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INDUSTRY FINANCIAL TECHNOLOGY PEER TO PEER LENDING DI INDONESIA : KINI DAN NANTI

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Revolusi Industri 4.0 menghadirkan era disrupsi teknologi karena otomatisasi dan konektivitas di sebuah bidang akan membuat pergerakan dunia industri dan persaingan kerja menjadi tidak linear. *Financial Technology* merupakan sebuah inovasi yang menggabungkan antara *financial service* dan teknologi sebagai alternatif pilihan pada masyarakat selain lembaga keuangan konvensional. Salah satu jenis *fintech* di bidang pembiayaan ialah *peer to peer lending*. *Peer to Peer Lending* (P2PL) di Indonesia banyak diminati masyarakat dengan berbagai alasan salah satunya ialah karena kemudahan dan singkatnya waktu pencairan dana. Hal ini terbukti dari kenaikan jumlah pinjaman yang disalurkan terhitung hingga 31 Desember 2020 mengalami kenaikan sebesar 91,30 % dibanding tahun 2019.

Saat ini bisnis *fintech* di Indonesia setidaknya diatur dan diawasi oleh Otoritas Jasa Keuangan dan Bank Indonesia. Berbagai regulasi yang berlaku atas *fintech* diharapkan dapat mengembangkan industri keuangan yang dapat mendorong tumbuhnya alternatif pembiayaan bagi masyarakat dan mendukung pertumbuhan lembaga jasa keuangan berbasis teknologi informasi. Namun, pada kenyataannya regulasi ini belum sepenuhnya memberikan kepastian dan perlindungan hukum bagi para pihak. Belum adanya aturan khusus mengenai kewajiban mitigasi risiko khususnya risiko pinjaman bermasalah, ambang batas rasio NPL (*Non-Performing Loan*), serta implikasi hukum bagi penyelenggara P2PL dengan NPL tinggi mengakibatkan persoalan hukum tersendiri.

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Kata Pengantar

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Perguruan tinggi memegang peran penting dalam mengembangkan ilmu dan pengetahuan bagi masyarakat yang dapat menghasilkan SDM intelektual, keilmuan, profesional yang kreatif, berbudaya, toleran, demokratis, dan berkarakter tangguh. Dalam rangka memperkuat peran tersebut Fakultas Hukum Universitas Islam Indonesia secara konsisten melakukan penerbitan prosiding seminar nasional untuk mewadahi publikasi karya ilmiah dari insan pengembang ilmu pengetahuan. Penerbitan ini diharapkan dapat memberikan sumbangsih manfaat bagi pengembangan ilmu pengetahuan ke depannya.

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Yogyakarta, 30 Juni 2021
Editor

DAFTAR ISI

The Implementation Of Mutually Agreed Terms Of Nagoya Protocol In Protecting Genetic Resources In Indonesia From Biopiracy And Misappropriaation

Hafizhah Azzahra Ghani[1], Sri Wartini[2]

Abstract

Indonesia ratified Nagoya Protocol in Law No. 11 of 2013, however there are still occasional cases of biopiracy and misappropriation of traditional knowledge. The Mutually Agreed Terms governed in Nagoya Protocol is a written contract as a condition for access to Indonesia's genetic resources, in which it discusses access benefit sharing which could protect genetic resources and traditional knowledge from biopiracy and misappropriation in Indonesia. This research be made to examine and analyze the implementation of Mutually Agreed Terms based on Nagoya Protocol in Indonesia as a legal instrument to protect Genetic Resources in Indonesia from biopiracy and misappropriation and the implementation of the Mutually Agreed Terms in Indonesia has been compatible with the Nagoya Protocol. This research is normative legal research with qualitative analysis and with a research approach in the form of the statue, historical and conceptual. The research results show that Mutually Agreed Terms are private international laws that bind between the provider and the user, with the principles contained in international private law Mutually Agreed Terms have the potential to be used as a legal instrument in protecting genetic resources. In its implementation in Indonesia, Mutually Agreed Terms is only regulated in a regulation of the Minister of Environment and Forestry of the Republic of Indonesia regarding access to genetic resources of wild species and sharing of benefits from their use and the scope of Mutually Agreed Terms in protecting genetic resources is very limited. There should be a law specifically regulating genetic resources in Indonesia.

Keyword: *Nagoya Protocol, Mutually Agreed Terms, Biopiracy, Misappropriation*

Abstrak

Indonesia meratifikasi Protokol Nagoya dalam UU No. 11 tahun 2013, namun masih ada kasus biopiracy dan penyalahgunaan pengetahuan tradisional. Kesepakatan bersama yang diatur dalam Protokol Nagoya adalah kontrak tertulis sebagai syarat akses terhadap sumber daya genetik Indonesia, yang membahas tentang pembagian manfaat akses yang dapat melindungi sumber daya genetik dan pengetahuan tradisional dari biopiracy dan penyelahgunaan pengetahuan tradisonal di Indonesia. Penelitian ini dilakukan untuk mengkaji dan menganalisis implementasi kesepakatan bersama berdasarkan protokol Nagoya di Indonesia sebagai instrumen hukum untuk melindungi sumber daya genetik di Indonesia dari biopiracy dan penyalahgunaan pengetahuan tradisional serta implementasi kesepakatan bersama di Indonesia telah sesuai dengan protocol Nagoya. Penelitian ini merupakan penelitian hukum normatif dengan analisis kualitatif dan dengan pendekatan penelitian berupa Undang-undang, historis dan konseptual. Hasil penelitian menunjukkan bahwa kesepatan bersama merupakan hukum perdata internasional yang mengikat antara penyedia dan pengguna, dengan prinsip-prinsip yang terdapat dalam hukum perdata internasional kesepakatan bersama berpotensi untuk digunakan sebagai instrumen hukum dalam melindungi sumberdaya genetik. Dalam pelaksanaannya di Indonesia, kesepakatan bersama hanya diatur dalam Peraturan Menteri Lingkungan Hidup dan Kehutanan Republik Indonesia tentang akses pada sumber daya genetik spesies liar dan pembagian keuntungan atas pemanfaatannya dan lingkup kesepakatan bersama dalam melindungi sumber daya genetik sangat terbatas. Harus ada undang-undang yang secara khusus mengatur sumber daya genetik di Indonesia.

Kata Kunci: Protokol Nagoya, Kesepakatan Bersama, Biopiracy, Penyalahgunaan pengetahuan tradisional.

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Introduction

Indonesia is a state with plenty of natural resources, once those resources are reduced, it is possibly to produce genetic resources diversity as well as traditional knowledge. Genetic resources are one of the important instruments in the development of biotechnology in the world. Not only that, genetic resources are also the hallmark of a country. All biological material that includes genes and/or metabolic material that can be extracted from genes is referred to by the term genetic resources.[3] Based on the Convention on Biological Diversity (CBD), Genetic Resources (GRs) is a genetic material with actual or potential value.[4] Genetic material is material from plants, animals, microorganisms or other bodies that contain functional units of heredity. Genetic Resources according to Kameri-Mbote (1997) refers to the formation of bases providers of genetic diversity in a group or species and physical heritage. According to Kameri-Mbote, Genetic Resources consists of plant germplasm, animals and other organisms.[5]

Since Genetic Resources have economic and commercial value, the world is competing in developing its genetic resources, not a few that steal from other countries without permission. This incident is also called biopiracy or piracy of genetic resources. According to the biopiracy viewpoint, "biopirates" are performing "biopiracy"-the theft of natural and biological resources from their natural habitat and using such for commercial profit.[6] Biopiracy occurs when researchers or research organizations take biological resources without permission, Biopiracy is very detrimental to developing countries. Such thievery is viewed as being performed at the expense of the country where the substance was discovered in nature. [7] Biopiracy is the appropriation of the knowledge and genetic resources of and indigenous communities by individuals or institutions who seek exclusive control (patent or intellectual property) over these resources and knowledge.[8] Conflicts of interest between developing countries and developed countries have been generated by biopiracy initiatives which are often carried out by scientists from developed countries.[9] By carrying out biopiracy by developed countries, developed countries get a big advantage

[3]What are Genetic Resources? https://www.biodiversity.fi/geneticresources/genetic-resources/what-are-genetic-resources (accessed 6 October 2020)

[4] Indonesia, Law on Ratification of the United Nations Convention on Biological Diversity (United Nations Convention on Biological Diversity), Law Number 5 Year 1994, LN.No. 41 of 1994 „ TLN No. 1556, official translation of the original manuscript copy

[5] Annie Patricia Kameri-Mbote, Phillipe Cullet, The management of Genetic Resources: Developments in The 1997, Sessions of The Commission on Genetic Resources For Food And Agriculture, (Colorado Journal of International Environmental Law and Policy, 1997) as quoted by Elfrida Lubis, "Application of Sovereign Right Concentration and Intellectual Property Rights in the Perspective of Protection and Utilization of Indonesian SDGs (Dissertation: Universitas Indonesia, 2009)

[6] Paulo Prada, Poisonous Tree Frog Could Bring Wealth to Tribe in Brazilian Amazon, N.Y. TIMES, May 30, 2006, at Cl, available at http://www.nytimes.com/2006/05/30/business/worldbusiness/30frogs.html.

[7]Moh. Wahyu Syafi'ul Mubarok, Biopiracy dan Kapitalisme Global, https://hijauku.com/2018/12/12/biopiracy-dan-kapitalisme-global/ (Accessed 7 October 2020)

[8] Vanessa Danley, Biopiracy in the Brazilian Amazon: Learning from International and Comparative Law Successes and Shortcomings to Help Promote Biodiversity Conservation in Brazil, 7 FLA. A & M U. L. REV. 291, 292 (2012).

[9] Jordyn Ashley Bishopa, "Help Save The Seeds: A Call To Action For Local Governments To Introduce Legislation To Protect Community Seed Sharing, Libraries And Exchanges", *Hastings Science & Technology Law Journal,* Vol.9, winter, 2017, page 119

economically, while developing countries whose genetic resources are hijacked do not get any benefit from genetic resources that have been exploited by scientists in developing countries.[10]

To confirm the originality of this research and to prevent replication or reproduction of a theme with the same study emphasis. To assess the originality of the research, previous researches were traced by tracing the findings of previous studies, both written by Indonesian authors and authors from other countries. Several researches that are relevant to the writing of this research have been compiled as a comparison to previous studies. One of a journals with a title "*Perlindungan Hukum Terhadap Akses dan Pemanfaatan Sumber Daya Genetik*" written by Hendra Djaja, Faculty of Law, University of Merdeka Malang. There are two problem formulations in this research, first related to whether the Indonesian national legal system is in line so that it can accommodate all aspects of the protection and utilization of genetic resources and the second is regarding the optimal efforts that must be made by the government regarding preparing and implementing the contents of the Nagoya Protocol agreement. The result of this research is that protecting genetic resources in Indonesia cannot be done partially or sectoral. Protection of genetic resources in accordance with several international Conventions, for example Law Number 11 of 2013 concerning the Ratification of the Nagoya Protocol, needs to be followed up through careful legislation so as to harmonize several legal principles, for example protection of intellectual property rights on the one hand with the concept of protection of resource utilization. genetic itself which is a common property (communal). In this journal, the author focuses on knowing that the Indonesian national legal system is able to accommodate all aspects of protection and utilization of genetic resources and knowing the optimal efforts that should be made by the government regarding preparing and implementing the contents of the Nagoya Protocol agreement.

On October 29, 2010, the Nagoya protocol was presented and ratified under the title "Nagoya Protocol on Access and Benefit-Sharing".[11] More than 51 countries have ratified this protocol including Indonesia but there are still many piracy practices of genetic resources that occur in many parts of the world, for example. The case in Indonesia, snail cone theft found in Indonesian waters is a deadly type of snail, but the poisonous compounds in these snails can be painkillers, this is based on the findings of research conducted by US researchers. The invention was then commercialized and produced, but Indonesia did not get any benefit from this. In some cases, Tantono Subagyo has disclosed that there are 40 patents in Japan which are based on Indonesian spices.[12]

One famous case regarding biopiracy in Indonesia is the one In 1995, where the cosmetics corporation Shiseido (Japan) had committed bio-piracy by filing 51 patent applications using Indonesian medicinal plants and spices. The company has received

[10] Megan Dunagan, "Bioprospection Versus Biopiracy And The United States Versus Brazil: Attempts At Creating An Intellectual Property System Applicable Worldwide When Differing Views Are Worlds Aparts-And Irreconcilable?"*Law and Business Review of the Americas,*Vol, 15, Summer, 2009) page.613.

[11] History of Nagoya Protocol, 2016, https://www.cbd.int/abs/background/. (Accessed 4 November 2020)

[12] Yulia and Zinatul Ashiqin Zainul, 2013, "Melindungi Keanekaragaman Hayati dalam Kerangka Protokol Nagoya", Journal, University of Malitussaleh Lhokseumawe and University of Kebangsaan Malaysia, Vol. 25 No. 2, page 272.

patents from the Japanese Patent Office for some of these native Indonesian medicinal plants and spices. The annulment was eventually granted by the Japanese Patent Office in favor of the patent filed by Shiseido.[13] Besides biopiracy, misappropriation also becomes a new problem. Misappropriation is closely related to biopiracy, where the misappropriation is regarding the misuse of traditional knowledge. Traditional knowledge is defined, according to Agus Sardjono, as knowledge that is owned or regulated and used by a specific hereditary culture, society or ethnic group and continues to grow in accordance with environmental changes.[14] Traditional knowledge has emerged as a new legal problem because there is no domestic legal instrument capable of providing optimal legal protection for traditional knowledge which is currently being used by irresponsible parties.[15]

From the case examples above, the Nagoya protocol implementation in Indonesia is questioned on this matter. Nagoya protocol alluding to the access benefit sharing, in doing this there are two steps that must be taken in order to achieve its goals, first there is Prior Informed Consent as Access Sharing and Mutually Agreed Terms as Access Agreement. [16] What is meant by access sharing is that prior informed consent as an access for Informed consent of the state where genetic resources are before accessing these resources and from that there will be sharing benefit both the result of research or commercial value from the research, and Access Agreement means that negotiate and agree to the terms and conditions of access and use of these resources in the form of contractual agreement.[17] Where what is meant in this Nagoya protocol is Doing the deal and agreeing to the terms and conditions of access and utilization of these resources through the creation of Mutually Agreed Terms (MAT).

Mutually Agreed Terms (MAT) in the Nagoya Protocol mentioned in Article 18. It is defined, in an agreement between providers and users, as the conditions for the access to and the utilization of Genetic Resources as well as the sharing of benefits resulting from their Utilization in accordance with the Nagoya Protocol to the Convention on Biological Diversity.[18] Specifically, it seeks to facilitate the implementation of mutually agreed terms (MATs) between individual users and suppliers of genetic resources and/or conventional information associated with such resources (i.e. contractual obligations).[19] With the Mutually Agreed Terms as previously defined, if each of the terms and conditions stated in article 18 of the Nagoya Protocol is adhered to, it can become one of a legal instrument

[13]Barita Ayu Theressa,BKasus Pengetahuan Tradisional Dalam Kekayaan Intelektual, www.foxip.co.id (Accessed 27 October 2020)

[14] Agus Sardjono, 2005. Potensi Ekonomi dari GRTKF; Peluang dan Hambatan dalam Pemanfaatannya: Sudut Pandang Hak Kekayaan Intelektual, Media HKI Vol. I/No.2/Februari 2005.

[15] Budi Agus Riswandi dan M. Syamsuddin, Hak Kekayaan Intelektual dan Budaya Hukum, Jakarta, PT Raja Grafindo Persada, Page 25.

[16] Susette Biber-Klemm, Sylvia I. Martinez, Anne Jacob, Ana Jevtic, Agreement on Access and Benefit-sharing for Academic Research: A toolbox for drafting Mutually Agreed Terms for access to Genetic Resources and to Associated Traditional Knowledge and Benefit-sharing, Vol. 11 No.3, 2016.

[17] Protokol Nagoya, https://balaikliringkehati.menlhk.go.id/tentang/protokol-nagoya/ (Accessed 13 November 2020)

[18] Biber-Klemm S., Martinez S. I., Jacob A., Jevtic A. (2016): Agreement on Access and Benefit-sharing for Academic Research. Bern: Swiss Academy of Sciences (SCNAT) page 10.

[19] Information Brief, Short Paper of Compliance with Mutually Agreed Terms Article 18 of the Nagoya Protocol on Access and Benefit-Sharing, www.iucn.org (Accessed 28 October 2020)

to overcome biopiracy and misappropriation.[20] Article 18 of Nagoya Protocol is a supporting article of the previous article, namely article 6 paragraph 3 (g) regarding access to genetic resources and article 7 regarding access to traditional knowledge related to genetic resources.[21] Under the CBD in article 15 paragraph 4 and 7, Article 16 paragraph 3 and article 19 paragraph 2, which all mention mutually agreed terms in those article the concept of mutually agreed terms means that the access to genetic resources and the sharing of resulting benefits among the parties (the contracting country, as represented by its competent authority, and the party using the genetic resources) must be regulated by a contractual agreement.[22]

The aims of this research is to examine and analyze the implementation of Mutually Agreed Terms based on Nagoya Protocol in Indonesia as one of the countries that already ratified this protocol in 2013 it could be used as a legal instrument to protect Genetic Resources (GRs) in Indonesia from biopiracy and misappropriation. Second, is to examine whether the implementation of the Mutually Agreed Terms in Indonesia has been compatible with the Nagoya Protocol. This research is divided into two sections. First, the introduction and then followed by problem formulation and research methodology. Second is the analysis of Mutually Agreed Terms as a legal a legal instrument to protect Indonesia's genetic resources from biopiracy and misappropriation. Third is to examine whether the implementation of Mutually Agreed Terms in Indonesia in accordance with the Nagoya Protocol. Finally, the result of the research finds that Mutually Agreed Terms is a private international law in the form of contact agreement between parties from foreign country, from the contract it could become a legal instrument when both parties decide the dispute resolution and signing it because it arises the binding power like law of *Pacta Sunt Servanda.* The implementation of Mutually Agreed Terms in Indonesia regulated in a regulation of the Minister of Environment and Forestry of the Republic of Indonesia regarding access to genetic resources of wild species and sharing of benefits from their use even though is not cover for all types of genetic resources but the regulation of Mutually Agreed Terms in the regulation of the Minister of Environment and Forestry is covering almost all the aspect of Mutually Agreed Terms in Nagoya Protocol.

Problem Formulation

There are two problem formulation in this research. The first is whether Mutually Agreed Terms could be used as a legal instrument to protect Indonesia's genetic resources from biopiracy and misappropriation. Second, whether the implementation of Mutually Agreed Terms in Indonesia in accordance with what is written in the Nagoya Protocol.

Research Methodology

The method used in this research is normative legal research or prescriptive library law research, the concept of this type of research is based on what the law says which is aimed

[20] *Ibid.*
[21] Nagoya Protocol Article 6 and 7.
[22] Convention on Biological Diversity.

to find ways to overcome a problem.[23] In accordance with the author's research title and the normative research methodology used by the author, the research approach is carried out through: Statute Approach, Historical Approach, and Conceptual Approach. The data used in this research are in the form of legal materials consist of

A. Primary Legal Material

1. 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.
2. Convention on Biological Diversity (CBD).
3. Law No. 11 of 2013 regarding 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.
4. Law No. 24 of 2000 regarding international treaties.
5. Law No.5 of 1990 regarding conservation of living natural resources and their ecosystems.
6. Law No. 5 of 1994 regarding ratification of the United Nations Convention on Biological Diversity
7. Law No. 32 of 2009 regarding Protection and management of the environment
8. Law No. 18 of 2002 regarding the System National Research, Development, and Application of Science Knowledge and Technology
9. Government Regulation Number 41 of 2006 concerning Licensing for foreign universities, research institutes and Foreign Development, Foreign Business Entities and Foreigners in conducting research and development activities at Indonesia
10. Regulation of the Minister of Environment and Forestry of the Republic of Indonesia No: P.2 / MENLHK / SETJEN / KUM.1 / 1/2018.
11. As well as other International Laws and Conventions relating to this study.

B. Secondary Legal Materials, which is, a legal materials that provide an overview of primary legal materials include literature, scientific journals, dissertations, theses, academic reports and other secondary legal materials related to this research.

C. Tertiary Legal Material, which is, a supporting legal materials, namely legal materials that provide further instructions and explanations regarding primary and secondary legal materials, including: conventional books and / or electronic books (e-books), news, information on official websites, large Indonesian dictionaries, language dictionaries UK and other sources supporting and related to Primary and Secondary Legal Materials.

Data Analysis Method used in this research uses qualitative. Legal information derived from the findings of academic and legal academics in the library. All data related to the research objectives have been qualitatively analyzed, namely the by means of an in-depth abstraction and analysis, with reference to theories that construct a structure of thought. Each process is carried out with reference to the objectives of the study. All of these stages

[23] Soerjono Soekanto & Sri Mamudji, Penelitian Hukum Normatif (Suatu Tinjauan Singkat), (Jakarta: Rajawali Pers, 2001), page 13-14.

culminated in a formulation that was collected and described in a descriptive analytical manner.

Results and Discussion

a. Mutually Agreed Terms of Nagoya Protocol as Legal Instrument in The Protection of Genetic Resources and Traditional Knowledge

Mutually Agreed Terms are one of the requirements for exploring or accessing genetic resources along with the traditional knowledge contained in them. Mutually agreed terms are a document in the form of a contract that must be in place to authorize access to genetic resources and traditional knowledge. Relevant regulations relating to the conservation of genetic resources and their national knowledge are also given in the Nagoya Protocol. Meanwhile, in general, an instrument is a tool and a foundation for a substance, while according to Mochtar Kusumaatmadja, the legal term is an instrument of the values and rules that are used to govern human existence in social life, which must include the institution or institution and the processes required to make law a reality. In this case, legal instruments are characterized as an instrument or foundation rather than a statute. Legal instruments are needed to fulfill the function of the law itself, namely that is to create a society that lives peacefully in justice.

The CBD became the first international instrument to recognize the sovereign rights of States over genetic resources within their jurisdictions, to recognize the power of States to regulate and control access based on sovereign rights, to explain the relation between sovereign rights and access to genetic resources, and to establish the principle of benefit-sharing.[24] The prior informed consent itself specified in Article 6(1) of the Nagoya Protocol that, unless otherwise defined by that Party, access to genetic resources for their use is subject to the prior informed consent of the Party providing such resources.[25] The wording "subject to prior informed consent" tends to indicate that prior informed consent is required for access, which is the permission provided by the Party to provide a user with the genetic resource prior to access. Prior informed consent under the CBD is intended to safeguard the group that provides genetic resources and not the one that acquires them.

Finally, understanding the relationship between prior informed consent and mutually agreed terms is also relevant in the sense of Article 6(1). The CBD specifies that access shall be on mutually agreed terms, if it is given. Mutually agreed terms will precede prior informed consent, according to the reasoning of this Article, as consent for access follows or is based on mutually agreed terms.[26] The mutually agreed terms clearly demonstrate that there should be consensus on the terms reached by the parties and on which access to genetic resources is based. The establishment of mutually agreed terms, which is once again the terms and conditions of access benefit sharing, is therefore a process of quasi-negotiation between the Party providing genetic resources and the Party

[24] *Ibid.*
[25] *Ibid,* Article 6
[26] Convention on Biological Diversity, Article 15(4).

requesting access, whether a person, a corporation, an entity, a society, or a State.[27] Mutually agreed terms are normally from the content of the agreement between the parties, which is often referred to as a material transfer agreement.

National Focal Point (NFP) The NFP is responsible for liaise with the Secretariat and making available information on procedures for accessing genetic resources and defining mutually agreed terms, such as information on competent national authorities (CNA), indigenous and local communities, stakeholders.[28] When Indonesia ratified the Nagoya Protocol on 24 September 2013, the lead institution of the ABS process was the Ministry of the Environment and since 2013 the Ministry of the Environment has been functioning as the NFP for ABS (as well as for CBD). There was a big reform in the Government of Indonesia in 2014. The ABS NFP was automatically put in the possession of the new Director General. The Ministry of Environment was merged with the Ministry of Forestry and became the current Ministry of Environment and Forestry.[29]

Furthermore, It is the responsibility of the Competent National Authorities (CNA) to grant access or provide written proof that access requirements have been met, advise on relevant procedures and requirements for obtaining prior informed consent (PIC) and enter into mutually agreed terms and conditions.[30] In the focus group discussion (FGD) which was conducted on issues of status in the sense of national efforts to enact Law No. 11 of 2013 Ratification of the Nagoya Protocol on Access to Genetic Resources and Profit Sharing in 2017, the CNA for Indonesia has not yet been determined. This is mainly due to the fact that problems relating to genetic resources are dispersed under different ministries , and thus the CNA may also be made up of multiple ministries to determine which ministry would serve as coordinator of all relevant ministries. At the beginning of 2019, Indonesia identified two institutions for the CNA, namely the Ministry of Agriculture and the Food and Drug Administration.[31] Talking about how Mutually Agreed Terms can be used as one of the protection of genetic resources from biopiracy and fraud, because in the agreement there are important points regarding profit sharing access and there are also sanctions that can be obtained if one of the parties violates the agreement and the dispute resolution chosen in the agreement also too obtain the mutually agreed terms is through the National Focal Point (NFP) and supported by Competent National Authorities (CNA), where the National Focal Point and Competent National Authorities are the part of government which is authorized to establish Mutually Agreed Terms. [32]

In 2018, the Ministry of Environment and Forestry of the Republic of Indonesia issued Ministerial Regulation No. P.2 / MENLHK / SETJEN / KUM.1 / 1/2018 concerning

[27] Thomas Greiber, Sonia Peña Moreno, Mattias Åhrén, Jimena Nieto Carrasco, Evanson Chege Kamau, Jorge Cabrera Medaglia, Maria Julia Oliva and Frederic Perron-Welch in cooperation with Natasha Ali and China Williams, An Explanatory Guide to the Nagoya Protocol on Access and Benefit-sharing, IUCN Environmental Policy and Law Paper No. 83, page 94.

[28] Ani Mardiastuti, Implementing Access of Benefit Sharing in Indonesia : Review and Case Study, Journal of Manajemen Hutan Tropika, April, 2019.

[29] *Ibid.*

[30] *Ibid.*

[31] *Ibid.*

[32] Ani Mardiastuti, Implementing Access of Benefit Sharing in Indonesia : Review and Case Study, Journal of Manajemen Hutan Tropika, April, 2019.

access to genetic resources of wild species and sharing of benefits from their use. In article 14 of the regulation, explain about the institutions that have the authority in access to genetic resources, it is further written that the minister gives national authority to the director general who is competent in the forestry sector to represent the state as the leader of national activities for the Nagoya protocol. The responsibilities given include issuing access permits which include permits to acquire, carry or utilize genetic resources including those from wild species[33].

The interdependence between one country and another in the current global era is a reality that cannot be avoided. Natural resources, biodiversity, genetic resources or other environmental needs are also important things in the development of countries. 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 is a protocol that regulates the protection of genetic resources and traditional knowledge from biodiversity from biopiracy and misappropriation. one of the ways to prevent biopiracy and misappropriation mentioned in this protocol is by making Mutually Agreed Terms as mentioned in article 18 on this protocol. Specific requirements for the use of genetic resources or the use of traditional knowledge must be established in mutually agreed terms, which are usually contracts regulated by private law, because in mutually agreed terms is a contractual agreement between two or more countries it is categorized as international private law.

Basically, a contract is an arrangement with clear terms between two or more individuals or organizations in which there is a commitment to do something in exchange for a beneficial gain known as consideration. Since the law of contracts is at the center of most business or relates to the commercial value of transactions, it is a matter of legal interest and can require differences in circumstances and complexities.[34] The existence of a contract involves the first finding of the following factual elements is an offer. The second is the acceptance of the offer, which results in a meeting of the mind. The third is a commitment to be made. The fourth valuable consideration is an important factor (which can be a promise or payment in some form). Fifth is the moment or occurrence when the output must be done (meet commitments). The sixth is the terms and conditions for success, including the fulfillment of the promise, and the last is the performance. Mutually agreed terms are normally brought up in a civil law contract even if it is concluded between a public authority and a private entity, these parties related to the national focal point. It is commonly understood that contractual relationships where private parties are involved fall within the scope of private international law when one party resides in a foreign

[33] Ministerial Regulation No. P.2 / MENLHK / SETJEN / KUM.1 / 1/2018 concerning access to genetic resources of wild species and sharing of benefits from their use, Article 14.

[34] Advocates For International Development at a Glance Guide to Basic Principles of English Contract Law, prepared by lawyer from Allen and overy, http://www.a4id.org/wp-content/uploads/2016/10/A4ID-english-contract-law-at-a-glance.pdf (Accessed 17 February 2021)

country.[35] They are not usually dealt with through a public international law instrument, such as the Nagoya Protocol, which is considered to govern relations between States.[36]

Furthermore, a contract can be understood as a relationship between two interests that binds both parties. In other words, a contract can be said to be a "promise" which the parties have to keep and mutually agreed terms as an agreement essentially follow the fundamental meaning of the actual agreement.[37] In general, there are two basic concepts of international contract law which are founded on two principles. First, the principle of sovereignty is a national one, which represents the fact that national law plays a very important role in the creation of international contracts and cannot be inviolable, that the binding power of national law is absolute and that its status cannot be inviolable.[38] In Indonesia, the dispute settlement is by deliberation/*musyawarah mufakat*, rarely use the private and criminal domains at all because the benefits sharing chosen by the user is in the form of non-commercial. But, in the case for commercial it is related to intellectual property rights and there is private and/or criminal sanction if there is a violation. Second, the basic principle of freedom of contract. The concept of freedom which can be applied in several types of legal principles, including the freedom to determine the substance of a contract, the freedom to determine the form of a contract, binding contracts as a regulation, mandatory rules as an exception, and the international essence.[39]

With the two principles above, mutually agreed terms can be used as a binding agreement and can be achieved to protect genetic resources from biopiracy and misappropriation. Thus, Mutually Agreed Terms can be a legal instrument in protecting genetic resources from biopiracy and misappropriation in Indonesia because it has become a tool or means as a legal basis for protection and law enforcement, and mutually agreed terms, if implemented correctly, it will fulfill the forms and conditions of a legal instrument.

a. The Implementation of Mutually Agreed Terms of Nagoya Protocol in Indonesia.

Indonesia ratified the Nagoya protocol in 2013 and was adopted in the national law in Law no. 11 of 2013 concerning 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. With an abundance of natural and biological resources, Indonesia has genetic resources which are genetic material that has real or potential value and besides that there is a role for indigenous peoples where indigenous peoples understand traditional knowledge and traditional cultural expressions as cultural

[35] Thomas Greiber, Sonia Peña Moreno, Mattias Åhrén, Jimena Nieto Carrasco, Evanson Chege Kamau, Jorge Cabrera Medaglia, Maria Julia Oliva and Frederic Perron-Welch in cooperation with Natasha Ali and China Williams, An Explanatory Guide to the Nagoya Protocol on Access and Benefit-sharing, IUCN Environmental Policy and Law Paper No. 83, page 183-184.

[36] *Ibid.*

[37] Putri Lestari BR Simanjuntak, Immaculata Anindya Karisa, and Merry Paulina Happy, 2013, Prinsip-prinsip hukum dalam kontrak internasional, Surakarta. Dodik Setiawan Nur Heriyanto, 'Resolving Indonesia's Transboundary Haze Pollution in Light of the Toothless ATHP', in Marcel Szabo, *et.al. Hungarian Yearbook of International Law and European Law 2017,* The Hague, Netherlands, 2018.

[38] *Ibid.*

[39] Mengenal Dasar dan Prinsip Hukum Kontrak Internasional, https://bahasan.id/mengenal-dasar-dan-prinsip-hukum-kontrak-internasional/, 2021. (Accessed 15 Februari 2021)

heritage that is communally owned. So, there is an assumption that traditional knowledge and traditional cultural expressions are something that is open and dominates in society.[40] Indonesia had a law on biological conservation, where the purpose of conservation is to ensure the preservation of ecological processes that support life-support systems for sustainable development and human welfare, furthermore, to ensure that the diversity of genetic resources and ecosystem types is preserved so that they can promote growth, science and technology to meet the human needs of those who use living natural resources for welfare, and to monitor the ways in which living natural resources are used to ensure their sustainability.[41] This biological conservation is regulated in Law No.5 of 1990. As a legal basis, a national and comprehensive legislation on the conservation of living natural resources and their ecosystems is required to govern the protection of life support systems, the conservation of the diversity of plant and animal species and their ecosystems, and the sustainable use of living natural resources and their ecosystems to ensure their use.

In 1992, the CBD was signed at the Earth Summit in Rio de Janeiro, Brazil, and entered into force on 29 December 1993.[42] In Indonesia, this convention was ratified in 1994 through Law No.5 of 1994. followed by other laws that support the ratification of the CBD such as Law No.29 of 2000 on the protection of plant varieties, Law no. 18 of 2002 concerning the national system of research, development and application of science and technology. Apart from the Law there is also Government Regulation No. 41 of 2006 concerning licensing to carry out research and development activities for foreign universities, foreign research and development institutions, foreign business entities and foreigners, as well as the Minister of Agriculture Regulation No. 15 of 2009 concerning guidelines for the preparation of material transfer agreements as well as ministerial regulation No.67 of 2006 concerning the preservation and utilization of plant genetic resources.

Law No 11 of 2013 on the adoption, in the CBD, of the Nagoya Protocol on Access to Genetic Resources and the Equal and Fair Distribution of Benefits Resulting from their Use. The Nagoya Protocol is an international instrument aimed at governing the equal and fair distribution of the use of genetic resources. This includes the conservation of biodiversity and the transfer of technology, as well as the protection of indigenous and local community-owned traditional knowledge. Whereas Indonesia has ratified the regulatory basis of the Nagoya Protocol with the objective of guaranteeing the sovereignty of the State, of controlling the conservation of sustainable use and of sharing and equitable benefits.[43] In 2016, Law No. 13 of 2016 concerning Patents. This Law replaces Law No. 14 of 2001 on Patents. This law strengthens the protection of genetic resources. This means that Article 9 of Law No 13 of 2016 does not award patents for inventions relating to living beings, with

[40] Abdul Atsar, Perlindungan HukumTerhadap Pengetahuan dan Ekspresi budaya Tradisional Untuk Meningkatkan Kesejahteraan Masyarakat Ditinjau dari Undang-Undang No.5 Tahun 2017 Tentang Pemajuan Kebudayaan dan Undang-Undang No.28 Tahun 2014 Tentang Hak Cipta, Jurnal Law Reform, Vol 13, No. 2, 2017.

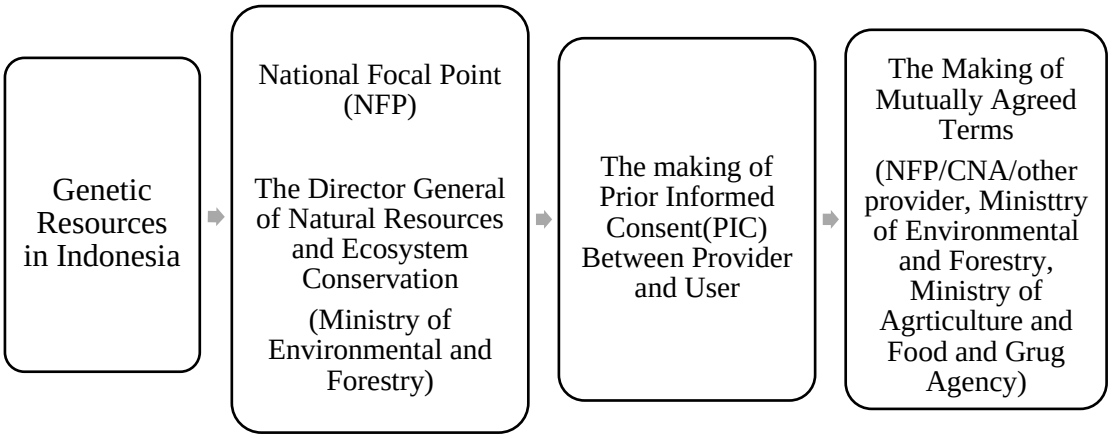
[41] UU 5 tahun 1990 tentang Konservasi Hayati accessed through https://www.jogloabang.com/, written on 7 october 2017 (accessed 20 January 2021).

[42] The Convention on Biological Diversity, https://www.cbd.int/convention/ (Accessed 20 January 2021)

[43] Sudaryat, Perlindungan Hukum Sumber Daya Genetik Indonesia dan Optimalisasi Teknologi Informasi, Journal of Bina Hukum Ligkungan, Vol. 4, No. 2, 2020.

the exception of microorganisms, biological processes required for the development of plants or animals, with the exception of non-biological processes or microbiological processes. The discovery of a genetic resource is not an innovation that is patentable.[44] In 2018, the Ministry of Environment and Forestry of the Republic of Indonesia issued Ministerial Regulation No. P.2 / MENLHK / SETJEN / KUM.1 / 1/2018 concerning access to genetic resources of wild species and sharing of benefits from their use.

Chart 1 The Access To Genetic Resources in Indonesia



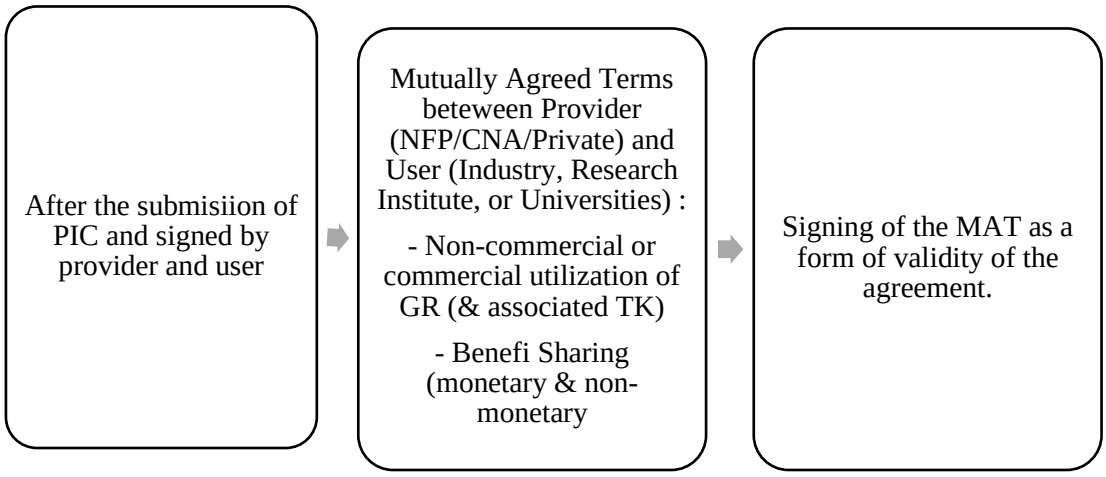
From the chart above, Genetic Resources under the control of the ministry of environmental and forestry, the very first step before access genetic resources is making Prior Informed Consent (PIC) which is where the provider is the ministry of environmental and forestry and the user can be an industry, research institute or university. After finishing the PIC, the second step is making Mutually Agreed Terms (MAT) between provider and user. In making MAT, Competent National Authority (CNA) as one of institution that has responsibility to Granting access or providing written proof that access criteria have been met and advising on the relevant procedures and requirements for obtaining and entering into mutually agreed terms and conditions.

ABS is certainly not a simple problem, although advice is available. While the protocol has been developed since 2010, the nature of the ABS is still difficult to enforce. As the organization dealing with ABS has not been properly located in Indonesia, this does not mean that there is no commercial exploitation of Indonesian biodiversity at international level. There is a strong probability that the international commercial transaction relating to genetic usage has taken place without regard to the ABS scheme. Another potential scenario for those wanting to use Indonesian genetic material has been redirected to neighboring countries in Southeast Asia, which share the same biogeographical areas, such as Malaysia and Thailand (except for the country endemic

[44] *Ibid.*

species). If this continues or has already occurred, Indonesia is or has lost the ability to use its capital by foreign cooperation.[45]

Chart 2 The mechanism of Mutually Agreed Terms making



From the chart above, after the submission of PIC then making MAT. In MAT it should contain the purpose of accessing genetic resources whether it is for commercial or non-commercial utilization and after that the form of benefit sharing whether is monetary like royalties or non-monetary like giving technology transfer or training in order to Improve genetic resources research facilities. The last which is no less important than the previous condition is deciding dispute resolution, whether in the form of negotiation in good faith, mediation, arbitration, or the jurisdiction to which the parties will subject any dispute resolution process.

In its implementation in Indonesia, international treaties that have been ratified and put into effect in Indonesia require more operational regulations to be implemented in accordance with those contained in the articles of the international agreement. It is very important and necessary for the existence of an international treaty which has been ratified to be able to provide new inputs to enrich national law. In addition to this, Indonesia will play a greater role in foreign affairs by participating in and carrying out essential activities relevant to this international agreement.

The institutions that are responsible for protecting genetic resources and traditional knowledge are the relevant ministries under the supervision of the presidency, namely the minister of environment and forestry and also the minister of agriculture in which there is an organization in charge of being responsible for genetic resources. Apart from the Ministry there is also the Indonesian Institute of Sciences which is a state research institute. Material Transfer Agreement needs to be developed since they include rules that must be fulfilled by recipients of products, such as, for example, for research activities only, not for commercial purposes. Likewise, if the material to be sent or exchanged has the potential

[45] *Ibid.*

for Intellectual Property Rights, a policy that governing the granting of approval for the material transfer or known as Material Transfer Agreement needs to be made.[46]

Indonesia in implementing Mutually Agreed Terms based on the Nagoya Protocol in Indonesia, is still based on the Minister of Agriculture Regulation No. 15 / Permentan / OT.140 / 32009 concerning the guidelines for drafting material transfer agreements (MTA). The Material Transfer Agreement (MTA) is a type of mechanism that can facilitate easy, flexible and negotiable agreements for the use of genetic resources. Benefit sharing is an agreement regulated in the MTA based on an agreement between the parties (provider and recipient).Likewise, the interests of local communities who are entitled to share benefits from the use of genetic capital are also important.[47] Besides Minister of Agriculture Regulation No. 15 / Permentan / OT.140 / 32009, it is supported by the Ministry of Research and Technology issuing Government Regulation Number 41 Year 2006 concerning licensing to carry out activities and development for foreign universities, foreign business entities. The two Regulations above were issued prior to the ratification of the Nagoya protocol. In 2014, one of the institutions responsible for this transfer material, namely the Indonesian Institute of Sciences (LIPI), also enacted a regulation, namely the regulation of the head of the Indonesian scientific institute No.9 of 2014 concerning guidelines for material transfer agreements within the Indonesian Institute of Sciences. In addition, the Ministry of Environment and Forestry as the NFP in the Nagoya protocol of the Ministry of Environment and Forestry of the Republic of Indonesia issued Ministerial Regulation No. P.2 / MENLHK / SETJEN / KUM.1 / 1/2018 concerning access to genetic resources of wild species and sharing of benefits from their use

Apart from preventing biopiracy and misappropriation, it comes from the Mutually Agreed Terms, Law no. 13 of 2016 concerning Patents can be one of the laws that prevent the theft of genetic resources accompanied by traditional knowledge, especially in cases of Biopiracy and misappropriation which produce commercial value. The principle of management of intellectual property rights in Indonesia involves two mechanisms interacting in one structure with each other, namely the process of creating an innovation before an invention is acquired to find legal protection, as well as the process of selling the invention until it is profitable.[48] In law no. 13 of 2016 concerning patents, the protection of genetic resources and traditional knowledge regulated in article 26 paragraph 3 that stated The distribution of yields and/or access to the use of genetic resources and/or traditional knowledge is carried out in accordance with statutory regulations and international agreements in the field of genetic resources and traditional knowledge.[49]

[46] Ahmad Redi,Analisis dan Evaluasi Hukum Tentang Pemanfaatan Sumber Daya Genetik,Center For Research and Development of National Legal System National Legal Development Agency, Ministry of Law and the Human Rights Republic of Indonesia, Jakarta, 2015. Andriyani Masyitoh, "Role Of Judicial Activism In Environmental Dispute Resolution Before The State Administrative Court," *Prophetic Law Review* 3, no. 1 (June 30, 2021): 1–15

[47] Devica Rully Masrur, Upaya PerlindunganSumber Daya Genetik Berdasarkan Undang-Undang No.13 Tahun 2016 Tentang Paten, Jurisprudence Journal, Vol.8 No.2, 2018.

[48] Tolib Setiady, Intisari Hukum Adat Indonesia (Dalam Kajian Kepustakaan), Bandung: Alfabeta, 2008, hal. 32-35.

[49] Article 26 of Law No.13 of 2016 concerning patents.

Conclusion

From the analysis, it can be concluded that First, Indonesian is gifted by God Almighty and wealth in the form of abundant natural resources, both on land, in water and in the air, which is the basic capital of national development in all fields. For the welfare of the Indonesian people in particular and the quality of human life in general, the fundamental capital of these natural resources must be secured, sustained, preserved and optimally used in a way that ensures peace, harmony and balance, both between humans and the God as a creator. Considering that the Republic of Indonesia is a state based on law, the conservation management of living natural resources and their ecosystems needs to be given a clear, firm and comprehensive legal basis to ensure legal certainty for such management efforts. This can be seen from Indonesia's action to ratify its 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 in 2013, in which the protocol regulates in detail about access to genetic resources being followed with traditional knowledge. The main objective of the Nagoya Protocol as established in Article 1 is the fair and equitable sharing of the benefits arising from the utilization of genetic resources, including by access to these resources, technology transfer and also funding. In its implementation in Indonesia, Indonesia has three principles in protecting genetic resources, namely state sovereignty, prior informed consent and mutually agreed consent. Mutually Agreed Terms in the form of contractual agreement, which can be used as legal instruments because mutually agreed terms have met the requirements of a legal instrument but also with the support of the two previous principles, namely state sovereignty and also prior informed consent.

Second, In implementing the Mutually Agreed Terms in the Nagoya Protocol, Indonesia is good enough by making the Minister of Environment and Forestry Regulation No. P.2 / MENLHK / SETJEN / KUM.1 / 1/2018 regarding access to genetic resources of wild species and sharing of benefits from their use. But it would be better if there was a further law after the ratification of the Nagoya Protocol which specifically regulates the protection of genetic resources and traditional knowledge in commercial use, so it does not only depend on Law No. 13 of 2016 concerning patents only because in this patent law genetic resources and traditional knowledge are only alluded to in a few articles and with further clarification, the national focal point who. Furthermore, Indonesia has statutory regulations regarding MTA (material transfer agreement) or material transfer agreement letters that are similar in shape to Mutually Agreed Terms (MAT) but have different functions, and this must be given special attention, because the rules already exist, but have not been well disseminated to the wider community, especially to researchers itself. whereas, there are no separate and detailed laws and regulations in Indonesia regarding Mutually Agreed Terms.

References

Books

Bahder Johan Nasution, , *Metode Penelitian Ilmu Hukum*, Mandar Maju, Bnadung, 2008.

Budi Agus Riswandi dan M. Syamsuddin, *Hak Kekayaan Intelektual dan Budaya Hukum*, Raja Grafindo Persada, Jakarta, 2005.

Dodik Setiawan Nur Heriyanto, 'Resolving Indonesia's Transboundary Haze Pollution in Light of the Toothless ATHP', in Marcel Szabo, et.al. *Hungarian Yearbook of International Law and European Law 2017*, The Hague, Netherlands, 2018.

Tolib Setiady, *Intisari Hukum Adat Indonesia (Dalam Kajian Kepustakaan)*, Alfabeta, Bandung 2008.

Journal

Abdul Atsar, Perlindungan HukumTerhadap Pengetahuan dan Ekspresi budaya Tradisional Untuk Meningkatkan Kesejahteraan Masyarakat Ditinjau dari Undang-Undang No.5 Tahun 2017 Tentang Pemajuan Kebudayaan dan Undang-Undang No.28 Tahun 2014 Tentang Hak Cipta, *Jurnal Law Reform*, Vol 13, No. 2, 2017.

Ani Mardiastuti, "Implementing Access of Benefit Sharing in Indonesia : Review and Case Study", *Journal of Manajemen Hutan Tropika*, April, 2019.

Devica Rully Masrur, "Upaya PerlindunganSumber Daya Genetik Berdasarkan Undang-Undang No.13 Tahun 2016 Tentang Paten", *Jurisprudence Journal*, Vol.8 No.2, 2018.

Jordyn Ashley Bishopa, "Help Save The Seeds: A Call To Action For Local Governments To Introduce Legislation To Protect Community Seed Sharing, Libraries And Exchanges", *Hastings Science & Technology Law Journal,* Vol.9, winter, 2017.

Jordyn Ashley Bishopa, "Help Save The Seeds: A Call To Action For Local Governments To Introduce Legislation To Protect Community Seed Sharing, Libraries And Exchanges", *Hastings Science & Technology Law Journal,* Vol.9, 2017.

Masyitoh Andriyani. "Role Of Judicial Activism In Environmental Dispute Resolution Before The State Administrative Court." *Prophetic Law Review* 3, no. 1 (June 30, 2021): 1–15

Megan Dunagan, "Bioprospection Versus Biopiracy And The United States Versus Brazil: Attempts At Creating An Intellectual Property System Applicable Worldwide When Differing Views Are Worlds Aparts-And Irreconcilable?"*Law and Business Review of the Americas,*Vol, 15, 2009..

Meray Hendrik Mezak, Jenis, Metode dan Pendekatan dalam Penelitian Hukum, Law Review, Fakultas Hukum, Universitas Pelita Harapan, Vol. V, No. 3, Maret 2006

Sudaryat, "Perlindungan Hukum Sumber Daya Genetik Indonesia dan Optimalisasi Teknologi Informasi", *Journal of Bina Hukum Ligkungan,* Vol. 4, No. 2, 2020.

Susette Biber-Klemm, Sylvia I. Martinez, Anne Jacob, Ana Jevtic, Agreement on Access and Benefit-sharing for Academic Research: A toolbox for drafting Mutually Agreed Terms for access to Genetic Resources and to Associated Traditional Knowledge and Benefit-sharing, Vol. 11 No.3, 2016.

Yulia and Zinatul Ashiqin Zainul, "Melindungi Keanekaragaman Hayati dalam Kerangka Protokol Nagoya", *Journal from University of Malitussaleh Lhokseumawe and University of Kebangsaan Malaysia*, Vol. 25 No. 2, 2013.

Statutories

Convention on Biological Diversity (CBD).

Law No. 11 of 2013 regarding 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.

Law No. 18 of 2002 regarding the System National Research, Development, and Application of Science Knowledge and Technology

Law No. 5 of 1994 regarding ratification of the United Nations Convention on Biological Diversity

Law No.5 of 1990 regarding conservation of living natural resources and their ecosystems.

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.

Government Regulation Number 41 of 2006 concerning Licensing for foreign universities, research institutes and Foreign Development, Foreign Business Entities and Foreigners in conducting research and development activities at Indonesia

Regulation of the Minister of Environment and Forestry of the Republic of Indonesia No: P.2 / MENLHK / SETJEN / KUM.1 / 1/2018.

Websites

Advocates For International Development at a Glance Guide to Basic Principles of English Contract Law, prepared by lawyer from Allen and overy, available at http://www.a4id.org/wp-content/uploads/2016/10/A4ID-english-contract-law-at-a-glance.pdf.

History of Nagoya Protocol, available at https://www.cbd.int/abs/background/ What are Genetic Resources? Available at https://www.biodiversity.fi/geneticresources/genetic-resources/what-are-genetic-resources

Mengenal Dasar dan Prinsip Hukum Kontrak Internasional, available at https://bahasan.id/mengenal-dasar-dan-prinsip-hukum-kontrak-internasional/, 2021.

Moh. Wahyu Syafi'ul Mubarok, *Biopiracy dan Kapitalisme Global*, available at https://hijauku.com/2018/12/12/biopiracy-dan-kapitalisme-global/.

Paulo Prada, *Poisonous Tree Frog Could Bring Wealth to Tribe in Brazilian Amazon*, N.Y. TIMES, May 30, 2006, at Cl, available at http://www.nytimes.com/2006/05/30/business/worldbusiness/30frogs.html.