



International Legal Framework for Traditional Knowledge and Intellectual Property Rights

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Abstract

Traditional knowledge held by indigenous and local communities has important cultural and ecological value. International legal frameworks have been developed to protect and manage this knowledge in a fair and sustainable manner. Legal instruments such as the Convention on Biological Diversity (CBD) and the Nagoya Protocol regulate access to genetic resources and promote the equitable sharing of benefits among communities holding traditional knowledge. However, implementation at the national level is faced with challenges such as harmonization with complex national laws and limited resources. Case studies demonstrate the various strategies used by countries to improve legal protection, including strengthening national legal frameworks and active participation of indigenous communities in decision-making. With joint efforts, it is hoped that this legal framework will ensure that traditional knowledge is well preserved for future generations, while providing equitable benefits to the communities that own it.

Keywords: *Traditional Knowledge; International Legal Framework; Intellectual Property Rights*

Introduction

Traditional knowledge is a cultural heritage that includes skills, practices and innovations that have developed within indigenous peoples or local communities for centuries. This knowledge often includes important aspects of everyday life, such as traditional medicine, agricultural practices, art, and technical expertise. Despite having significant value to the communities that possess it, traditional knowledge is often vulnerable to exploitation without proper permission and recognition. In the context of globalization, traditional knowledge faces serious threats due to commercialization by irresponsible third parties.¹

Traditional knowledge is often vulnerable to exploitation without proper permission and recognition because the communities that own it do not have adequate protection mechanisms. This

¹ Rongiyati, S. (2016). Hak Kekayaan Intelektual Atas Pengetahuan Tradisional. *Negara Hukum: Membangun Hukum untuk Keadilan dan Kesejahteraan*, 2(2), 213-238.

exploitation occurs when outside parties, such as companies or individuals, take and use this knowledge, such as medicinal herbs, agricultural techniques, or cultural arts, for commercial gain without asking permission or providing compensation to the community of origin. Moreover, this knowledge is often claimed as a new innovation by those who exploit it, without giving credit or recognition to the communities that have maintained it for centuries. As a result, host communities lose the economic and cultural benefits of their knowledge, and their cultural heritage is at risk of being lost or ignored. Effective legal protection and fair rewards are essential to ensure that traditional knowledge is recognized and preserved as a valuable piece of cultural property.²

This results in economic and cultural losses for indigenous communities, as well as the loss of invaluable cultural identity. Therefore, an effective international legal framework is needed to protect traditional knowledge and guarantee intellectual property rights (IPR) for the community that owns it. Various international instruments have been attempted to address this problem. One of the main instruments is the Convention on Biological Diversity (CBD) which recognizes the importance of protecting traditional knowledge related to biodiversity. In addition, the World Intellectual Property Organization (WIPO) has attempted to develop more specific guidelines and protection mechanisms through the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC).³

However, even though there are various initiatives and legal instruments, their implementation at the national level often faces various obstacles. Countries with significant indigenous communities, such as Indonesia, face challenges in adapting international legal frameworks to national legal systems and ensuring effective and fair implementation.

Countries with significant indigenous communities, such as Indonesia, face major challenges in adapting international legal frameworks to national legal systems and ensuring effective and fair implementation. One of the main challenges is the harmonization of international law, which is often not fully in line with existing local legal norms and practices. Additionally, a lack of understanding and respect for traditional knowledge by national policymakers can hinder comprehensive protection efforts. Effective implementation also requires adequate resources and active participation from indigenous communities, which are often overlooked in legislative and regulatory processes. Therefore, countries like Indonesia need to develop inclusive approaches that integrate input from indigenous communities, strengthen institutional capacity, and ensure that legal protection for traditional knowledge does not only exist on paper but is also implemented practically and fairly.⁴

This is where an in-depth analysis of the international legal framework for traditional knowledge and IPR is important. By understanding the various existing legal instruments, as well as the challenges and opportunities faced in their implementation, better protection of traditional knowledge can be achieved. This is not only important for justice for indigenous communities, but also for preserving the cultural and biological diversity that is an integral part of the world's heritage.⁵

This research uses normative legal research. Normative legal research is an approach that focuses on the analysis of applicable laws and regulations, legal principles and doctrine. In the context of research on the international legal framework for traditional knowledge and intellectual property rights (IPR), normative legal research has an important role in identifying, reviewing and evaluating various relevant legal instruments.

² Susanti, D. I. (2022). Eksplorasi Perlindungan Kekayaan Intelektual Komunal Berbasis Hak Asasi Manusia. *Media Iuris*, 5(3).

³ AFNAN, S. N. (2020). *Perlindungan terhadap Pengetahuan Tradisional asal Indonesia Ditinjau dari Aspek Hak Kekayaan Intelektual: Penelitian Jamu Tradisional di Yogyakarta* (Doctoral dissertation, Universitas Gadjah Mada).

⁴ Sofyanto, K. (2018). Perlindungan Hukum Hak Kekayaan Intelektual atas Pengetahuan Tradisional terhadap Perolehan Manfaat Ekonomi. *Kanun Jurnal Ilmu Hukum*, 20(1), 149-162.

⁵ Raharja, I. F., & Kusniati, R. ANALISIS MODEL PENGATURAN HUKUM HAK KEKAYAAN INTELEKTUAL PENGETAHUAN TRADISIONAL MASYARAKAT ADAT Oleh.

Discussion

The international legal framework for traditional knowledge and intellectual property rights (IPR) aims to protect knowledge that has been developed and maintained by indigenous and local communities for centuries. This knowledge covers various aspects, from medical practices and herbal concoctions to agricultural methods and cultural arts. However, with globalization and technological developments, traditional knowledge is often exploited without proper permission and recognition.

a. Convention on Biological Diversity (CBD)

The Convention on Biological Diversity (CBD) is a landmark international treaty that underscores the critical importance of safeguarding traditional knowledge, particularly in the context of biodiversity conservation and sustainable use. Established during the Earth Summit in Rio de Janeiro in 1992, the CBD seeks to address various aspects of biodiversity, including the preservation of ecosystems, species, and genetic resources. A key provision of the CBD, Article 8(j), explicitly mandates that member parties must respect, protect, and preserve the traditional knowledge of indigenous and local communities. This knowledge is deemed essential for the effective conservation and sustainable utilization of biodiversity. Moreover, the CBD promotes the principle of fair and equitable sharing of benefits derived from the utilization of genetic resources, ensuring that communities that have preserved and developed this knowledge receive appropriate recognition and benefits. By fostering international cooperation and creating frameworks for benefit-sharing, the CBD aims to balance conservation efforts with the rights and livelihoods of indigenous peoples, thereby contributing to both environmental sustainability and social justice.⁶

The Convention on Biological Diversity (CBD) promotes the fair and equitable sharing of benefits from the use of genetic resources as one of its main principles. This principle aims to ensure that the profits resulting from the exploitation of genetic resources, such as medicinal plants, microorganisms and other genetic materials, are not only enjoyed by the company or country that utilizes them, but also by local communities and indigenous peoples who have long protected and managed them. These resources. CBD recognizes that local communities often have deep traditional knowledge about how to utilize and conserve genetic resources sustainably, and therefore, they are entitled to share in the resulting benefits. These benefits can include financial benefit sharing, access to technology, capacity building, and support for conservation and sustainable development in their region. Thus, fair and equitable distribution of benefits not only promotes social justice and recognition of the rights of indigenous peoples, but also serves as an incentive for them to continue conserving biodiversity which is essential for the balance of the global ecosystem. This principle also helps prevent biopiracy, the practice of extracting genetic resources and traditional knowledge without permission or fair compensation, which often harms developing countries and local communities. Through this framework, CBD seeks to create a balance between the exploitation of natural resources and the protection of the rights of communities who have been the guardians and managers of these resources.⁷

b. Nagoya Protocol

The Nagoya Protocol, as an extension of the Convention on Biological Diversity (CBD), plays an important role in strengthening the legal framework for access and benefit-sharing (ABS). Adopted in 2010 in Nagoya, Japan, this protocol aims to provide more specific and operational guidance regarding how genetic resources and related traditional knowledge can be accessed and utilized fairly and equitably. The Nagoya Protocol establishes more detailed mechanisms to ensure that indigenous and local

⁶ Chandra, A., & Idrisova, A. (2011). Convention on Biological Diversity: a review of national challenges and opportunities for implementation. *Biodiversity and Conservation*, 20, 3295-3316.

⁷ Morgera, E., & Tsioumani, E. (2010). Yesterday, today, and tomorrow: Looking afresh at the Convention on Biological Diversity. *Yearbook of International environmental law*, 21(1), 3-40.

communities, who are often the original custodians of these genetic resources and traditional knowledge, receive fair and appropriate compensation when their resources are used by third parties, such as pharmaceutical companies, industrial biotechnology, or research institutes.⁸

Through prior informed consent (PIC) and mutually beneficial agreements (MAT), the Nagoya Protocol guarantees that all parties involved in the extraction and use of genetic resources must obtain the consent of the community that owns the resource, and agree on terms for transparent and fair distribution of benefits. These benefits include not only financial profit sharing, but also non-financial benefits such as technology transfer, capacity building, and support for conservation projects in local communities. By providing a clear and detailed legal framework, the Nagoya Protocol seeks to prevent unfair exploitation and biopiracy practices, which often harm indigenous communities and developing countries. This protocol also encourages more active participation of local communities in the process of conservation and utilization of biodiversity, thereby strengthening their sovereignty over the natural resources and traditional knowledge they possess. Through the implementation of the Nagoya Protocol, it is hoped that a better balance will be created between economic interests and social justice, as well as the protection of biodiversity globally.⁹

c. Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), managed by the World Trade Organization (WTO), is an important instrument in regulating various aspects of Intellectual Property Rights (IPR) at the international level. Although TRIPS does not explicitly mention the protection of traditional knowledge, several provisions in it can be applied to provide such protection, especially through patent and copyright mechanisms. TRIPS sets minimum standards for the protection and enforcement of intellectual property rights among its member countries, which include patents, copyrights, trademarks, geographical indications and industrial designs.¹⁰

In the context of traditional knowledge, patents can be used to protect innovations originating from traditional knowledge that has undergone a process of adaptation or further development. For example, if a company or individual develops a new medicine or product based on a traditional herb known to have healing properties, they can apply for a patent on the innovation. Likewise, copyright can protect traditional cultural expressions, such as folklore, music, dance, and visual arts, which are often an integral part of a community's traditional knowledge.¹¹

However, implementing TRIPS provisions to protect traditional knowledge faces various challenges. One of the main challenges is that conventional IPR systems often do not fully comply with the characteristics of traditional knowledge, which is usually collective and passed down from generation to generation in certain communities. Traditional knowledge often does not meet the criteria of novelty and originality required for patent or copyright protection. Additionally, there are concerns that traditional knowledge could be exploited by third parties without permission or fair compensation, a practice known as biopiracy.¹²

To address this problem, there are efforts at the international level to develop more appropriate and inclusive legal frameworks for the protection of traditional knowledge. Some countries have adopted

⁸ Yulia, M., & Zainol, Z. A. (2013). Melindungi Keanekaragaman Hayati dalam Kerangka Protokol Nagoya. *Mimbar Hukum-Fakultas Hukum Universitas Gadjah Mada*, 25(2), 271-283.

⁹ Morgera, E., Tsioumani, E., & Buck, M. (2014). *Unraveling the nagoya protocol: a commentary on the nagoya protocol on access and benefit-sharing to the convention on biological diversity* (p. 444). Brill.

¹⁰ Correa, C. (2020). *Trade related aspects of intellectual property rights: a commentary on the TRIPS agreement*. Oxford University Press.

¹¹ Correa, C. M., & Yusuf, A. A. (Eds.). (2016). *Intellectual property and international trade: The TRIPS agreement: The TRIPS agreement*. Kluwer Law International BV.

¹² Busche, J., Stoll, P. T., & Arend, K. (Eds.). (2008). *WTO-trade-related aspects of intellectual property rights* (Vol. 7). Brill.

national laws specifically aimed at protecting traditional knowledge and traditional cultural expressions. In addition, various international forums, including the World Intellectual Property Organization (WIPO), are working to develop more effective and appropriate legal instruments to protect traditional knowledge and ensure that indigenous communities receive the recognition and benefits they deserve from the use of their knowledge.

Thus, although the TRIPS Agreement was not directly designed to protect traditional knowledge, some of its provisions can be implemented for that purpose, and there is an urgent need to continue to improve and adapt the IPR legal framework to be more responsive to the needs and rights of traditional communities around the world .

d. World Intellectual Property Organization (WIPO)

The World Intellectual Property Organization (WIPO) has established the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC) as a strategic effort to develop international legal instruments aimed at protecting traditional knowledge. This committee is tasked with developing guidelines and frameworks that can assist WIPO member countries in formulating national laws that are more effective and inclusive in protecting intellectual property rooted in traditional knowledge, genetic resources and traditional cultural expressions or folklore.¹³

IGC works by collecting and analyzing data, case studies and best practices from different countries to understand the different challenges and needs in the protection of traditional knowledge. Through intensive and collaborative discussions, this committee seeks to harmonize various perspectives and interests, from both developed and developing countries, as well as from indigenous and local communities who are the main custodians of traditional knowledge.¹⁴

One of the main focuses of the IGC is to create comprehensive and practical guidelines, which member states can implement to strengthen their national legal frameworks. This includes identifying ways to document traditional knowledge, establishing mechanisms to obtain consent from local communities before their knowledge is used (Prior Informed Consent - PIC), as well as determining how the benefits from the use of that knowledge can be shared fairly and equitably (Access and Benefits-Sharing - ABS).¹⁵

In addition, the IGC also seeks to address issues that often become obstacles to the protection of traditional knowledge, such as biopiracy and the use of traditional knowledge without proper compensation or recognition. By developing strong and coordinated international legal instruments, the committee aims to provide better protection for traditional knowledge from unfair exploitation, as well as ensuring that the communities that own and safeguard that knowledge receive the benefits they deserve.

Through the work of the IGC, WIPO hopes to encourage member states to adopt policies and laws that respect and protect traditional knowledge, which is often an integral part of a community's cultural heritage and identity. Thus, these efforts not only contribute to the protection of intellectual property, but also to the preservation of cultural and biological diversity throughout the world.

Implementation of international legal instruments to protect traditional knowledge and intellectual property rights at the national level is faced with a number of complex challenges. One of the main challenges is the gap that often occurs between the legal framework regulated internationally and actual conditions at the national level. Countries often have varying policies, legal infrastructures, and

¹³ Birkbeck, C. D. (2016). *The world intellectual property organization (WIPO): A reference guide*. Edward Elgar Publishing.

¹⁴ Halbert, D. J. (2006). The World Intellectual Property Organization: Past, Present and Future. *J. Copyright Soc'y USA*, 54, 253.

¹⁵ Dinwoodie, G. B., & Dreyfuss, R. C. (2009). Designing a Global Intellectual Property System Responsive to Change: The WTO, WIPO, and Beyond. *Hous. L. Rev.*, 46, 1187.

administrative capacities, which can impact their ability to effectively adopt and implement these legal instruments.

In addition, traditional knowledge itself has unique characteristics that do not always fit the intellectual property criteria generally regulated by patent, copyright or trademark law. Traditional knowledge is often collective, hereditary, and closely related to cultural practices or local wisdom that are difficult to explain in a formal legal context. This makes the process of identifying, documenting and protecting traditional knowledge more complex and requires a highly sensitive approach to cultural and ethical values.

Another challenge is in terms of recognition and active participation of indigenous and local communities who have traditional knowledge. Effective implementation requires direct engagement and consultation with these communities to ensure that the protection policies and practices developed take their needs into account and gain their support. This requires an inclusive and participatory approach in the legal decision-making process.

Apart from administrative and technical points of view, there are also political and economic challenges that affect the implementation of international law for traditional knowledge. Some countries may face pressure from industry or economic interests to treat traditional knowledge as an asset that can be exploited commercially without appropriate regard for collective rights or cultural protection. This gives rise to problems such as biopiracy, where traditional knowledge is used without permission or fair compensation to the community of origin.

To overcome these challenges, there needs to be a strong global commitment to increase awareness, capacity and international cooperation in protecting traditional knowledge. This involves collaborative efforts between states, international organizations such as WIPO, civil society, and the academic community to develop legal frameworks that are more inclusive and responsive to the needs and rights of indigenous communities. Thus, it can be hoped that more effective implementation of these international legal instruments will strengthen the protection of traditional knowledge, promote social justice, and ensure cultural and environmental sustainability throughout the world.

a. Harmonization of International Law with National Law

One of the main challenges in protecting traditional knowledge at the national level is harmonization between international law and the different national legal systems in each country. Each country has a unique legal heritage and different institutional systems, which are sometimes inconsistent with international principles and standards set by treaties such as the Nagoya Protocol or the Convention on Biological Diversity. The process of integrating these principles into national law often requires significant legislative changes, complex political processes, and intense coordination between various government agencies and stakeholders.¹⁶

In countries like Indonesia, this harmonization challenge becomes increasingly complex due to the existence of a customary law system that still applies in many regions. These customary laws often regulate social relations, natural resource management, and the daily lives of local communities based on local traditions and wisdom that have existed for generations. However, this customary law is not always formally recognized within the larger national legal framework, and often conflicts with new positive national or international law.¹⁷

¹⁶ Nugroho, T. A. (2024). POLITIK HUKUM KEKAYAAN INTELEKTUAL KOMUNAL DALAM SISTEM HUKUM NASIONAL. *Jurnal De Lege Ferenda Trisakti*, 57-66.

¹⁷ Susanti, D. I., Sudhiarsa, R. I., & Susrijani, R. (2019). *Ekspresi budaya tradisional dan hak kekayaan intelektual*. Percetakan Dioma Malang.

Harmonization between customary law, national law and international law is crucial to ensure effective protection of traditional knowledge. This involves open and inclusive dialogue between governments, indigenous communities, academia, and civil society organizations to find common ground that respects local cultural values while meeting international protection standards. This effort also requires an approach that is sensitive to the political, economic and social dynamics in each country, as well as a strong commitment to ensuring that the policies adopted can provide real benefits for local communities with traditional knowledge.¹⁸

In addition to legal harmonization, effective implementation also requires adequate administrative capacity to enforce and monitor the implementation of the law. This includes training for legal officials, developing documentation and monitoring systems that can identify abuse or biopiracy, as well as ensuring that indigenous communities have adequate access to protect their own intellectual property.

By strengthening international cooperation and shared commitment, countries can overcome these challenges and build inclusive and sustainable legal frameworks to protect and equitably utilize traditional knowledge. This is not only important to maintain cultural and ecological diversity, but also to ensure social and economic justice for the communities that hold the keys to such intellectual property.

b.Limited Resources and Institutional Capacity

Effective implementation of an international legal framework to protect traditional knowledge also depends heavily on the availability of adequate resources and institutional capacity. Many developing countries face serious challenges in terms of budget constraints and a lack of experts who have the knowledge and skills necessary to effectively design, implement and enforce traditional knowledge protection policies.¹⁹

Budget constraints often limit the government's ability to provide the infrastructure, training, and technical resources necessary to monitor and enforce compliance with existing laws. This may result in slowdowns or weaknesses in the implementation of protection programs, as well as hinder efforts to identify and respond to cases of intellectual property rights infringement.

In addition, the lack of adequate experts in the fields of law, public policy and natural resource management is also a serious problem. In the context of traditional knowledge, in-depth knowledge of customary law, socio-cultural dynamics, and ways to integrate local values into a larger legal framework is required. This lack of experts can hamper the ability to manage conflicts of interest, design inclusive policies, and build the capacity of local communities to exercise their rights effectively.²⁰

To overcome these challenges, continued investment in capacity building is needed, including training for legal officers and government officials, as well as the development of documentation and monitoring systems that can assist in the identification and handling of cases of intellectual property rights violations. In addition, international cooperation and technical assistance from international organizations can play an important role in providing additional support and strengthening national capacity to implement a more effective legal framework.

¹⁸ Nizwana, Y. (2022). Kekayaan Intelektual Komunal dalam Perspektif Teori Hak Milik. *JUDAKUM: Jurnal Dedikasi Hukum*, 1(2), 86-101.

¹⁹ Tobing, C. I., & Hutagalung, J. M. (2023). Kepentingan Indonesia Terhadap Ekspresi Budaya Tradisional dalam Sumber Hukum Internasional Mengenai Hak Kekayaan Intelektual. *Kritha Bhayangkara*, 17(1), 127-140.

²⁰ Bustani, S. (2018). Perlindungan Hak Komunal Masyarakat Adat Dalam Perspektif Kekayaan Intelektual Tradisional Di Era Globalisasi: Kenyataan Dan Harapan. *Jurnal Hukum PRIORIS*, 6(3), 304-325.

By increasing resources and institutional capacity, countries can strengthen the implementation of international law aimed at protecting traditional knowledge. This is not only important to ensure justice for communities with traditional knowledge, but also to support cultural and ecological sustainability around the world.

c. Lack of Indigenous Community Participation

Active participation of indigenous communities in policy-making and legislative processes is a very important aspect to ensure effective protection of traditional knowledge. Unfortunately, in many cases, indigenous communities are often not adequately involved in decisions that directly impact their rights. This can result in policies and legislation that do not fully reflect the needs, values and aspirations of indigenous communities.

Limited involvement or lack of involvement in policy processes can be a serious barrier to efforts to protect traditional knowledge. Policies that are formulated without considering the views and direct experiences of indigenous communities tend to be less relevant and may not be effective in addressing the challenges faced by these communities. In addition, such policies also risk causing dissatisfaction among indigenous communities, and can trigger greater social tensions or conflicts with the government or other parties involved.²¹

Effective participation of indigenous communities enables them to contribute actively in designing solutions that suit their cultural, social and environmental contexts. It also ensures that adopted policies are more likely to be accepted and supported by affected communities, thereby increasing successful implementation and compliance with established rules.

Efforts to increase the participation of indigenous communities in policy processes can involve a variety of approaches, ranging from open and inclusive public consultations to the establishment of formal mechanisms to represent the interests of indigenous communities in legislative or decision-making institutions. The government and civil society organizations can also play a role in facilitating dialogue between various parties, as well as providing training and assistance to build the capacity of indigenous communities to participate effectively.

By strengthening the participation of indigenous communities in policy processes, countries can build more inclusive and sustainable legal frameworks to protect traditional knowledge. This is not only an important step in respecting human rights and social justice, but also in safeguarding cultural and ecological sustainability throughout the world.

Evaluating the effectiveness of international legal frameworks to protect traditional knowledge and intellectual property rights is an important challenge in efforts to ensure fair and sustainable protection for intellectual property originating in indigenous and local communities. This legal framework, which includes international agreements such as the Convention on Biological Diversity (CBD) and the Nagoya Protocol, as well as the TRIPS Agreement under the auspices of the WTO, has provided an important legal basis for regulating access to genetic resources and the equitable sharing of benefits. However, implementation is often complex and faces various challenges.

One critical evaluation of these legal frameworks is the extent to which they are able to accommodate the unique characteristics of traditional knowledge. Traditional knowledge is often collective, dynamic and hereditary, which differs fundamentally from more general principles of intellectual property rights such as patents and copyright. This creates challenges in adapting existing

²¹ Ilyasa, R. M. A. (2020). Perlindungan Hukum Atas Pengetahuan Tradisional Indonesia Terhadap Praktek Biopiracy Dalam Rezim Hak Kekayaan Intelektual. *Gema Keadilan*, 7(3), 170-194.

rules and procedures to ensure that the rights of indigenous communities are recognized and protected without compromising the principles of environmental and cultural sustainability.²²

In addition, evaluations of effectiveness should also consider the administrative capacity of countries to implement and enforce such regulations. Many developing countries face limitations in terms of adequate resources, legal infrastructure, and expert personnel to properly implement these legal frameworks. Lack of oversight and compliance can result in unfair exploitation of traditional knowledge by outsiders, often in the form of biopiracy or unfair unauthorized use.

In addition to technical and administrative challenges, effectiveness evaluations must also consider social and economic aspects. A good legal framework must not only protect traditional knowledge in theory, but must also provide real benefits for the communities that safeguard that knowledge. This means developing mechanisms that allow for fair and equitable sharing of benefits from the use of traditional knowledge, as well as ensuring that indigenous communities have adequate access to and control over the use of their knowledge.

Thus, evaluating the effectiveness of the international legal framework for traditional knowledge and intellectual property rights must take a holistic and integrated approach. This involves discussions between government, civil society, academia, and indigenous communities to evaluate successes, identify remaining challenges, and develop strategies to improve implementation and better protection in the future. With shared commitment and cross-sector collaboration, we can ensure that this legal framework truly functions as an effective tool in maintaining cultural sustainability, social justice and the sustainable use of natural resources.

a. Case Study: Implementation of CBD and the Nagoya Protocol in Indonesia

Indonesia, as a megabiodiversity country, shows many examples of implementing the Convention on Biological Diversity (CBD) and the Nagoya Protocol in its context which is rich in natural resources. This case study shows how Indonesia has implemented CBD Access and Benefit-Sharing (ABS) principles into its national legislation. One of the significant achievements was the issuance of Law Number 11 of 2020 concerning Job Creation which stipulates provisions to protect traditional knowledge and regulates the recognition and distribution of benefits from the use of genetic resources. However, the implementation of ABS in Indonesia is not free from a number of significant challenges. One of them is the complex coordination between the central government and regional governments in implementing these regulations consistently throughout Indonesia's vast and diverse regions. Additionally, other challenges include the lack of awareness and capacity of local communities about their rights in the ABS context, which affects their ability to protect traditional knowledge and manage genetic resources appropriately. By identifying these challenges and taking steps to overcome them, Indonesia continues to strive to strengthen its legal framework to protect natural wealth and local wisdom which are a valuable heritage for the country and the world.²³

b. Juridical Analysis and Comparative Law

Juridical analysis of countries that have successfully integrated international principles into their national laws is a valuable source of insight into efforts to protect traditional knowledge. By comparing legal frameworks from different legal contexts, such as those seen in countries with cultural diversity and rich natural resources, we can identify best practices and effective strategies. This comparative study not only helps to understand how the Access and Benefit Sharing (ABS) principles of the Convention on

²² YULIA, N. (2023). *PERLINDUNGAN KEKAYAAN INTELEKTUAL KOMUNAL MASYARAKAT TRADISIONAL DALAM SISTEM HUKUM NASIONAL* (Doctoral dissertation, Universitas Andalas).

²³ Fitriani, N., & Sulistiyono, A. (2024). Perlindungan Hukum Kekayaan Intelektual Komunal terhadap Obat Tradisional Jamu sebagai Pengetahuan Tradisional. *Aliansi: Jurnal Hukum, Pendidikan dan Sosial Humaniora*, 1(3), 253-279.

Biological Diversity (CBD) are applied in local contexts, but also to evaluate the success of implementation as well as identify challenges that other countries may face. is considering or is developing a similar legal framework. Thus, this analysis not only raises awareness of the importance of protecting traditional knowledge at a global level, but also provides practical guidance for policy makers and legal practitioners to design more appropriate and sustainable solutions in protecting this valuable cultural heritage.²⁴

The following are several recommendations to improve legal protection of traditional knowledge and intellectual property rights. First, it is important to increase awareness and understanding of the value and importance of traditional knowledge among global society as well as at the policy level. This can be done through education, public campaigns and training for stakeholders, including indigenous communities and local communities.

Second, closer collaboration between countries is needed in developing a stronger and more inclusive international legal framework to protect traditional knowledge. This includes adopting clear and effective international standards, as well as promoting dialogue and exchange of experiences between countries to strengthen capacities and better implementation of laws.

Third, there is an urgent need to strengthen institutional capacity at the national level, particularly in developing countries, by providing the training, resources and technical support necessary to enforce the law effectively. This includes the development of adequate documentation systems, regular monitoring, and mechanisms to respond to and resolve intellectual property rights violations.

Fourth, active and inclusive participation of indigenous and local communities in the legal decision-making process is very important. Governments must ensure that these communities have adequate access to voice their interests and be involved in designing policies that affect them directly.

Finally, protecting traditional knowledge also requires a holistic approach, which integrates cultural, social and ecological values within a legal framework. This will help ensure that environmental sustainability and social justice are the main focus in the management and use of natural resources and traditional knowledge.

By adopting these recommendations, it is hoped that we can improve legal protection of traditional knowledge and intellectual property rights globally, ensure respect for this valuable cultural heritage, and promote social justice and environmental sustainability throughout the world.

Conclusion

The international legal framework for traditional knowledge and intellectual property rights (IPR) is a global effort to protect the cultural heritage and knowledge held by indigenous and local communities throughout the world. Legal instruments such as the Convention on Biological Diversity (CBD), the Nagoya Protocol and other international agreements aim to regulate access, use and sharing of benefits from traditional knowledge in a fair and sustainable manner.

However, implementation of this legal framework at the national level faces significant challenges. Harmonization with complex national legal systems, limited resources, and lack of institutional capacity are often the main obstacles to implementing these protective principles effectively. Active participation of indigenous communities in policy processes is also a key factor in ensuring that

²⁴ Hakim, L., & Negara, P. D. (2018). Perlindungan Pengetahuan Tradisional (Traditional Knowledge) Dalam Dimensi HAM: Upaya Harmonisasi Hukum Dalam Kerangka Pembangunan Hukum Di Indonesia. In *Proceeding Conference on Innovation and Application of Science and Technology (CIASTECH)*, September (pp. 318-327).

adopted policies not only meet international standards, but are also relevant to local needs and respect existing cultural values.

Case studies from various countries demonstrate successful approaches and strategies in improving legal protection for traditional knowledge. Recommendations to strengthen national legal frameworks, increase institutional capacity, and ensure greater participation of indigenous communities are important steps towards better protection of traditional knowledge in the future. Thus, this international legal framework not only aims to regulate the use and benefits of traditional knowledge, but also to ensure that this valuable cultural heritage is properly preserved for future generations, while providing proper recognition and fair benefits to the communities that own it.

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