

## 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, Nagoya Protocol, and the 2002 Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization (Bonn Guidelines).<sup>1</sup> 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),<sup>3</sup> the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)<sup>4</sup> Review of Article 27.3(b) regarding traditional knowledge and

**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),

<sup>1</sup> the 2002 Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization (Bonn Guidelines),<sup>2</sup> 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),<sup>3</sup> the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)<sup>4</sup> Review of Article 27.3(b) regarding traditional knowledge and

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).<sup>5</sup>

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 P

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 <sup>10</sup>
Ministry of Agriculture, Food and Rural Affairs	Act on the Conservation, Management, and Use of Agricultural Bio-resources <sup>11</sup>

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

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.<sup>19</sup>

#### **(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).<sup>20</sup> Competent National Authorities carry out the following functions: i) the processing of access declaration or modified declaration on domestic genetic resources,<sup>21</sup> ii) prohibition of access to and utilization of domestic genetic resources,<sup>22</sup> iii) supporting fair and equitable benefit sharing on domestic genetic resources,<sup>23</sup> and iv) other matters determined by Enforcement Decree regarding ABS.<sup>24</sup>

#### **(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,<sup>25</sup> ii) investigation and advice on compliance with procedures,<sup>26</sup> and iii) supporting domestic users who utilize overseas genetic resources.<sup>27</sup> 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.<sup>28</sup>

##### **(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.<sup>29</sup>

##### **(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.<sup>30</sup>

##### **(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.<sup>31</sup>

##### **(iv) Utilization**

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

---

<sup>19</sup> Enforcement Decree, art 2.

<sup>20</sup> ABS Act, art 8.

<sup>21</sup> *ibid*, art 9.

<sup>22</sup> *ibid*, art 12.

<sup>23</sup> *ibid*, art 8(2)(3).

<sup>24</sup> Enforcement Decree, art 3.

<sup>25</sup> ABS Act, art 15.

<sup>26</sup> *ibid*, art 16.

<sup>27</sup>

biochemical components, by the utilization of genetic resources.<sup>32</sup>

**(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.<sup>33</sup>

**E. SCOPE OF APPLICATION**

The ABS Act applies to the following genetic resources:<sup>34</sup>

- (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.<sup>35 e(f)-3.70.00</sup>

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.<sup>40</sup> 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.<sup>41</sup>

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.<sup>42</sup>

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

---

<sup>40</sup> ABS Act, 1.7 (S)-3 (-)-14ces,



National Check Points may, after the investigation, recommend that the user of foreign genetic resources observe the provider country procedures, if necessary.<sup>55</sup> 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.'<sup>56</sup> 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.'<sup>57</sup> 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 [...].'<sup>58</sup> 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 12<sup>th</sup> 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).<sup>59</sup> The adoption of the term IPLC is interpreted in favour of some countries without indigenous

---

<sup>55</sup> *ibid.*, art 16(2).

<sup>56</sup> 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.

<sup>57</sup> 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.

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

<sup>59</sup> 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

Myung-

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 an1.8y1.6 (o)-.7 (i)-1.6ip

WIPO, 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 (26 February 2019)

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