals. These distinctions also determine the specific laws and regulations that can be employed to preserve wild animals among the various laws. In terms of the Conservation Law and its implementing regulations, protected wildlife is the subject of legal protection. Although there is a species classification, it is not entirely consistent with CITES' classification of animal species.

The Conservation Law has established that trading activities relating to endangered species are prohibited in regard to the conservation of endangered species as governed by CITES. Article 21 makes it illegal for anybody to do the following:

- a. capture, injure, kill, keep, own, nurture, transport, and trade in protected creatures in their natural habitats;
- b. store, own, preserve, transport, and trade in dead protected animals;
- c. transfer protected animals from one location in Indonesia to another within or outside of the country;
- d. trade in, keep, or own the skin, body, or other parts of protected animals, or things made from those parts, or transport the animal from one location in Indonesia to another in or beyond Indonesia;
- e. take, destroy, trade in, keep or own eggs and/or protected animal nests.

Accordingly, it is clear that one of the attempts to safeguard endangered species is the restriction of commerce that does not comply with the legislation's provisions. If there are violations of this law, the consequence, according to Article 40, is imprisonment for a maximum of 5 years and a fine of up to IDR 100 million.

To restrict the trade in endangered species, Government Regulation Number 8 of 1999 specifies that plants and animals that can be traded are non-protected animals gained by captivity or taken or caught from nature. Plant and animal trade can only be conducted by a business entity constituted under Indonesian law after gaining the minister's approval. Plant and animal trade must be accompanied by original and legitimate documentation. Furthermore, animal transport certificates are issued both domestically and internationally to monitor the circulation of animals that are traded as commodities.

Indonesia's commitment as a CITES member is carried out by two institutions, a management authority and a scientific authority; they are responsible for ensuring that CITES' requirements are implemented at the national level. Indonesia has delegated the responsibility for implementing the

licensing system to a management authority, namely the Directorate for Biodiversity Conservation (KKH), which is under the Ministry of Environment and Forestry (KLHK). Also, a scientific body, namely the Indonesian Institute of Sciences (LIPI), has been mandated to provide advice on the impact of trade on species status (scientific authority).¹³ In addition to the management and scientific authorities, law enforcement in Indonesia is carried out by the Directorate General of Law Enforcement under the Ministry of Environment and Forestry of the Republic of Indonesia; it can also be carried out by the Police Agency.

Implementing CITES in Indonesia, including the enforcement of all necessary legislations, necessitates cooperation and coordination among the agencies and ministries involved at the national level. It also necessitates strong collaboration via bilateral, regional, and international partnerships, as well as international and non-governmental organizations. At the national level, the Directorate of Biodiversity Conservation (KKH) coordinates CITES implementation and enforcement with a variety of authorities, including customs, quarantine, police, and other relevant agencies. For example, coordination and communication are carried out, training is carried out, and species identification criteria are developed as forms of collaboration.

One example of cross-border achievement accomplished through collaboration is the repatriation of 91 reptiles, mammals, and aves (birds) trafficked into the Philippines in 2020. This was achieved through collaboration between the CITES management authority in Indonesia and the CITES management authority in the Philippines.¹⁴ In terms of law enforcement, the Ministry of Environment and Forestry has successfully handled over 300 cases of crimes against plants and animals in recent years by collaborating with relevant institutions, such as the Ministry of Foreign Affairs, the Directorate General of Customs and Excise, the Animal Quarantine Agency, the Directorate of Animal Health, Police, and Local Government.

4. Barriers to CITES Implementation in Indonesia

As a CITES member country, Indonesia is required to adopt a national legislation to coordinate CITES implementation and to delegate responsibilities to two entities, a management authority and a scientific authority. Despite the fact that the Indonesian government has met these duties, CITES implementation in Indonesia has not been optimal. This is evidenced by various examples of rare species smuggling that still occur. There were reports of newborn orangutan being transported from Bali to Russia in 2019. A few days later, the instance of 41 komodo dragons being smuggled was revealed in East Java. Furthermore, in the same year, there were reports of slow lorises being sold on social media in Bogor.¹⁵

These cases show that there are still barriers to effective implementation of CITES in Indonesia. The national regulations, in general, do not fully cover the provisions of CITES, for example in the classification of animals. Only protected

and unprotected species are classified in Law Number 5 of 1990. This is not the same as the CITES categorization based on the Appendix. Despite the fact that the law was passed 22 years ago, many kinds of animals and plants remain in the category of endangered species that must be preserved. In 2017, for example, a study claimed the discovery of a new species of orangutan, *Pongo Tapanuliensis*.¹⁶ In this circumstance, the modification of laws and regulations is a necessity.

Another barrier is subpar law enforcement. This is due to a variety of circumstances, including procedural issues with arrest and custody protocols across police agencies, forest police, and civil forest investigators. In this case, there is still overlapping authority regarding the custody and investigation of perpetrators of endangered species trafficking. Furthermore, the prevalent illegal trade in endangered species is caused by the level of punishment applied, which is considered to be so light that it has no deterrent effect on individuals who trade in endangered species.

Therefore, a thorough understanding of CITES is important. Understanding CITES is critical for all stakeholders, including government agencies, non-governmental organizations, and the general public, in order to achieve better monitoring and reporting. There are many stakeholders that do not understand or are unaware of the endangered species that are protected, making monitoring and reporting difficult to accomplish.

Conclusion

The ratification of CITES has had a positive influence and resulted in reforms in Indonesia's attempts to safeguard endangered species. The implementation of CITES after ratification is demonstrated in the Indonesian government's implementation of obligations, notably through adjusting domestic policies by establishing numerous laws and regulations. Furthermore, the Indonesian government has delegated responsibility to a CITES management authority, namely the Directorate for Biodiversity Conservation (KKH), which is under the Ministry of Environment and Forestry (KLHK). Also, a scientific body, namely the Indonesian Institute of Sciences (LIPI), has been mandated to provide advice on the impact of trade on species status (scientific authority).

However, there are still various barriers to the ideal implementation of CITES in Indonesia. In general, there are four barriers. First, the classification of endangered species in national regulations is not in accordance with the classification of endangered species in CITES. Second, many endangered species are not protected by law. Third, law enforcement is ineffective and has no deterrent effect on perpetrators of endangered species trade. Fourth, there is little understanding of CITES, which affects monitoring and reporting.***

References

Books and Journals

- Ageng Rahmantio.(2019). *Peran Keputusan Presiden Nomor 43 Tahun 1978 Dalam Mencegah Kepunahan Spesies Langka*, Sultan Agung Islamic University, Unissula Student Conference
- Andreas Pramudianto. (2017). *Hukum Lingkungan Internasional*, RajaGrafindo Persada, Depok
- Ditha Putri Effendi. (2018). *Dampak Ratifikasi Convention on Internasional Trade in Endangered Species of Wild Fauna and Flora (CITES) Terhadap Perdagangan Satwa Langka di Indonesia (2012-2017)*, Doctoral Dissertation Repository, Indonesian Computer University
- Fathi Hanif. (2015). *Upaya Perlindungan Satwa Liar Indonesia Melalui Instrumen Hukum dan Perundang-Undangan*, Jurnal Hukum Lingkungan, Volume 2 Number 2
- Ollani Vabiola Bangun. (2014). *Efektifitas CITES (Convention on Internasional Trade in Endangered Species of Wild Fauna and Flora) Dalam Mengatur Perdagangan Hiu di Kawasan Coral Triangel (Implementasi di Indonesia)*, University of Riau, Jom FISIP, Volume 1, Number 2
- Sara Oldfield (ed). (2003). *The Trade in Wildlife. Regulating for Conservation*, Earthscan, London
- Sri Wartini. (1995). *Analisis Hubungan Instrumen Perdagangan Internasional dan Perjanjian Lingkungan Internasional (GATT dan CITES) dalam Perspektif Hukum Perjanjian internasional, Analysis of International Trade Instrument Relations and Intenational Environmental Agreements (GATT and CITES)*, UNISIA Journal, Number 26 Year XV, Quarter II
- Wahyadyatmika Permana Adi. (2017). *Implementasi CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) dalam Menangani Perdagangan Kukang Ilegal di Indonesia*. Journal of International Relations, Volume 3 Number 4

Internet Sources

- CITES Official Website, *How CITES Works*, in <https://www.cites.org/eng/disc/how.php>, retrieved on October 21, 2021
- Gakkum Penegakan Hukum Lingkungan Hidup dan Kehutanan, *91 Satwa Endemik Indonesia Direpatriasi Dari Filipina*, in <http://gakkum.menlhk.go.id/infopublik/detail/175>, retrived on October 22, 2021
- Komodo, Orangutan, Hingga Kukang, Mengapa Perdagangan Satwa Langka Terus Terjadi ?, in <https://www.bbc.com/indonesia/indonesia-47746441>, retrived on October 22, 2021.

Endnotes:

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- ¹Ageng Rahmantio.(2019). *Peran Keputusan Presiden Nomor 43 Tahun 1978 Dalam Mencegah Kepunahan Spesies Langka*, Sultan Agung Islamic University, Unissula Student Conference 2, p. 115
- ² Fathi Hanif. (2015).*Upaya Perlindungan Satwa Liar Indonesia Melalui Instrumen Hukum dan Perundang-undangan*, Jurnal Hukum Lingkungan, Volume 2 Number 2. p.31
- ³ Ollani Vabiola Bangun. (2014). *Efektifitas CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) Dalam Mengatur Perdagangan Hiu di Kawasan Coral Triangel (Implementasi di Indonesia)*, University of Riau, Jom FISIP, Volume 1, Number 2, p. 2
- ⁴ Andreas Pramudianto. (2017). *Hukum Lingkungan Internasional*, RajaGrafindo Persada, Depok, p. 24
- ⁵ Ditha Putri Effendi. (2018). *Dampak Ratifikasi Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Terhadap Perdagangan Satwa Langka di Indonesia (2012-2017)*, Doctoral Dissertation Repository, Indonesian Computer University, p. 2
- ⁶ *Ibid*, p. 5
- ⁷ Fathi Hanif, Op.cit, p. 34
- ⁸ CITES Official Website, *How CITES Works*, in <https://www.cites.org/eng/disc/how.php>, retrieved on October 21, 2021
- ⁹ Sara Oldfield (ed). (2003). *The Trade in Wildlife. Regulating for Conservation*, Earthscan, London, p. 63-64
- ¹⁰ Ditha Putri Effendi, Op.cit, p. 6
- ¹¹ Sri Wartini. (1995). *Analisis Hubungan Instrumen Perdagangan Internasional dan Perjanjian Lingkungan Internasional (GATT dan CITES) dalam Perspektif Hukum Perjanjian internasional, Analysis of International Trade Instrument Relations and International Environmental Agreements (GATT and CITES)*, UNISIA Journal, Number 26 Year XV, Quarter II, p. 55-56
- ¹² Fathi Hanif, Op.cit, p. 36
- ¹³ Wahyadyatmika Permana Adi. (2017). *Implementasi CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) dalam Menangani Perdagangan Kukang Ilegal di Indonesia*. Journal of International Relations, Volume 3 Number 4, p. 22-23
- ¹⁴ Gakkum Penegakan Hukum Lingkungan Hidup dan Kehutanan, *91 Satwa Endemik Indonesia Direpatiasi Dari Filipina*, in <http://gakkum.menlhk.go.id/infopublik/detail/175>, retrieved on October 22, 2021
- ¹⁵ Komodo, Orangutan, Hingga Kukang, Mengapa Perdagangan Satwa Langka Terus Terjadi ?, in <https://www.bbc.com/indonesia/indonesia-47746441>, retrieved on October 22, 2021.
- ¹⁶ Ditha Putri Effendi, Op.cit, p. 11