

Material Transfer Agreement as an Attempt to Protect Genetic Resources and Intellectual Property to Actualize Indonesian Welfare

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Article Info Volume 83 Page Number: 8445 - 8458 Publication Issue: March - April 2020

Article History Article Received: 24 July 2019 Revised: 12 September 2019 Accepted: 15 February 2020 Publication: 09 April 2020

Abstract:

This research will analyze the legal protection of genetic resources and intellectual property to realize economic development in Indonesia. The approach used is normative law, to find the rule of law, legal principles, and legal doctrines in answering the legal issues at hand. By entering into a transfer agreement or a Material Transfer Agreement (MTA), on genetic resources and intellectual property. Indonesia's genetic resources need to be managed and utilized as well as being preserved and protected for the welfare of the people. The material transfer agreement aims to protect the material and ensure that research, development and application of technology related to the material does not cause harm to society and the environment. In addition, another goal is to encourage the use of materials to improve national competitiveness and public welfare

Keywords: law, system allocation, legal protection

1. INTRODUCTION

In the era of globalization, the demands of development on science and technology are the main issues both in developed and developing countries in order fulfil human necessities that are always dynamic.

Technology as a patent product has become one of the most strategic commodities in international trade, where technology plays a significant role for society necessities. This is due to the almost of all human necessities in this modern century derived from the products born of human intellectual in the field of science and technology.¹

Biodiversity (biological diversity) is the main focus of human life, because everyone needs it as a life sustain, as a source of food, feed, raw material, industry, pharmaceutical and medicine. Biodiversity is a diversity



among living creatures of all sources, including the lands, oceans and other aquatic ecosystems as well as ecological complexes that are part of the species diversities, between species and ecosystems.

Indonesia is one of the countries that has biggest biodiversity which usually called by megadiversity (both flora and fauna) and equivalent with Brazil in the American Continent and the Zaire or Democratic Republic of the Congo in Africa. According to the World Conservation Monitoring Committee (1994) in Ramono (2004), Indonesia's Earth Wealth includes 27,500 (twenty seven thousand and five hundred) species of flowering plants or by 10% (ten percent) of all plants in the world, 515 (five hundred and fifteen) types of mammals or 12% (twelve percent) of all mammals in the world, 1,539 (one thousand five hundred and thirty nine) of a kind of bird or 17% (seventeen percent) of all types of birds in the world and 781 (seven hundred and eighty one) types of reptiles and amphibious or of 16% (sixteen percent) of all reptiles and amphibious in the world.²

Biodiversity of both plants and animals owned by Indonesia should be used or utilized for the welfare of its community. This is as described in Article 33 paragraph (3) of the 1945 Constitution, that "The land, the waters and the natural resources within shall be under the powers of the State and shall be used to the greatest benefit of the people." Referring to the contents of the article, that all biodiversity owned by Indonesia, must be able to bring its greatest benefit to society in relation to the economic aspects.

According to Betho (2014) the utilization of biodiversity as the Genetic Resources (GR) at least provides three benefits to the community, sociologically, biological resources are useful for human survival in the context of human relationships with such as food, clothing, and housing. Biodiversity as GR can be said as the foundation of human sustainability. Betho stated. biodiversity as a foundation because at its core the GR have an interest in various aspects of human life, such as food security, environmental conservation and sustainable development as well as economic. While economically, biological resources have the potential to improve human welfare and community standards. In addition to these benefits, biological resources are also the resources of science and technology that are beneficial in the development of culture and national identity.³

The commercial potency involving genetic resources and related traditional knowledge has grown very rapidly in the last two decades along with the rapid development of the biotechnology industry. The of biotechnology development has encouraged the development of economic potential, utilization and commercialization of GR. Regarding this, Indonesia and the tropical countries with an abundant wealth of genetic resources should be in a strong position to gain advantage in the utilization of genetic resources. However, the fact is far from the expectation. *Biopiracy* becomes the most common thing that befalls developing countries with an abundant wealth of genetic resources. Developed countries with their technological capabilities tend to have taken unfair advantage of genetic resources and



traditional knowledge from developing countries.⁴

The economic utilization of the GR using biotechnology, especially in the field of pharmacy and biotechnology cannot be denied developed by the IPR system, especially the patent and protection of plant varieties (PVT). From the data in the world's patent offices including Indonesia. Thus, there will be a shift in the application of pharmaceutical patents from the invention of research into biotechnology.

The economic potential of the utilisation and commercialization of the GR usually involves traditional knowledge and promotes *biopiracy* whereby took unfair advantages from the GR and related traditional knowledge are currently carried out at least In these following two ways:

- Theft, abuse, or free riding genetic resources and/or traditional knowledge through the patent system
- Retrieval, unauthorized collection for commercial purposes of genetic resources and/or traditional knowledge.

The management and protection of genetic resources and traditional knowledge for Indonesia has become a very urgent necessity. Indonesia is the country with the largest genetic resources in the world after Brazil. With its culture and traditional knowledge, the most important thing is how Indonesia utilize and develop its leadership into something for the welfare of its community. Furthermore, the magnitude of potential genetic resources, traditional knowledge and local wisdom in Indonesia makes it one of the most interesting research destinations among researchers including foreign researchers. On the other hand, there have been many research results of local and foreign researchers with the main focus of Indonesian genetic resources and colleges. But the data and results of the research are not all well recorded.⁵

In addition, research that comes down from medicines industry, cosmetics, and health food are loaded in various packaging. Unfortunately, the final product in packaging and assembled by logos or labels rarely mentions the origins of its raw materials. Even the idea originated (in the case of traditional knowledge for drugs). The mentioned system of storing or managing a database of genetic resources is a system that allows obtaining a complete package of relevant information from a variety of data which scattered and required for its purpose. Other national needs can also support the patent office to providing access of patent-related data derived from genetic resources and traditional knowledge including in the effort to abort foreignowned patents for example is because of the unauthorized utilization violations.

Genetic Resources (GR) are a part of living creatures that are essential to human life. If this is associated with food, the plant genetic resources become invaluable as expressed by Stephen Brush (1994) as it is cited by Dutfield (2002).¹

¹ Devica Rully Masrur, (2018), Efforts to protect Genetic Resources Under Act No. 13 of 2016 concerning Patents. Jurisprudence Law Journal, Vol.8, No.2, pp.55-56.



"Plant Genetics Resources "the foundation of all food production, and the key to feeding unprecedented members of people in times of climate and other environmental change, and therefore comprise perhaps the important category of biological resources"

According to the article 2 of Convention on Biological Diversity (CBD), the meaning of genetic resources is genetic of actual or potential value. WIPO adds the definition of genetic material to "any material plant, microbial or other Origin animal. containing function units of hereditary". Where the functional units of heredity are all organisms and biochemicals extracts from tissue samples contain *deoxyribonucleic* acid (DNA) or for certain cases of ribonucleic acid (RNA) such as agents, plasmids and so on.

Genetic resources are a character of plants or animals that can be inherited, be beneficial or potentially exploited by humans. Due to the value of such genetic resource potential, both for social and economic interests, many regional and international discussions on the utilization and protection of the GR. In the context of utilization, before the CBD, there is thought that the biodiversity in this world is the human heritage (common heritage), so without considering the existence of the GR everyone could take advantage of it freely. However, this thought was opposed by a country that owns and maintains a specific premise, but the role of local communities to preserve and capitalize on large-mentioned GR, so that recognition of the community remains the utilization of GR in its regional authority.

Article 3 of CBD strictly states:

"States have, in accordance with the Charter of the United Nations and the principles of international law. the sovereign right to *exploit* their own to their resources pursuant own environmental *politics*, and the Responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

In the protection of patent rights, if the scope of protection provided is widespread to the patent holders, then the legal protection system has an impact on the protection of patents held by a person becomes firm, but the process to take over the technology in the country is not easy, because the unsubstantial modifications of the other party can still be assessed as patent infringement. Otherwise, if the protection given to the patent holder is too narrow, the patent holder is easily harmed because of substantial modifications can still be assessed not as a violation of patent rights, positively effects country's but its technological developments.⁷

Patents are given to protect the invention of technology. Patents are granted for a limited period of time, and the purpose is to prevent other parties, including the independent inventor of the same technology, using those inventions during its patent protection, so that investor or patent holders gains



economic benefits from their invention. Instead, the patent holder must publish all details of its invention so that at the end of the patent protection, the information relating to the invention is freely available to public audience.⁸

In the previous description. It is said that the new type of living creatures can also be patented, as long as the invention is new, contains inventive steps and can be applied in the industry. What is meant by "the new living creature" is any invention related to the life of the flora and fauna of both as a unity or division, from the largest to the smallest. Examples are bacteria, cells, microorganisms and parts of DNA or viruses and vectors that are commonly known in biotechnology.

In the era of genetic engineering technology, it has been found an invention of living creatures whose DNA formula has been replaced or supplemented so that the creature has traits such as the original creatures. Creatures like this are called "Genetic modified creatures". In July 2000 two major consortiums in America, "The Human Genome Project Group and The Celera Company", have published books about humans. This book is a result of annual work that successfully reveals the formulation of life, that is, the framework of the nucleus pair as much as 3.2 billion contained in human DNA. Every human being has important elements in his body; Cells, in each cell there are 23 pairs of chromosomes, each chromosome containing a solid blob of human DNA, a piece of DNA for example, consisting of 1000-500,000 pairs of nucleus, each genes determines the characteristics, natures and shapes of the human, every genes is inductively protein generation.

A change in a piece of DNA is called mutations and each mutation causes "abnormalities". The mutation technique to change the pieces of DNA is known as manipulation. Theoretically, all its inventions relating to this can be patented. However, each country has a different policy regarding the invention of the new living creatures. In Indonesian patent law, all living creatures cannot be patented, except for microorganisms. While the biological processes for producing plants or animals also cannot be patented except nonbiological or microbiological processes.

As known, patent applications must be accompanied by a specification that contains the full description of the invention of the patent-requested. If the invention concerns a "new living creature" There should be a detailed explanation of the invention. The applicant can provide this explanation in the description section. The explanation is made in detail by including the money data related to morphology, type of taxonomy, and its Given biochemical properties. the complexity of the ins and outs also the knowledge of the sciences concerned, it is sometimes not easy to give a complete explanation of the found creatures with a simple description. In fact, the inventor can find it difficult to write about the invention. To overcome this problem, the countries of the world met in Budapest, the capital of



Hungary, in 1980 and reached an agreement known as the Budapest Treaty.

In the Budapest Treaty it is mentioned that if there is a difficulty in making patent specifications. Terms, "The inventions must be disclosed in detail so as to be known by ordinary parties working in the field of technology filed patent" is deemed to be fulfilled when the investor entrusts the examples of "living creatures" in official storage.

The storage of examples of "living officially determined by creatures" is countries that have signed the "Budapest Treaty". The storage places for example "New Living Creatures" are referred to in the Budapest agreement as the International Depository Authority (IDA) or called Depository. Articles 18, 19, and 20 and Government Regulation No. 34 year 1991 on the procedures of Indonesian patent regulating demand, patent request documents about new living creatures. In the regulation government the term "Microorganisms" is called a new creature.

In the Australian Patent Office, if a patent request concerns a "new living creature invention" and the explanation relies on storage in one of the official storages, filing a patent request should include evidence from the storage. Among other things should be known storage names for example of "new creatures" and their storage numbers. Usually these data are contained or recorded in receipts from the official storage which must be presented as complementary specifications.⁹ Of all the categories of conventional intellectual property, the offers granted by patent law on Indonesian traditional arts may be the least. Patents are held to develop science and technology, and not for (products), artistic culture, literature or music. In fact, when cultural expressions have a technological dimension, patent protection is available only for completely creations/inventions, and is new not available for simple upgrades or just a few based on existing knowledge. Jad, for example, no one can make a patent of the ancient bamboo flute in its original form or a more modern variant that uses plastic in some parts. And also, patent protection has a very limited duration in Indonesia, for example, only 20 years, along with the law No. 14 year 2001 about patents.

Thus, what can be taught from patent law. If for now, it is mainly useful as a warning over excessive reliance of formalities to support the intellectual property regime. Wherever the world, the fact that patents are given affirmatively only after the submission of applications/registrations and approvals for applications that are required its terms, is continuously a problem. This is due to the process of patent registration, which is a complex process, usually this registration cannot be resolved without any assistance from the experts. Because this kind of assistance required the cost, obtaining a patent tends to be expensive. To some point, patent system precisely creates a gap between rich and poor intellectual property; corporations and major instance may successfully submit claims for patent registration.¹⁰



2. RESEARCH MATERIALS AND METHOD

2.1 Nature of Research

This writing is using a descriptive research done with a normative juridical approach. The types and sources used are secondary data. Data collection is done mainly by document study technique (library research and online research) by doing an inventory of required secondary data, either primary legal material, secondary or tertiary, then perform a research about its history and the synchronization between its legal materials. The primary legal material used, consists of statutory regulations.

2.2 Research materials

Literature research using documents, research materials of secondary legal material that will be used are the form of scientific works, research and literature results related to the substance of research. The tertiary legal materials, which are materials that support primary and secondary legal material information. That are other data from newspapers, journals, dictionaries, and encyclopedias.

2.3 Data Retrieval

The data retrieval in this study is to conduct literature studies on the books. Articles, research results and legislation related to the consistency of material arrangement transfer agreement as an attempt of patent protection.

2.4 Research Course

Research will be conducted analysis on the conception of the welfare state with references to statutory regulations, books,

articles, and pre-existing research results. Furthermore, will analyses the consistency of a material transfer agreement as an attempt for genetic resources protection.

2.5 Data Analysis

Normative legal research then the data related to legal research is analysed by conducting analyses that are essentially redeveloped in three aspects, which are clarifying, comparing, and linking to other words, a researcher using qualitative research method is not merely aimed at revealing the truth, but to understand the truth to the data that has been collected from the literature research. Next, will be analyzed on a qualified basis to answer the proposed research problem.

3. RESULTS AND DISCUSSION 3.1 Protection of IPR

Intellectual property right is commonly abbreviated as "IPR" in Indonesian is a word match called the *Intellectual Property Right* (IPR), which is the right of ideas that producing a product or process that is useful for human beings. Shortly, IPR is a right to gains benefits economically at the result of an intellectual creativity. Objects in the IPR are works that arise or are made due to human intellectual abilities.¹¹

According to Budi Santoso, Intellectual Property Rights is interpreted as a result of human intellectual ability in various fields that produces a process or product beneficial to human beings. Intellectual property has two main aspects, the first is the process and the product covers a wide range of areas, ranging from the field of arts and literatures



to inventions and innovations in the field of technology and all other forms that are the result human creativity through its ideas, senses, and carnations. Second, the ideas of work or inventions create property rights for the inventor and the discoverer. Its nature as proprietary, hence the right of a creator or inventor of his creation must be protected.

Protection against the IPR basically a recognition of the wealth and the right to a certain period of time to gains benefits or the self-exploitation of its wealth. For that period of time other parties cannot enjoy or or exploit such rights use without permission. " IPR " is tend to be exclusive and absolute, meaning that the IPR can be maintained against anyone and the person who has the right is able to sue against any violations committed by anyone. IPR holders also have a monopoly right, which is the right that prohibiting anyone to make or inventions without use their their permission.

The concept of IPR's possession was born from John Locke, 16th-century English philosopher who stated about property rights theory. According to Locke, the property rights is one of three things that cannot be separated from humans. Human birth "tabula rasa" means in free state and equivalent under the law of nature. Nature law prohibits anyone from damaging, eliminating life, freedom, and property rights. These three things, according to Locke, cannot be separated from the human beings that come from God. Every human owning their self and no one has any right to interfere with the other except the human itself, including the works which made by their body, hand and their five senses. It means that everyone naturally has the right to have all the persona potential and all the work they produced.¹²

3.2 IPR Protection theory

The IPR protection theory stated by Robert M. Sherwood are: Reward theory says that the creator or inventor that will be given protection should be rewarded for their efforts. It is regarding community person's appreciation for а efforts, recognition or a success. As for *Recovery* Theory, it may be without a further judgment, that the inventor or creator who has wasted time, cost and energy to produce his intellectual work needs to be given some kind of a chance to regain what he would make. Incentive Theory said that incentives are beneficial for attracting efforts and funds for the implementation and development of creativity and discovery of passion for generating new discoveries.

Public Benefit Theory, says the basis of providing protection intellectual property rights is for economic development. *Risk Theory* says that intellectual property is the result of a research that assumes risks that could allow others to first find legal protection against efforts or activities that contain such risks. *Economic Growth Stimulus Theory*, recognizes the protection of IPR is a tool of economic development. Economic development is the whole goal of an effective IPR or protection system.



3.3 Violation and Piracy by Foreign Parties

Patents are one of the progress indicators of a nation. The Intellectual Property (IP) productivity, especially the patent in Indonesia, improving continuously. LIPI is the institution that contributes the highest number of patents nationally. Compared non-ministerial with other research institutions, ministries and universities in Indonesia, LIPI is leading the number of the largest patent acquisition reaching 662 patents (April 2018). The highest number of registrations up until now is in 2017 as many as 159 patents.

The amount of patent acquisition is none other than the contribution of intellectual thought from LIPI researchers. The knowledge that researchers possess are capitalized and protected with patents. Patent is one form of protection of intellectual property, especially in technology field. The rapid development of technology demands researchers to think about how to produce a work of innovation that can benefit the society in the field of technology. But not all the results of research can be patented. Patent has 3 (three) main conditions those are containing novelty element inventive step and can be patented in the industry.

In 2011, scientists managed to find a species of monster wasp in Sulawesi through Mekongga's expedition. In a recent publication of journal Zookey, scientists finally described the wasp as a new species and genus of wasp, named "Megalara Garuda". The scientist of LIPI was involved in the discovery. Along with Indonesian scientists. The other scientist are Lynn S. Kimsey from the University of California, Davis, USA, and Michael Ohl from the Museum fur Nuturkunde, Germany. Garuda Megalara has a unique characteristic that is a large jaw, longer than its front foot. Scientists suspect that the great jaw plays a role in the defences from predators and reproduction. Because of this great large jaw, the Garuda Megalara is called a monster wasp.

The genus name Megalara is derived from the word: Mega "which means big and" Dalara "which is another genus with the most similar traits. This wasp is divided into different genus because its traits is not in the genus Dalara. Megalara has unique form of area between the eyes and the large below jaw. In other genus, even the narrow cheek bone sometimes does not exist. Another distinctive feature is a smooth-short-black hair. The species name is after Indonesia's symbol has been planned since the discovery of the monster. Finally, the name of the Garuda that is interpreted as the king of birds in Hindu. Garuda Megalara became the real "king of wasp".

Garuda Megalara measuring between 25-34 mm. Because it never been found in the living state, then there are still many things that are not yet known about it. Many researches remain to be done. It is only known that these insects kill its prey by stinging. With males larger than females, scientists suspect that males are holding the females during mate process.¹⁴



Researcher from Bohart (Museum of Entomology UC Davis, USA), has received a research permit in 2011 with research partners from LIPI and research topics proposed "biodiversity Surveys in Indonesia and Discovery of Health and Energy Solution ". The research has created a Memorandum of Understanding (MoU) and Material Transfer Agreement (MTA) that regulates the ownership of the research results or "patent". Publication, provision of sample submissions, etc. One of the researchers from Indonesia finds a giant wasp that is a new species called Megalara Garuda or Garuda Wasp. The new species was then loaned to the United States with trust. But without the knowledge of LIPI and the government of Indonesia. The new species is published by researchers from the United States without mentioning the name of the Indonesian researchers. LIPI expressed the feeling of being harmed due to one of the researches conducted with foreign researchers did not include the name of Indonesian researchers. The results of the research were seen to include only two foreign researchers.

3.4 Material Transfer Agreement

The world economic system leads to international free trade for example in a new TRIPs-GATT that requires the signers to align the intellectual Property rights system (IPR) with the country of industry. The Material Transfer Agreement (MTA) is a special form of a contract that is usually used by the biotechnology industry and college researchers in the country of industry, in order to facilitate the provision of materials for mutual acquisition. The

rights PPM/MTA establishes the and obligations of all parties, including third parties involved in the transfer of materials. The PPM/MTA should be compiled in a concise and flexible manner to support the application of several research and development scenario. That makes PPM/MTA very useful especially for people developing countries from who are interested in improving research and development.

The agreements above are used to facilitate access to genetic resources for basic and applied research. In addition, the PPM/MTA is the basis for the right of the country of giver and local community. Distinction is made between tangible wealth, intellectual property, and traditional knowledge. GR are required as tangible wealth such as oil and natural gas, mineral or wood. The GR, which has commercial value, can be traded for monetary gain or non-monetary benefit in the form of technology. Intellectual property is intended as a knowledge and invention created by researchers. The invention of intellectual property of high economic value requires large inputs in the form of funds and resources, which can be requested for patent protection. Traditional knowledge is an intellectual property that is formally unknown in the laws of the IPR in industrialized countries. However, by using certain strategies, which enable the local or other rural communities who had a traditional knowledge use the PPM/MTA to claim ownership of the knowledge.

PPM/MTA has a general coverage, it can be applied to different cooperation from



various sectors. Optional clauses, such as those relating to IPR/IPR, may be incorporated into the PPM/MTA in defining the local community's rights to the GR or to protecting traditional knowledge such as the knowledge of natural herbs or pesticides. Such knowledge can be protected by treating it as a trade secret.¹⁴

In order to facilitate a deeper understanding of the manufacturing of commercial products from the GR, the GR recipients will cooperate with the giver specified in the PPM/MTA to conduct basic and/or applied research, or research Development of commercial products that will further outlined.

The world of research and development especially in the field of health has contributed to the development of health. Research in the field of health has become the basis and foundation in the decision making especially policy in the field of health. Apart from that, research and development has also contributed a great contribution to the science and knowledge in Indonesia. This strategic position is certainly become a capital for researchers to continue working in the field of research and health development. Indonesian researchers both through institutions and individuals have done a lot of cooperation with foreign parties. The form of cooperation with the overseas can be bilateral, regional, and multilateral. The cooperation is often unfair and balanced. Researchers are often affected by the wealth of abundant biological resources, so that the ownership of Indonesian genetic resources is lacking in proportional attention. The implementation of cooperation with international research institutions tend to adapting the research and development programs of their partners. The research program could result in the transfer of this nation's GR to other country. Then we aware of that after it's been patented internationally, and it looks like some of Indonesia's GR have grown and belong to other countries.

At first the GR is the public property, so it is freely accessible, and there is no legal or protective standard against the GR. Then with the Convention on Biological Diversity, which has ratified by Indonesian law number 5, year 1994 that seeks the protection of GR (article 8 paragraph (1). Furthermore, article 15 paragraph (1) states "to acknowledge the authority of the state for its natural resources, so that the power to determine access to the GR is in the hands of the government and depends on the applicable state law. On the basis above, the Minister of Health made a very strategic policy to overcome the problems that have been often detrimental to researchers and even harm the nation. The policy regulates the approval of the transfer agreements of materials better known as the Material (MTA). This transfers Agreement arrangement is not to restrict the movement space of researchers, but to guard and protect the rights of researchers who have often become the weak side when dealing with foreign parties. In addition, MTA policy is expected to be able to develop the capabilities of local resources and develop technology of country.



The Health formed Minister of an independent team in charge of the submission of Material Transfer Agreement, hereinafter referred as MTA study team. The establishment of the team is a follow-up to regulation of the Minister of Health No. 657/MENKES? PER/VII? 2009 about the delivery and use of specimen clinics, number materials and the content of information. In addition, the Ministry of Research, Technology, and Higher Education issued Regulation number 41, year 2006 about licensing of conducting activities and development for universities, foreign Enterprises, (Government Gazette year 2006 number 104). The policy is implemented by the establishment of the MTA advocacy and study team from various institutions, Ministry of Health, LIPI, BPPT, Ministry of Agriculture, BPOM, etc. The effort is done as one of attempts against Indonesia's GR protection by the government and put forward the elements of the principle of *access and benefit sharing* (ABS) to accommodate national interests.

Rights and obligations in the implementation of material transfer agreements of the provision and beneficiary obligations are described in the tables below.¹⁴

Purposes and objectives are determined to reference in be а drafting and implementation: protecting materials and that the loss of research, ensuring development, and/or application of materialrelated technologies does not effects communities and the environment. Encourage the utilization of materials to improve national competitiveness and community welfare.

No.	Provider's obligations	Beneficiary's obligations
1	Transferred the material to the receiver	Submission of material transfer request must be accompanied by proposal of material utilization
2	Submit material in accordance with specifications and material conditions as promised in MTA	Comply the administrative requirements and the specified costs of the provider
3	Prepare supporting documents related to material	Responsible for all risks involving material at the time of shipment and at the time in its customs
4	-	Not transferring material to a third party, unless with others permission
5	-	Not transferring material to the agreed place in the MTA, unless obtaining the written permission of the provider
6	-	Not use any material other than the agreed purpose in the MTA, unless otherwise agreed.
7	-	Return or destroy the material in accordance with the promised, unless otherwise agreed
8	-	Not providing information to third parties of any matters relating to the material, except for the written permission of the provider
9	-	Each publication made by the recipient shall pay attention to the authorship and provide reasonable recognition and information on the material used
10	-	Willing to provide information in writing related to material utilization when requested by the provider
11	-	In the event of the implementation of MTA produce inventions, must report to the provider

 Table 1 Provider and Beneficiary Obligations.



12	-	To comply with the tracking system
	-	In the case of a commercial aimed MTA, the receiver:
13		use of materials
		b. Divide the profit according to the mutually agreed

Table 2 Provider and Beneficiary Rights.

No.	Provider's Rights	Beneficiary's Rights
1	Gain access to information from material utilization	Accepting and utilizing the materials in accordance with the promised agreement in the MTA
2	Obtain a decent inclusion on the basis of material preliminary information	Obtain access to information on the transferred material
3	Receive the material in accordance with the promised agreement, unless otherwise agreed	Exploit or make a request for intellectual property rights of material utilization
4	Perform tracking system of material	

To encourage application investigation from genetic resources, the source of the material and the traditional knowledge related materials in the framework of utilization to improve national competitiveness and community welfare.

4. CONCLUSION

Material Transfer Agreement is one way to secure genetic resources that is an agreement whose substance is subject to the approval of the parties. MTA is used when the owner of the material (Provider) is willing to give the recipient permission to use biological material. This agreement is a mechanism to facilitate the cooperation of research and development in the field of biotechnology, such as genetic resources. Through the MTA, the delivery of material genetic resources will become evident and official, MTA will regulate some rights related to Intellectual Property Right, so hopefully the existence of the MTA can prevent biopiracy and misappropriation.

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