

14. ISSUES AND CHALLENGES FOR THE PROTECTION OF GENETIC RESOURCES AND TRADITIONAL KNOWLEDGE: THE KOREAN EXPERIENCE

Myung-Hyun Chung*

ABSTRACT

The protection of traditional knowledge and genetic resources, which belong to the indigenous people and local communities, have been a long-standing debate in international fora such as CBD, WIPO IGC, UNDRIP, WTO TRIPS Agreement and Nagoya Protocol. However, there are still many unsolved issues, including how to approach for the protection of traditional knowledge and genetic resources within human right issues, and how to define rights holders, beneficiaries, and the scope of protection. Furthermore, other key issues pertain to the prevention of unauthorized use by third parties and acknowledgement as a rights holder. The Republic of Korea became a Party to the Nagoya Protocol in 2017. For the development of access to genetic resources and benefit sharing legal framework, Republic of Korea needs to develop the sectorial guidelines for users, to provide information of the main provider countries' domestic measures and to develop the case studies, to prepare to comply with applicable laws and deal with possible legal disputes. Other key issues are to discover domestic genetic resources and traditional knowledge, to keep them in the database system or registries. The Nagoya Protocol and its implementing measures involve many uncertainties with

obscure meaning since they were created by coordinating varying interests of different stakeholders and views of various countries. The issues for the protection of genetic resources and traditional knowledge should focus on the right holders' interests and balance between users and providers. Special concerns should extend to cases where simplified measures or exemption of access procedure is essential for expeditious access especially during a public health emergency.

Keywords: *genetic resource, traditional knowledge, WIPO IGC, Nagoya Protocol, indigenous people*

1. INTRODUCTION

How to protect traditional knowledge and genetic resources that belong to the indigenous people and local communities is an issue that has been extensively discussed internationally. This long standing debate emerged in several international fora such as the 1992 Convention on Biological Diversity (CBD),¹ the 2002 Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization (Bonn Guidelines),² the World Intellectual Property Organization Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (WIPO IGC), the 2007 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP),³ the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)⁴ Review of Article 27.3(b) regarding traditional knowledge and

* Myung-Hyun Chung is a research professor at Korea University School of Law and vice director of Cyber Law Centre. She graduated from the University of Iowa (LL.M. in international & comparative law) and Korea University with Ph.D. in international law. She teaches international law, international trade law, international intellectual property law, data protection law, and cyber law. She has advised the Personal Information Protection Commission and Korea Research Institute of Bioscience and Biotechnology. She is a member of the Korean Society of International Law, Korean Society of International Economic Law, and a board member of Korean Society of Trade Remedies and International Cyber Law Studies in Korea.

¹ The Convention on Biological Diversity of 5 June 1992 (1760 U.N.T.S. 69) [hereinafter CBD].

² The Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization, COP 6 Decision VI/24, UNEP/CBD/COP/6/20 (adopted 14 June 2002) [hereinafter Bonn Guidelines].

³ United Nations Declaration on the Rights of Indigenous Peoples, UNGA Res A/RES/61/295 (adopted 2 October 2007) [hereinafter UNDRIP].

⁴ Agreement on Trade-Related Aspects of Intellectual Property Rights, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299, 33 I.L.M. 1197 (15 April 1994) [hereinafter TRIPS Agreement].

biodiversity, and the 2010 Nagoya Protocol on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization (Nagoya Protocol).⁵ There are, however, still many unsolved issues, including whether the approach for the protection of traditional knowledge and genetic resources should be made for inherent right and human right issues, or economic right and property right issues. Moreover, other key issues pertain to defining right holders and beneficiaries, the scope of protection, prevention of unauthorized use by the third parties, and acknowledgement of rights holders.

The Republic of Korea (hereinafter, Korea) has made continuous efforts to establish domestic follow-up measures to implement the Nagoya Protocol after its adoption in 2010. The Nagoya Protocol provides a transparent legal framework for the effective implementation of one of the three objectives of the CBD: the fair and equitable sharing of benefits arising out of the utilization of genetic resources. After Korea signed the Nagoya Protocol on 20 September 2011, the Korean government launched a Cooperative Action Plan with twelve relevant government authorities on 8 November 2011.⁶ The Cooperative Action Plan of 2011 carried out several tasks to implement the Nagoya Protocol. These tasks include survey and discovery of genetic resources in Korea; survey and discovery of traditional knowledge in Korea; survey of the current state in export of biological resources originated in Korea; establishment of comprehensive management system on the national

biological resources; and revision of national legislation system.

As of August 2017, 'The Act on Access to and Utilization of Genetic Resources and Benefit-Sharing' (ABS Act)⁷ and 'Enforcement Decree of the Act on Access to and Utilization of Genetic Resources and Benefit-Sharing' (Enforcement Decree)⁸ became effective. 'Implementing Rules on the Act on Access to and Utilization of Genetic Resources and Benefit-Sharing' (Implementing Rules)⁹ became effective in August 2018. In this article, section 2 will review the ABS Act and its implementation mechanism in Korea, section 3 will further explain issues pertaining to the protection of genetic resources and traditional knowledge and section 4 will suggest way forward to develop ABS mechanism nationally and internationally.

2. LEGAL FRAMEWORK FOR PROTECTION OF GENETIC RESOURCES AND TRADITIONAL KNOWLEDGE IN KOREA

A. OVERVIEW OF ABS ACT

The ABS Act aimed to implement the Nagoya Protocol and establish a national policy on access to and utilization of genetic resources, as well as to contribute to the conservation and sustainable use of biological resources; improve the quality of citizens' life; and enhance international cooperation in transaction of genetic resources. However, it took more than three years after the Notice of Legislation, for the enactment of the final ABS Act. Korea, as a user country

⁵ 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, UNEP/CBD/COP/DEC/X/1 (adopted 29 October 2010, entered into force 12 October 2014) [hereinafter Nagoya Protocol].

⁶ Ministry of Environment, Cooperative Action Plan in Response to the Nagoya Protocol (8 November 2011). As of November 2011, the relevant twelve government authorities were following: Ministry of Science, ICT & Future Planning; Ministry of Environment; Ministry of Justice; Ministry of Agriculture, Food & Rural Affairs; Ministry of Trade, Industry & Energy; Ministry of Health & Welfare; Ministry of Oceans & Fisheries; Ministry of Food & Drug Safety; Rural Development Administration; Korea Forest Service; and Korean

Intellectual Property Office.

⁷ Act on Access to and Utilization of Genetic Resources and Benefit-Sharing (Act No. 14533, 17 January 2017, Amended by Act No. 14839, 26 July 2017, entered into force 17 August 2017) [hereinafter ABS Act].

⁸ Enforcement Decree of the Act on Access to and Utilization of Genetic Resources and Benefit-Sharing (Presidential Decree No. 28246, 16 August 2017, entered into force 17 August 2017) [hereinafter Enforcement Decree].

⁹ Implementing Rules on the Act on Access to and Utilization of Genetic Resources and Benefit-Sharing (Ordinance of the Ministry of Environment No. 720, 27 November 2017).

of genetic resources, took a careful approach to ratify the Nagoya Protocol since it would bring potential economic impact on relevant industries once it came into full effect. Furthermore, the government needed to coordinate varying demands of stakeholders, as well as review other countries' practices. In this line, the government engaged researchers on various occasions to examine other countries' practices and to establish a Korea-specific benefit-sharing model based on such research.

B. OTHER ABS LEGAL FRAMEWORK

In addition to the ABS Act, relevant Ministries also operate several ABS bills under the Ministries' authority for genetic resources concerned. Most of the ABS bills were recently revised in response to the Nagoya Protocol. Further, these concerned Ministries are considered as Competent National Authorities and the National Check Points under the ABS Act.

Table 1. ABS Legislations and Relevant Ministries

Ministries	ABS Legislations
Ministry of Science and ICT	Act on the Acquisition, Management, and Utilization of Biological Research Resources ¹⁰
Ministry of Agriculture, Food and Rural Affairs	Act on the Conservation, Management, and Use of Agricultural Bio-resources ¹¹

¹⁰ Act on the Acquisition, Management, and Utilization of Biological Research Resources (Act No. 16016, 24 December 2018),

https://elaw.klri.re.kr/kor_service/lawView.do?hseq=49586&lang=EN accessed 30 May 2020.

¹¹ Act on the Conservation, Management and Use of Agricultural Bio-resources (Act No. 14644, 21 March 2017),

https://elaw.klri.re.kr/kor_service/lawView.do?hseq=42736&lang=EN accessed 30 May 2020.

¹² Act on the Promotion of Collection, Management, and Utilization of Pathogen Resources (Act No. 14839, 26 July 2017),

https://elaw.klri.re.kr/kor_service/lawView.do?hseq=49006&lang=EN accessed 30 May 2020.

¹³ Act on the Conservation and Use of Biological Diversity (Act No. 15833, 16 October 2018)

Ministries	ABS Legislations
Ministry of Health and Welfare	Act on the Promotion of Collection, Management, and Utilization of Pathogen Resources ¹²
Ministry of Environment	Act on the Conservation and Use of Biological Diversity ¹³
	Wildlife Protection and Management Act ¹⁴
Ministry of Oceans and Fisheries	Act on Securing, Management, Use, ETC. of Marine and Fisheries Bio-resources ¹⁵

C. COMPETENT AUTHORITIES

As the Nagoya Protocol requires to designate a national focal point, competent national authorities¹⁶ and the checkpoints,¹⁷ the ABS Act provides national authorities to manage ABS measures for those governing genetic resources.

(i) National Focal Points

In accordance with Article 13(1) of the Nagoya Protocol, the ABS Act designated two responsible National Focal Points: The Ministry of Foreign Affairs and the Ministry of Environment.¹⁸ As per the Enforcement Decree, the Ministry

https://elaw.klri.re.kr/kor_service/lawView.do?hseq=44471&lang=EN accessed 30 May 2020.

¹⁴ Wildlife Protection and Management Act (Act No. 15835, 16 October 2018)

https://elaw.klri.re.kr/kor_service/lawView.do?hseq=49116&lang=EN accessed 30 May 2020.

¹⁵ Act on Securing, Management, Use, ETC. of Marine and Fisheries Bio-resources (Act No. 14605, 21 March 2017)

https://elaw.klri.re.kr/kor_service/lawView.do?hseq=42825&lang=EN accessed 30 May 2020.

¹⁶ Nagoya Protocol, arts 13(1), (2).

¹⁷ Nagoya Protocol, art 17(1)(a).

¹⁸ ABS Act, art 7.

of Foreign Affairs mainly liaises as a contact point with the CBD secretariat, and the Ministry of Environment carries out the dissemination of information with regard to ABS matters.¹⁹

(ii) Competent National Authorities

The ABS Act also designated five Competent National Authorities that have managed genetic resources within their competency: the Ministry of Science and ICT (Biological research resources); the Ministry of Agriculture, Food and Rural Affairs (Agro bio resources); the Ministry for Health and Welfare (Pathogenic resources); the Ministry of Environment (Biological resources); and the Ministry of Oceans and Fisheries (Marine-fishery bio resources).²⁰ Competent National Authorities carry out the following functions: i) the processing of access declaration or modified declaration on domestic genetic resources,²¹ ii) prohibition of access to and utilization of domestic genetic resources,²² iii) supporting fair and equitable benefit sharing on domestic genetic resources,²³ and iv) other matters determined by Enforcement Decree regarding ABS.²⁴

(iii) National Check Points

The ABS Act requires National Check Points in Article 13 to carry out, i) processing of declaration on compliance with procedures,²⁵ ii) investigation and advice on compliance with procedures,²⁶ and iii) supporting domestic users who utilize overseas genetic resources.²⁷ Furthermore, the Enforcement Decree may determine other tasks of check points regarding ABS. Five National Competent Authorities and the Ministry of Trade, Industry and Energy are responsible for National Check Points. The Ministry of Trade, Industry and Energy is included

given the concern of economic impact of ABS rules to those relevant industries.

D. DEFINITIONS

The ABS Act defines some key terms in the context of the Act.²⁸

(i) Genetic resource

Genetic resource means materials, which have practical or potential value, among plants, animals and microorganisms or other genetic material, which becomes genetic origins including a genetic functional unit. This definition has been ascribed verbatim in Article 2, Section 4 of the Act on the Conservation and Use of Biological Diversity.²⁹

(ii) Traditional knowledge

Traditional knowledge means knowledge, technology and practice, etc. of individuals or local communities, which maintained a traditional lifestyle appropriate for the conservation and sustainable use of genetic resources.³⁰

(iii) Access

Access means the collection of information regarding the acquisition of a specimen or substance of a genetic resource, or of a genetic resource and its associated traditional knowledge. In the ABS Act, genetic resources and associated traditional knowledge are called, 'genetic resource(s)', collectively.³¹

(iv) Utilization

Utilization means, to conduct research and development, through the application of biotechnology, on the genetic or

¹⁹ Enforcement Decree, art 2.

²⁰ ABS Act, art 8.

²¹ *ibid*, art 9.

²² *ibid*, art 12.

²³ *ibid*, art 8(2)(3).

²⁴ Enforcement Decree, art 3.

²⁵ ABS Act, art 15.

²⁶ *ibid*, art 16.

²⁷ *ibid*, art 13(3).

²⁸ *ibid*, art 2.

²⁹ *ibid*, arts 2.1 and 2(4).

³⁰ *ibid*, art 2(2).

³¹ ABS Act, art 2(3).

biochemical components, by the utilization of genetic resources.³²

(v) Benefit

Benefit means monetary benefits, such as royalties and revenue, and non-monetary benefits including but not limited to sharing of research results and transfer of technology, etc., arising from the utilization of genetic resources.³³

E. SCOPE OF APPLICATION

The ABS Act applies to the following genetic resources:³⁴

- (i) Human genetic resources;
- (ii) Genetic resources in the area beyond state jurisdiction including Antarctica;
- (iii) Genetic resources accessed for the purposes other than utilization described in Article 2(4);
- (iv) Genetic resources that are subject to other international agreements relevant to the access and benefit sharing of genetic resources;
- (v) Genetic resources have been granted patent pursuant to Article 87(1) of the Patent Act.³⁵

F. ACCESS REPORT ON DOMESTIC GENETIC RESOURCES

(i) Duty of Access Report

Where foreigners, overseas Koreans, foreign institutions and international organizations, and those other persons designated by Ordinance of the Ministry of Environment seek access to domestic genetic resource(s), they must report such

access to the head of the Competent National Authority in accordance with the procedures of Presidential Decree.³⁶ However, if the approval, permission or report has been made and granted in accordance with other ABS legal framework, it will be deemed that the duty to report under the ABS Act has been fulfilled.³⁷

Table 2. Approval, permission, or declaration system under other ABS legislations

<p>[Approval, permission, or report system under other ABS legislations]</p> <p>(i) Approval under Art. 11(2) of Act on the Conservation and Use of Biological Diversity or report under Art. 13(1) of same Act</p> <p>(ii) Approval under Art.18(1) of Act on the Conservation, Management, and Use of Agricultural Bio-resources</p> <p>(iii) Permission under Art. 11(1) of Act on Securing, Management, Use, ETC. of Marine and Fisheries Bio-resources or approval under Art. 22(1) of the same Act.</p> <p>(iv) Approval or permission under Art. 16(1) or Art. 18(1) of Act on the Promotion of Collection, Management, and Utilization of Pathogen Resources or report under Art. 16(2) of the same Act.</p>

Korean nationals, who have access to the domestic genetic resources for the purpose of utilization, may report to the Competent National Authority subject to the procedures of Enforcement Decree, including when it is necessary to verify that the provider country of the genetic resource is Republic of Korea.³⁸ According to the Nagoya Protocol, provider can be either a country of origin of genetic resources or a country that acquired the genetic resources in accordance with the Convention of Biological Diversity.³⁹ If a person, who has

³² *ibid*, art 2(4).

³³ *ibid*, art 2(5).

³⁴ *ibid*, art 3.

³⁵ Patent Act (Act No. 15582, Apr. 17, 2018) art 87(1). ‘A patent shall take effect when the grant of the patent is registered.’

<https://elaw.klri.re.kr/kor_service/lawView.do?hseq=47910&lang=EN> accessed 30 May 2020.

³⁶ ABS Act, art 9(1).

³⁷ *ibid*, art 9(2).

³⁸ ABS Act, art 9(4).

³⁹ Nagoya Protocol, art 5(1).

reported access to domestic genetic resources, and seeks to modify the contents of report required in Enforcement Decree, that person shall report the modification to the Competent National Authority.⁴⁰ This duty of access report became effective on 18 August 2018, which enjoyed one-year grace period after the enforcement of the ABS Act.

(ii) Procedure of Access Report

The Enforcement Decree on the ABS Act provides the procedure for report of access to domestic genetic resources. Anyone who seeks to access report shall submit the report document containing following information to Competent National Authority:

- User information (name, affiliation, address, contact etc.)
- Name, quantity or concentration of the genetic resources
- Methods of access, period of utilization
- Provider information (name, affiliation, address, and contact, etc.)
- Purpose of access; methods of utilization including application of biotechnology
- Country to utilize the genetic resources; and
- Mutually agreed terms, if any.⁴¹

A Competent National Authority that received access report must notify its decision to the user, as to whether the report is approved, within 30 days from its receipt. If the report is approved, the Competent National Authority shall issue a certificate of report.⁴²

Where a person, who reported access to domestic genetic resources, and seeks to change the contents of report in accordance with Article 9(3) of the ABS Act, such person must

submit a report on notification of change to the Competent National Authority. This must include modified purpose of access, modified purpose of utilization, increase of quantity or concentration of genetic resources, or modification of mutually agreed terms, if any.⁴³ The Ministry of Environment may establish a comprehensive report system to promote electronic processing and efficient management of access report procedure.⁴⁴

G. EXCEPTIONS TO REPORT OF ACCESS TO DOMESTIC GENETIC RESOURCES

There are some exceptions to the duty of a report for access to domestic resources. The procedures and requirements of the access report may be simplified or waived, where a Competent National Authority recognizes the need for expeditious access to or utilization of genetic resources. These may arise for developing therapeutic treatment or food security, due to threat or damage to the life and health of humans, animals, or plants, or in case of access for the purpose of non-commercial research. However, when the purpose of non-commercial research is changed, the user shall report, without delay, in accordance with Article 9(1).⁴⁵

H. SHARING THE BENEFIT OF DOMESTIC GENETIC RESOURCES

The users and providers of genetic resources must agree to share the benefits of domestic genetic resources fairly and equitably.⁴⁶ This agreement may not be necessarily made at the time of access and only stipulates the manner of benefit sharing agreement and does not provide any further details.

I. PROHIBITION AGAINST CERTAIN ACCESS TO AND UTILIZATION OF DOMESTIC GENETIC RESOURCES

The Competent National Authority may seek to prohibit or restrict the access and utilization of domestic genetic

⁴⁰ ABS Act, art 9(3).

⁴¹ Enforcement Decree, art 4(1).

⁴² *ibid*, art 4(3).

⁴³ *ibid*, art 4(5), (6).

⁴⁴ *ibid*, art 7.

⁴⁵ ABS Act, art 10.

⁴⁶ ABS Act, art 11.

resources in case of threat or likely to threaten the conservation and sustainable use of biodiversity, or adverse socio-economic effect on the value of biodiversity.⁴⁷ Any person who accesses or uses genetic resources that are prohibited or restricted from access or utilization, in violation of Article 12(1), shall be punished by imprisonment for not more than three years or by a fine not exceeding 30 million KRW.⁴⁸ In case of the above punishment in accordance with Article 26, the applicable genetic resources shall be confiscated. However, if confiscation is not possible, then equivalent fee thereof shall be collected.⁴⁹

J. COMPLIANCE WITH PROCEDURES FOR ACCESS TO AND UTILIZATION OF OVERSEAS GENETIC RESOURCES

(i) Duty of Compliance Report

When the user seeks to access to foreign genetic resources for their utilization in the territory of Korea, they shall observe and comply with the measures and procedures established by the providing country. The user should endeavor to share the benefit arising from utilization of genetic resources with the provider, fairly and equitably.⁵⁰

The user of foreign genetic resources shall report to the National Check Points that they have complied with the measures of the provider country. The duty of compliance report is limited to the cases where it is used in Korea, by accessing to the genetic resources of the provider country which is a party to the Nagoya Protocol and has established procedures for access and utilization of genetic resources.⁵¹

(ii) Procedure of Compliance Report

Where a person seeks to report compliance with the measures of the provider country in accordance with Article 15(1) of the ABS Act, such person shall submit a report of the procedural compliance to one of the six designated National Check Points within 90 days from the date of approval of prior

informed consent (PIC). The declaration shall include the following information:

- User information (name, affiliation, address, contact etc)
- Name of the provider country; name and address of the provider;
- Issuer of PIC (name of issuing authority, date of PIC, issuance number);
- Name of the genetic resources that PIC is approved, quantity or concentration;
- Purpose and utilization of genetic resources; and
- Whether mutually agreed terms are concluded and its contents, if any.⁵²

Pursuant to the Enforcement Decree, the Ministry of Environment established a comprehensive report system to promote electronic processing and efficient management of procedural compliance declaration.⁵³

K. INVESTIGATION ON COMPLIANCE WITH PROCEDURES

National Check Points may seek to investigate whether the domestic user of foreign genetic resources complied with provider country measures in the following cases:⁵⁴

- (i) Where there is an objection to the user's compliance with procedural violations from the provider country; or
- (ii) Where a third party has provided information regarding the procedural violations of the provider country measures; or
- (iii) Where there is reasonable doubt that the user has not complied with the provider country measures.

⁴⁷ *ibid*, art 12(1).

⁴⁸ *ibid*, art 26

⁴⁹ *ibid*, art 27.

⁵⁰ *ibid*, art 14.

⁵¹ *ibid*, art 15.

⁵² Enforcement Decree, art 6.

⁵³ *ibid*, art 7.

⁵⁴ ABS Act, art 16(1).

National Check Points may, after the investigation, recommend that the user of foreign genetic resources observe the provider country procedures, if necessary.⁵⁵ The Enforcement Decree shall determine the content and method of the investigation.

3. DOES THE CURRENT ABS LEGAL FRAMEWORK PROTECT GENETIC RESOURCES AND TRADITIONAL KNOWLEDGE PROPERLY?

A. SUBJECT MATTER

Although the Nagoya Protocol and the ABS Act stipulated some definitions of genetic resources and traditional knowledge, it is still not clear what kind of, and to what extent are genetic resources and traditional knowledge covered. Users such as academic researchers and biotechnological industries are concerned whether the ABS Act covers their R&D subjects. The problem, in most cases, will be decided by depending upon what and how the provider countries are regulating in their domestic measures, since the Nagoya Protocol empowered its Parties with wide discretion regarding the establishment of their domestic measures.

In this respect, WIPO IGC states, 'International harmonization, standard-setting and cooperation across the field of IP have not, overall, been dependent on the determination of definitive, exhaustive definitions of the subject matter of protection. There has been a tendency to leave specific determinations of the boundaries of protectable subject matter up to domestic authorities, and for terminology at the international level to be used more to express a common policy direction.'⁵⁶ However, if a providing

country sets strict standards and widens the scope of subject matter, users will try to circumvent by accessing those genetic resources and traditional knowledge and find or develop other complementary suitable sources. This situation will not improve the protection of genetic resources and traditional knowledge in the providing country.

B. DEFINITION OF 'TRADITIONAL'

There is an uncertainty about what could constitute traditional knowledge, especially the meaning of 'traditional.' In this regard, WIPO IGC states that, '[W]hile it is often thought that tradition is only about imitation and reproduction, it is also about innovation and creation within the traditional framework. Thus, the term 'traditional' does not necessarily mean 'old', but rather that the knowledge and cultural expressions derive from or are based upon tradition, identify or are associated with an indigenous people or a local community, and may be made or practiced in traditional ways.'⁵⁷ Further, Article 8(j) of the CBD provides that, '[E]ach contracting Party shall [...] respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity [...].'⁵⁸ In these contexts, it is understood that traditional knowledge is the knowledge identified or associated with indigenous and local communities, maintained in traditional ways. During the 12th CBD Conference of Parties, the parties adopted the use of the term 'indigenous peoples and local communities' (IPLC) which replaced 'indigenous and local communities' in Article 8 (j).⁵⁹ The adoption of the term IPLC is interpreted in favour of some countries without indigenous

⁵⁵ *ibid*, art 16(2).

⁵⁶ WIPO, Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, Traditional Knowledge-Operational Terms and Definitions, WIPO/GRTKF/IC/3/9 (20 May 2002), paragraph 4; WIPO, Information Note for IGC 39, Prepared by Mr. Ian Goss, the IGC Chair, WIPO/GRTKF/IC/39/CHAIRS INFORMATION NOTE (26 February 2019), para 19.

⁵⁷ WIPO, Information Note for IGC 39, Prepared by Mr. Ian Goss, the IGC Chair, WIPO/GRTKF/IC/39/CHAIRS INFORMATION NOTE (26 February 2019), para 24.

⁵⁸ The Convention on Biological Diversity of 5 June 1992 (1760 UNTS 69), art 8(j).

⁵⁹ Convention on Biological Diversity, Decision Adopted by the Conference of the Parties of the Convention on Biological Diversity, XII/12. Article 8(j) and related provisions, F. Terminology 'indigenous peoples and local communities', UNEP/CBD/COP/DEC/XII/12 (13 October 2014), para 2 (a), (b) and (c).

people in their territory, for a basis to argue that there exists traditional knowledge of local communities. Thus, the concept of traditional knowledge originated from strictly limited areas was broadened by the application of the term 'IPLC.' Recently, many countries, including Korea, have been establishing databases for genetic resources and traditional knowledge, which is found within their countries, claiming that these genetic resources and traditional knowledge belong to their local communities. Although there are no indigenous people in Korea, this is an argument for the protection of traditional knowledge, which Korean people with their long historical and traditional background have developed using traditional local methods, such as Kimchi, Korean traditional herbal medicine, or Koryo celadon. Whether such extensions to the meaning of traditional knowledge is appropriate for the further protection of traditional knowledge is questionable.

C. LINKAGE WITH INTELLECTUAL PROPERTY RIGHTS, MISUSE AND MISAPPROPRIATION

There has been extensive discussion over the last two decades in WIPO IGC regarding how to protect genetic resources and traditional knowledge within the intellectual property regime. In this context, the WIPO Secretariat has intensively published documents regarding the protection of genetic resources and traditional knowledge, describing how to protect them at the international level, existing gaps, and possible options that may be developed to address any identified gaps.⁶⁰ If genetic resources and traditional knowledge met with requirements for granting intellectual property right, they are certainly able to enjoy those rights. Some resources are not by themselves qualified as intellectual property, but hold a high level of value to be recognized as a prior art. In those cases, a prior art shall not be misused or misappropriated by the third party. Some countries argue that such recognition of prior art should be

obligatory for patent applicants, and that patent applicants disclose the origin of resources and the proof of prior informed consent (PIC) and mutually agreed terms (MAT) in their patent applications. According to this approach, if these disclosure requirements are not fulfilled, those patent applications may be refused or the patents invalidated. In this regard, proposals were made to review and amend Article 27.3(b) of the TRIPS agreement and the debate continues in the WIPO IGC.

To prevent unauthorized use and misappropriation, the possibility of establishing databases and other complementary or defensive measures have been suggested.⁶¹ However, there are key issues that need to be considered: Who should be responsible for compiling and maintaining the databases? Should there be standards to harmonize their structure and content? Who should have access to the databases? What would be their content? In what form would the content be expressed? Should there be accompanying guidelines? What would be the benefits and risks of facilitating and encouraging the development of publicly accessible databases?⁶²

D. ECONOMIC BENEFIT

The Nagoya Protocol originally focused on the economic aspects of genetic resources and associated traditional knowledge, including benefit sharing arising from their utilization. The intellectual property debate also based on conferring exclusive property rights. However, it should be considered whether the financial rewards or any licensing fees from the use are in the fundamental interest of rights holders.

A distinction should be made in this regard between economic rights and moral rights. For example, moral rights may be more appropriate for traditional knowledge that is

⁶⁰ 'The Protection of Traditional Knowledge: Undated Draft Gap Analysis,' WIPO/GRTKF/IC/40/7 (WIPO, 9 April 2019).

⁶¹ Joint Recommendation on the Use of Databases for the Defensive Protection of Genetic Resources and Traditional

Knowledge Associated with Genetic Resources, WIPO/GRTKF/IC/39/14 (WIPO, 26 February 2019).

⁶² Information Note for IGC 39, Prepared by Mr. Ian Goss, the IGC Chair, WIPO/GRTKF/IC/39/CHAIRS INFORMATION NOTE (WIPO, 26 February 2019), para 36.

publicly available or widely known, but still attributable to specific indigenous peoples and local communities. Differentiated protection in the form of a tiered approach offers an opportunity to reflect the balance referred to in the mandate of the IGC and that is integral to an intellectual property system. The balance referred to is that between the interests of the holders of intellectual property rights, on the one hand, and the general public, including users and re-users of IP, on the other. In the traditional knowledge context, differentiated protection in the tiered approach offers an opportunity to respond to the reality of differences among secret, narrowly diffused and widely diffused traditional knowledge.⁶³

E. PUBLIC HEALTH

Special concerns should be given to cases where simplified measures or exemptions of access procedures are essential for expeditious access, such as public health emergencies. In line with public health concerns and access to genetic resources, the World Health Organization published comments on the issue of digital sequence information, stating that, 'Rapid, timely and broad sharing of digital sequence information (DSI) is essential to global health; it enables surveillance, response, preparedness, routine control and optimal clinical management of infectious diseases.'⁶⁴

4. CONCLUSIONS

Many questions surrounding the protection of genetic resources and traditional knowledge remain unanswered since the Nagoya Protocol only deals with economic aspects of those resources and rights over them. The starting point for this debate dates back to when a big multinational company performed bio-prospecting activities in an isolated indigenous community with a good source of information and made big financial gains without compensation to the

indigenous communities. Furthermore, there has been a need to prevent unauthorized use of genetic resources and traditional knowledge because sometimes they contain a high value or spirit of indigenous communities. Recent debates, however, seem more likely to give weight to economic interests of providing countries, which may not promote the protection of valuable resources. Whether the protection mechanism should be approached, as a human rights issue, or as an economic and property right issue are additional unsolved issues and still under discussion. As economic and property rights issue, the discussion involves defining rights holders, beneficiaries and the scope of protection, methods to prevent unauthorized use by third parties, methods to be acknowledged as a rights holder, terms of protection, trans-boundary cooperation, formalities, exceptions and limitations. Therefore, the issues of protection for genetic resources and traditional knowledge should focus on the genuine rights holders' interests and balance between users and providers. Special concerns should be given to the cases where simplified measures or exemptions of access procedures are essential for expeditious access, such as public health emergencies.

With regard to the ABS legal framework in Korea, the future challenges are to promote an understanding of the Nagoya Protocol and its implementation mechanism among industries and researchers who utilize genetic resources, and to develop sectorial guidelines. It is also necessary to provide information on main provider countries' domestic ABS measures and mechanism, and develop case studies, in order to prepare Korea to fully comply with applicable laws and regulations and deal with possible legal disputes. Other key issues are to discover domestic genetic resources and associated traditional knowledge by survey and research, and to keep them in a database system or registries, so that third parties do not abuse them in bad faith. The Nagoya Protocol

⁶³ Information Note on Traditional Knowledge/Traditional Cultural Expressions for IGC 40, Prepared by Mr. Ian Goss, the IGC Chair, WIPO/GRTKF/IC/40/CHAIRS INFORMATION NOTE (WIPO, 6 June 2019) paras 17-20.

⁶⁴ Comments by the World Health Organization on the Draft Fact-finding and Scoping Study 'The Emergence and Growth of Digital Sequence Information in Research and Development: Implications for the Conservation and Sustainable Use of Biodiversity, and Fair and Equitable Benefit Sharing' (WHO, 9 November 2017).

and implementing measures of its Parties contain many terms with rather obscure meaning, possibly because they were created by coordinating varying interests of different stakeholders, and reflect diverging views of various countries. Competent authorities and ABS Help-Desks should consult experts and their counterparts in the provider countries to clarify these uncertainties. Although Korean law stipulates the access report procedures and requirements may be simplified or waived where a Competent National Authority recognizes the need for expeditious access to genetic resources for developing therapeutic treatment or food security, due to threat or damage to the life and health of humans, animals, or plants, or in case of access for the purpose of non-commercial research, there is no specified regulation for the requirement of simplified or waived procedure. The Korean ABS legal framework need to develop rules and regulations in a manner to clarify where and when the ABS Act is applied and to ensure that relevant industry and research development is not hindered.

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