

# ACCESS, BENEFIT SHARING AND IPRS: AN ANALYSIS OF TRIPS AGREEMENT AND CBD FOR THE ABS IMPLEMENTATION AND DEVELOPING COUNTRIES CONCERNS†

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## I. INTRODUCTION

Within the World Trade Organization (WTO), the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs Agreement) regulates the grants of intellectual property on human-created inventions. Considering “living material” especially biological and genetic resources as patentable allows developed countries to take advantage of these resources. Developed countries are of the view that the effective implementation of intellectual property protection does benefit innovation, competition, technology transfer and at the end the standard of living of people, both in the developed and developing countries.<sup>1</sup>

On the other hand, many developing countries argue that since the major portion of the biodiversity segregated in developing world, hence patenting of biological and genetic material and associated knowledge in the developed countries becomes a threat to the safeguard of biodiversity and disadvantages them economically.<sup>2</sup> According to them, the use of traditional knowledge and its commercialization through patents without the consent or the compensation violates their fundamental rights.

This imbalance has caused a global debate over access to and benefit sharing (ABS) of genetic resources. The major issues involved in this debate

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† The views expressed in this paper are entirely the author’s view and should not be attributed either to IUCN or WWF India.

<sup>1</sup> Graham Dutfield, *Sharing the Benefits of Biodiversity: Access Regimes and Intellectual Property Rights*, Science, Technology and Development Discussion Paper No. 6, Center for International Development and Belfer Center for Science and International Affairs, Harvard University, Cambridge, MA, USA, 1999.

<sup>2</sup> WWF, *Review of National Actions on Access to Genetic Resources and IPRS in Several Developing Countries*, WWF International Discussion Paper, 1995.

viz: (1) developed countries that have the requisite technological expertise to utilize genetic material and developing countries who are providers of genetic material; and (2) between the big pharmaceutical companies who want to have access to genetic resources and local and indigenous communities who would like to get meaningful benefits from these resources.

The paper endeavours to give an overview of the emerging global regime on genetic resources, with a special focus on the developing countries concerns as such the development on an effective ABS regime at the national level, could have bigger scope for these countries. The paper aims at giving answer to the following queries:

- (i) What are the potential conflicts between laws regulating on the one hand conservation of biodiversity and on the other hand Intellectual Property Rights?
- (ii) How can these arguments be used in order to strengthen the position of the developing countries in their attempt to defend their biological and genetic resources?
- (iii) How can we create an effective legal regime for effective access and benefit sharing of these resources for the developing countries?

To answer these questions, firstly, the existing legal framework for the conservation of biodiversity and benefit sharing mechanism has to be examined; secondly, the issue of conservation of biodiversity and its relevance to the intellectual property rights (IPRs) have to be examined; thirdly, ABS mechanism, its different participants and the implications have to be reviewed; fourthly, WTO framework on TRIPs Agreement and CBD and the conflicts between the existing agreements and how they can be used to gear interests towards biodiversity-rich nations have to be considered; and finally, progress and initiative already undertaken for the development of framework regime of ABS for the developing countries have to be examined.

## II. EXISTING LEGAL FRAMEWORKS FOR THE CONSERVATION OF BIODIVERSITY AND BENEFITS SHARING MECHANISM

### *A. The Convention on Biological Diversity*

The CBD's objectives are: "the conservation of biological diversity, the sustainable utilization of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources" (Article 1). In addition, it insists on contracting parties to "respect, preserve and maintain knowledge, innovations and practices of Indigenous and local

communities” and “encourage the equitable sharing of the benefits arising from the use of such knowledge, innovations and practices” [Article 8(j)].<sup>3</sup>

These two articles specifically emphasize the need for protection of biodiversity and the recognition of traditional knowledge. If they are effectively applied and implemented, they can have major consequences for the access to genetic resources. Many developing countries have welcomed the concept of benefit-sharing, which is of substantial signification for local communities and the preservation of traditional knowledge. Indeed, more than 50 countries have already enacted some legislation on CBD at the national level.<sup>4</sup>

### *B. Benefit-sharing Mechanisms*

The Convention also recognizes “the sovereign rights of States over their natural resources”, and that “the authority to determine access to genetic resources rests with the national governments and is subject to national legislation” (Article 15). The sovereignty of states over their genetic resources is a vital issue in the equitable benefit sharing mechanisms. The Convention further says that parties “shall endeavor to create conditions to facilitate access to genetic resources” (Art 15.2) and access, where granted, shall be on mutually agreed terms and subject to Prior Informed Consent (PIC) of the Contracting Party (Art 15.5).<sup>5</sup> The latter provision indicates that parties have to be aware and agree with the terms under which resources are accessed and /or taken away.

The Convention finally asserts, in Article 16 that “The Contracting Parties, recognizing that patents and other Intellectual Property Rights may have an influence on the implementation of this Convention, shall cooperate in this regard subject to national legislation and international law in order to ensure that such rights are supportive of and do not run counter to its objectives.”<sup>6</sup>

Articles 15 and 16 are now subject of negotiations, as they involve rights and duties that should be enforced. However, laws regulating

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<sup>3</sup> L. Glowka, et. al., *A Guide to the Convention on Biological Diversity*, Environmental Policy and Law Paper No. 30, IUCN Environment Law Centre, Bonn – Germany, 1994 at 48-49.

<sup>4</sup> Manuel Ruiz, *Intellectual Property Rights and Biodiversity: Processes and Synergies*, Background paper for workshop on TRIPs and CBD Global Biodiversity Forum, Cancun – Mexico, Sep 5-7, 2003 at 7.

<sup>5</sup> *Supra* n. 3 at 76-83.

<sup>6</sup> *Supra* n. 3 at 85-86.

intellectual property do have other priorities that may be hindered by such articles, as I will elaborate here in the next section below.

### III. CONVENTION ON BIOLOGICAL DIVERSITY AND ITS IMPLICATION WITH IPRS

As a result of common concern about the genetic resources, a number of international treaties and intergovernmental institutions deal with the issue of conservation of biodiversity; intellectual property rights, and/or with both. Even though opinions are divided on the need for diversity, the importance of biological resources for human being and the decline of their availability made a common concern. According to Cooper,<sup>7</sup> the worldwide dependence on other countries' resources is the main reason why international cooperation in the field of genetic resources is important. There are three main treaties dealing with CBD and IPRs viz. the International Undertaking on Plant Genetic Resources (IUPGR) of the FAO, the Convention on Biological Diversity (CBD) and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs Agreement). The aim and purposes of each of these treaties is different. However, for the purpose of this paper, I will look more closely at the debates and conflicts around CBD and TRIPs Agreement only.

IPRs are currently defined as "rights given to persons over the creation of their minds" (TRIPs-WTO, text of the Agreement). The scope of the exclusive rights created by IPR defines who can use the information contained in genetic resources, and so influences the distribution of the benefits flowing from this use.<sup>8</sup> In these ways, and others, IPR will affect who shares in the benefits arising from genetic resources, with implications for the conservation and use of biological diversity.

The CBD on the other hand has two provisions relating to IPRs. First, its Article 16.5 states that Contracting Parties shall cooperate to ensure that IPRs are "supportive of and do not run counter to its (the CBD's) objectives". However, this is "subject to national legislation and international law". Second, Article 22 states that the CBD's provisions will not affect rights and obligations of countries to other "existing international agreements,

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<sup>7</sup> D. Cooper, *The International Undertaking on Plant Genetic Resources* 11(1) RECIEL, 2002.

<sup>8</sup> The scope of intellectual property rights refers to a number of factors such as the subject, duration, category of activities that IPRs extend to, as well as the availability of exceptions to private rights such as compulsory licensing, and other exceptions for research and non-commercial uses.

except where the exercise of those rights and obligations would cause a serious damage or threat to biological diversity".<sup>9</sup> By reading both these articles in conjunction and in the spirit of the CBD, it seems there is a basis for countering the runaway march of the IPRs regimes.

Dutfield<sup>10</sup> in an extensive review argues that the relevance of international IPR regime to the CBD is beyond doubt. The questions which he feels are unresolved include:

- (i) increased availability of IPR protection will automatically lead to greater levels of innovation in society. He argued that innovation and creativity flourish in many parts of the world without any IPR laws.<sup>11</sup>
- (ii) though, evidence suggests that most technologies supportive of biodiversity conservation are in the public domain but, with respect to those which are not, it is uncertain whether IPR restrict or support their transfer to developing countries but it is widely accepted that the application of traditional knowledge and technologies can add value to genetic resources.

He further opined that, while patents are clearly unsuitable mechanisms to protect the rights of traditional knowledge holders, the use of other intellectual property rights may in some circumstances be feasible.

Moreover, the relationship between the CBD and IPRs has already been considered by the CBD Conference of the Parties (COP) in a number of decisions. The COP called for cooperation with the WTO on IPR-related issues and stressed "the need to ensure consistency in implementing the Convention on Biological Diversity and the World Trade Organisation agreements, including the Agreement on Trade-Related Aspects of Intellectual Property Rights" (decision IV/15).<sup>12</sup> It has also invited the WTO to take into account relevant provisions of the Convention and their interrelationship with the TRIPS Agreement. While related to a number of aspects of biodiversity conservation, IPR are proving particularly relevant to provisions of the CBD that govern the following inter-related areas:

<sup>9</sup> A. Kothari and R. Anuradha, *Biodiversity, Intellectual Property Rights, and the GATT Agreement: How to Address the Conflicts?* BIOPOLICY, Paper 4, PY 97004, 1997, Online Journal, <http://www.bdt.org.br/bioline/py>.

<sup>10</sup> Graham Dutfield, *INTELLECTUAL PROPERTY RIGHTS, TRADE AND BIODIVERSITY: SEEDS AND PLANT VARIETIES*, (IUCN and London: Earthscan Publications Ltd., 2000) at 125-27.

<sup>11</sup> The knowledge, innovations and practices of indigenous peoples and local communities, for example, are rarely if ever protected by intellectual property rights

### *A. Traditional Knowledge (TK)*

Traditional knowledge (TK) is main issue related to the CBD's provisions on access and benefit sharing. The indigenous and local communities through years of practise, scrutiny and usage have developed a knowledge base system extending across generations regarding the use and properties of various biological resources. This knowledge, for example, the long-term use of medicinal plants – provides an important source of information for the sustainable management of biological diversity, and for the development of new, socially beneficial products.<sup>13</sup>

The CBD calls on Parties to “respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biodiversity” in Article 8(j).<sup>14</sup> A diversity of views has been expressed about the relationship between traditional knowledge and IPR. Some authors argue that IPR can provide an incentive for continued investment in the preservation of these practices.<sup>15</sup> Other commentators argue that traditional knowledge generally falls outside the parameters of protection offered by current IPR regimes, and that these regimes may enable the knowledge of indigenous and local communities to be misused by others. In my opinion, these views are not mutually exclusive, and there are examples where both are true.

Indeed, there are growing numbers of instances in which IPRs have been used to gain control over traditional knowledge, without provision for benefit sharing. Some recent examples include the case of an Indian Turmeric (*Curcuma Longa*) and Amazon Basin Ayahuasca. These two cases are good examples of the controversy on how IPRs control the TK without sharing the benefits with the indigenous community and resulting in the “biopiracy”.<sup>16</sup>

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<sup>12</sup> The CBD website at: [www.biodiv.org](http://www.biodiv.org)

<sup>13</sup> R.V. Anuradha, *Law Relating to Bio-diversity Challenges for the Lawyer*, 1 INDIAN JOURNAL OF ENVIRONMENTAL LAW, National Law School of India University and CEERA, 2000 at 31-42.

<sup>14</sup> *Supra* n. 3, Article 8(j) at 47-49.

<sup>15</sup> Anil K. Gupta, *How Can Asian Countries Protect Traditional Knowledge, Farmers Rights and Access to Genetic Resources through the Implementation or Review of the WTO TRIPS Agreement*, paper presented at the Joint ICTSD/CEE/HBF Regional Dialogue for Governments and Civil Society, organised by ICSTD at Thailand, March 29-30, 2001.

<sup>16</sup> A. Kothari and R. Anuradha, *Biodiversity and Intellectual Property Rights: Can the Two Co-exist?* 2(2) JOURNAL OF INTERNATIONAL WILDLIFE LAW AND POLICY, 1999.

### *B. Conservation of Biological Diversity*

The main objective of the CBD is to encourage the conservation and sustainable use of the components of biological diversity. This objective encompasses many of the issues raised above, and requires consideration of additional, often indirect, impacts of IPRs on the conservation and sustainable use of biodiversity.

Among its many obligations relating to conservation and sustainable use, the CBD requires Parties to integrate considerations relating to conservation and sustainable use into national decision-making (Article 10).<sup>17</sup> Further, Parties are responsible for identifying processes and categories of activities that have or are likely to have significant adverse impacts on biological diversity and monitoring their effects (Article 7(c))<sup>18</sup>. The granting of IPRs could, arguably, be such a category of activity.

The CBD also includes a number of obligations relating to the conservation of *in situ* biological diversity. For example, it requires Parties to “control the risks associated with the use and release of living modified organisms resulting from biotechnology which are likely to have adverse environmental impacts” (Article 8(g)).<sup>19</sup> Implementation of these obligations will be particularly important in relation to the conservation of genetic resources, where IPRs can play a crucial role.

A major concern about IPR in the hands of private owners and companies is that the latter used this IPR for commercial purposes, the first reason for genetic erosion, threatening biodiversity, which in turn threatens food security which is the most concern for the developing countries<sup>20</sup> in the current WTO debate.

All the above mentioned factors contribute to the thought that strong IPR regime is detrimental to developing countries and emphasize the need for an alternative way for developing countries to protect their resources.

### *C. Access to and Benefit Sharing of Genetic Resources*

Due to the economic benefit associated with the genetic resources, there is a large scope for the framing of regulations for controlling access to such resources in the interest of the national and local communities. However,

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<sup>17</sup> *Ibid.*

<sup>18</sup> *Supra* n. 3 at 36.

<sup>19</sup> *Id.* at 45.

<sup>20</sup> The food security is also important in the light of recently concluded WTO Ministerial Meeting where strong coalition of developing countries raised that this is the most important concern for them.

before laying any access regime, the major constraint needs to be tackled with is the 'ownership right' on these resources. The problem is further complexed by the fact that discourse on the subject limits itself often to the modern definitions of ownership, which do not necessarily encompass the more traditional forms of ownership acquisition. For example, traditional knowledge in India has been preserved through *smriti and shruti*, that is, through the word of the teacher, which is heard and remembered, not documented, nor converted into a statutory ownership right in favour of the teacher or his disciple. Although this form of ownership right is enshrined in the common law principles,<sup>21</sup> and recognized through jurisprudence in India, and at times even converted into a statute for a more predictable ownership rights regime, it is not necessarily recognized outside the jurisdiction of India.

But CBD does not clarify who has the ownership rights on the resources in the first place: the country, the community concerned, the individual or some association on behalf of the individuals. The 'rights' issue, therefore, is perhaps left for resolution at the national level. The focus of implementation of the will of the international community as laid down in CBD is at the national level and hence recognition of such national level regimes at the international level is a mandatory for conservation of biological resources and associated traditional knowledge.

As in the case of access, for benefit sharing also, CBD gives solutions that need national level implementation (Art 15 (1)).<sup>22</sup> In fact, CBD perhaps assumes that the exploitation of the right of the holder, irrespective of the way it is determined, will be ensured through a process of fair and equitable benefit sharing.<sup>23</sup> There is an implicit recognition that outsiders misappropriate resources and associated traditional knowledge, and therefore a benefit sharing mechanism would reverse the wrong. But determination of value of the resource/knowledge, and the profit earned by the outsider that should accrue to the holder is no mean task. In some of the agreements that have been concluded between developing country right holders and developed country corporations, royalties promised range from 0.1% to 3-4%.

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<sup>21</sup> A. Kaushik, *Multi-stakholder Dialogue on Trade, Intellectual Property and Biological Resources in Asia*, paper presented at the workshop conducted by Bangladesh Environmental Lawyers Association (BELA), Bangladesh, April 19-20, 2002 at 3.

<sup>22</sup> *Supra* n. 3 at 76.

<sup>23</sup> *Ibid.*

On the other hand, the royalty proposed to a developed country right holder by a developed country corporation was as high as 10%.<sup>24</sup> This brings us to the negotiating power of the local communities who are right holders but do not have the wherewithal to get their fair share from powerful corporations. It is this realization that has perhaps made many developing countries to install regimes that provide for State intervention in determining access as well benefit-sharing arrangements along with strong IPR laws.

#### IV. THE CONSTRAINTS FOR THE ABS REGIME

At present, there are many constraints relevant to the debate on genetic resources that national governments are confronting in their approach towards the effective implementation of an ABS regime at the national level viz: (1) prior informed consent, (2) the role of indigenous and local communities; (3) effective benefit sharing arrangements with communities, and (4) the Doha work programme adopted by the WTO which includes the clarification of the relationship between the CBD and TRIPs as it relates particularly to the protection of traditional knowledge and interests of developing countries.

##### *A. Issues Related to Prior Informed Consent (PIC)*

Article 15 of the CBD recognizes the sovereign rights of states over their natural resources and gives governments the authority to determine access to genetic resources. Such access shall be subject to PIC of the host State. All these are to be done and regulated through national legislation.

The debate at the global level is focused on the extent to which governments can regulate access to prevent biopiracy while not imposing unnecessary burdens on "legitimate" collection and utilization. In the case, for example, of plant genetic resources, its "free" exchange is seen as an important pillar for meeting the goal of global food security. Likewise, the collection of specimens that are critical for biodiversity conservation is perceived to be a legitimate activity that access legislation could unduly hinder.<sup>25</sup>

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<sup>24</sup> J. Wendt and J. Izquierdo, *Biotechnology and Development: A Balance between IPR Protection and Benefit-sharing Biotechnology Issues for Developing Countries*, 2001. See <http://www.ejb.org/content/vol4/issue3/01>.

<sup>25</sup> B. Tobin, *Certificates of Origin: A Role for IPR Regimes in Securing Prior Informed Consent*, in Mugabe, et. al., *ACCESS TO GENETIC RESOURCES: STRATEGIES FOR SHARING BENEFITS*, Acts Environmental Policy Series No. 8, 1997 at 329-40.

### ***B. The Role of Indigenous and Local Communities***

Article 15 of the CBD requires only that national governments give prior informed consent (the sovereign act of allowing access to genetic resources within a country), but other CBD provisions—as well as the national laws of many countries—imply that PIC should also be obtained from the local or indigenous communities from whose territories genetic resources are taken.

The role of local and indigenous communities in determining whether a state should give its prior informed consent to the collection and utilization of genetic resources is a decision that will be made at both the global (particularly in the CBD) and national levels. This is a decision with serious implications to the rights (political and natural resources related) of local and indigenous communities. Serious attention needs to be devoted to the relevant global and national processes so that such rights are protected.

### ***C. Effective Benefit Sharing with Communities***

The CBD requires the adoption and implementation of benefit sharing arrangements between its Parties. In its national legislation, governments are mandated to establish such arrangements if this core objective of regulating access is to be achieved. In addition, user countries have an obligation to institute measures to ensure benefit sharing with the provider countries. It should be noted that most benefits from the utilization of genetic resources are generated by the private sector. Individual governments and communities would have to develop their own approaches to—and conduct their own negotiations with—industry to ensure benefit-sharing. The Kani Tribe of India experience in a unique example in this regard.

While there is a broad consensus that benefit sharing should include benefits for local and indigenous communities, arrangements should be specifically designed to include those that would benefit these communities. Moreover, If communities, not only provider States, is to benefit from utilization of genetic resources, it is mandatory that State build the capacity for local communities to negotiate the appropriate terms that would provide both short term and long term benefits. In addition to acquiring the necessary technical skills to negotiate successfully, the ability of local communities to maximize benefits they could receive is also directly dependent on their right to prevent access. Thus, benefit sharing with communities can work only if their role in giving prior informed consent is recognized and respected.

## V. WTO FRAMEWORK ON TRIPS AND CBD

The World Trade Organisation (WTO) in its Doha Declaration in 2001, singled out the relationship between the CBD and traditional knowledge to the Trade Related Aspects of Intellectual Property Rights (TRIPs Agreement) as requiring clarification (para 19).<sup>26</sup> As part of the Declaration, the ministers agreed to include in its review of the TRIPs Agreement, an examination of the relationship between TRIPs Agreement and the CBD as well as the protection of traditional knowledge and folklore:

The TRIPs Agreement lays down the international framework for the protection of intellectual property rights, including patents and trade secrets (the most relevant to benefit sharing of genetic resources). As a general rule, the TRIPs Agreement protects intellectual property rights holders by requiring WTO Members to provide national treatment and MFN treatment to the nationals of other WTO Members with respect to the protection of intellectual property.

Article 27 of the TRIPs Agreement effectively allows Contracting Parties to allow the patenting of life forms i.e. plants, animals, and biological processes – by the simple expedient of not expressly excluding such life forms from patentability. Micro-organisms and non-biological and microbiological processes may be patented as well. Because of these provisions, many see the TRIPs Agreement as threat to the protection of traditional knowledge of local and impoverished communities.

However, the outcome of the review, undertaken by the TRIPs Council at the WTO, is still inconclusive and it is difficult to anticipate the outcomes of this review. What is clear is that if this is not done right, decisions made in the WTO process could seriously undermine whatever progress has been made in the CBD. Decisions being made in these negotiating forums have enormous impact especially on developing countries and their local and poor communities.

Moreover, in the recent past, many local communities reject the patenting of life forms. The concept of ownership over knowledge of living products and life processes is culturally strange to many such communities and particularly to indigenous peoples. While there are people who advocate that traditional knowledge can be protected through the present system, many disagree for both ideological as well as practical reasons. Solutions have been

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<sup>26</sup> See paragraph 19 of the Doha Ministerial Declaration, the full text of which can be found in [http://www.wto.org/english/thewto\\_e/minist\\_e/min01\\_e/mindecl\\_e.htm](http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm).

proposed on how to deal with this difficult challenge like collective community rights<sup>27</sup> but many argue that without the review of TRIPs Agreement, it is difficult to foresee a satisfactory solution.

It is also pertinent to mention here that the TRIPs Agreement's source of authority arises from its Understanding on the Settlement of Disputes (DSU) which establishes a binding dispute settlement mechanism<sup>28</sup>. If a Member fails to abide by a decision of the DSU, the complaining Member may be authorised to retaliate and impose trade sanctions on the other party. Although it is among the most powerful international dispute settlement systems, it has been criticised for inadequate mechanisms for gaining access to non-trade expertise, and sometimes inappropriate decisions regarding the competing goals of trade liberalisation and environmental protection. Where the subject matter of the WTO agreements and other international agreements interrelate, the existence of the dispute settlement mechanism is one factor that lends practical and political strength to the WTO agreements. It is thus important in designing recommendations to resolve tensions between the CBD and the TRIPs Agreement, to consider this factor.<sup>29</sup>

## VI. INCONSISTENCY BETWEEN THE AGREEMENTS

As mentioned above, there are various international treaties and different inter-governmental institutions that regulate the access to genetic resources and Intellectual Property Rights, on different levels and for different purposes. Different texts of agreements have various intentions and protect different peoples and interests. Simultaneous implementation is therefore sometimes difficult. Specifically, in case of the CBD and TRIPs Agreement, a certain number of problems arise. On the face of it, it seems unlikely that there should be significant conflicts between them as they both deal with different topics.

### *A. Equitable Benefit-sharing*

The TRIPs Agreement does not mention any provision recognizing the principle of benefit-sharing, a central thought in the CBD, or any regulation

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<sup>27</sup> G. S. Nijar, *TRIPs and Biodiversity, The Threat and Responses: A Third World View*, Third World Network, Paper No. 2, Malaysia, 1996.

<sup>28</sup> RIS, *WORLD TRADE AND DEVELOPMENT REPORT 2003* (RIS, New Delhi, 2003).

<sup>29</sup> It is relevant to mentioned here that Article 22(1) of the CBD provides "The provisions of this Convention shall not affect the rights and obligations of any Contracting Party deriving from any existing international agreement, except where the exercise of those rights and obligations would cause a serious damage or threat to biological diversity".

between the patent holder and the holder of the genetic material.<sup>30</sup> The absence of such mechanism from international conventions has raised concerns amongst the developing countries. Though, developing countries have not much space for negotiations, the issue here is that they would like to see some form of compensation for the use of the resources originating from their territories.

The CBD asserts that mechanisms of benefit-sharing should be implemented, meaning thereby that countries must ensure that benefits arising from the use of biological resources are shared with the communities and peoples from whom they have been taken. The promise of benefit sharing should not be a sufficient ground on which access can be accorded. It is also important that clear provisions should be made on how to share the benefit.

Criticism on this concept is that such contracts consider material as a commodity rather than knowledge, and overlook the intrinsic value for local communities. Besides, contracts between the private sector and communities or institutions are seldom equitable: the percentage of royalties the communities should get does not reflect in any means the benefits for the company.<sup>31</sup>

Another argument is that the rush for Indigenous-held knowledge and resources has turned into a race for patents, and not for the substance the patent is protecting. So, what seemed to be a fairness contract in CBD is now being criticized by the defenders of community rights and public interest: accepting the mechanism of benefit sharing in fact means that the idea of a resource as a commodity is accepted. In doing so, it justifies bioprospecting, which in turn those same defenders reject.

Hence, the absence of sharing mechanism in IP regulating laws and the simultaneous explicit mentioning of the same principle in CBD shows on the one hand a conflict between two agreements. But on the other hand, given the criticism on benefit sharing, it shows that the principles of the CBD may not conflict that much in starting point with the ones of TRIPs as is commonly advocated.

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<sup>30</sup> Gaia Foundation and GRAIN, *TRIPs versus CBD, Conflicts Between the WTO Regime of Intellectual Property Rights and Sustainable Biodiversity Management*, 1 GLOBAL TRADE AND BIODIVERSITY IN CONFLICT (London/Barcelona, 1998).

<sup>31</sup> Gaia Foundation and GRAIN, *Biodiversity for Sale, Dismantling the Hype about Benefit Sharing*, GLOBAL TRADE AND BIODIVERSITY IN CONFLICT (London/Barcelona, 2000) at 4.

In view of the above, one can argue that whereas the benefit-sharing mechanism seemed like a fairer deal than open access, the practical outcome does not seem to be satisfactory in many cases. It is nevertheless one way in between the agreements to achieve a better deal than unlimited access. It requires though that resources be considered a marketable commodity, which is in turn rejected by many.

### *B. Private and Collective Rights*

By stating in the preamble that “intellectual property rights are private rights”, TRIPs Agreement also negates collective rights. Regarding implementation of TRIPs, this is a major shortcoming and uneasy situation for the developing countries. Indeed, many communities share their resources, knowledge and cultures among themselves. The individual appropriation of knowledge like in industrialised countries is less common in developing countries. The negation of collective rights in TRIPs Agreement shows how inappropriate the Agreement is for countries other than the developed and industrialized ones. The negation of collective rights is seen as a big issue for developing countries. Whereas they are obliged to protect their biological and genetic resources through patents or the *sui generis* system, they are unable to protect them in a way that fulfils cultural traditions, such as community rights.<sup>32</sup>

### *C. Sovereignty over Genetic Resources*

There is also debate on the TRIPs Agreement about the principle mentioned in the CBD, stating that countries have sovereignty over their genetic resources. According to Article 3 of the CBD Convention, States have “the sovereign right to exploit their resources pursuant to their own environmental policies”.

The TRIPs Agreement, by making biological resources subject to private Intellectual Property Rights with the intention of promoting free trade, wishes to facilitate the access to these resources, and overlooks the sovereignty principle.

The concept of sovereign rights over resources, replacing the concept of common heritage, allows countries to regulate the access to them, making their national laws prevailing, including provisions concerning the restriction to exploit their resources. It is questionable though, if sovereignty of states over their resources is beneficial to the resources and the communities. No need to say that when it comes to financial benefits that can be made out of

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<sup>32</sup> *Supra* n. 30.

the exploitation of resources, States too are interested in commerce. In this context, one should think that resources in the hands of dishonest officials are not that protected, especially when it becomes a sought after, commercially interesting item. If the state authorities decide to allow access in exchange for financial support, then the purpose of the CBD can be endangered.

#### *D. Prior Informed Consent/Mutually Agreed Terms*

The CBD also states that access to genetic resources should be subject to "Prior Informed Consent" (PIC), meaning that authorization of the right holder should be sought after and obtained in order to access the resource and/ or the knowledge.

The simultaneous occurrence of sovereignty over genetic resources and the allowance to access them can be combined in Prior Informed Consent, that means that communities should know and agree on the removal of resources from their natural territory. To make such provision effective, it should be possible to nullify any new invention, whether patented or not, for which the resource was used without PIC. Terms under which consent can be denied/permitted should also need to be defined.<sup>33</sup> TRIPs Agreement on the contrary pursues free access and does not mention any such notion.

#### *E. Approval and Denial of Access*

On the approval and denial of access, provisions should include the conditions under which access is permitted or denied. Article 8 of the TRIPs Agreement states that: "Members may, in formulating or amending their national laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interests in sectors of vital importance to their socio economic and technological development, provided that such measures are consistent with provisions of this Agreement".<sup>34</sup> So, it should be possible to deny access on the ground that the latter does endanger among others socio- economic development. Besides, the CBD states that access is permitted for the purpose of "environmentally sound uses" only. It is thus possible to determine what one considers environmentally unsound use in the *sui generis* provision, which in turn allows denying access if such is the case. The terms under which access can be permitted or denied should be defined in such provisions. In this context, one could argue of mentioning the end purpose of the use of the resources.

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<sup>33</sup> J. Mugabe, et. al., *MANAGING ACCESS TO GENETIC RESOURCES : TOWARDS STRATEGIES FOR BENEFIT SHARING* (Nairobi: Centre for Technology Studies, 1996).

<sup>34</sup> WTO TRIPs Agreement, *supra* n. 26.

Thus, the list of conflicts about benefit sharing viz. collective versus individual rights, sovereignty principles and others clearly show contrasts between the laws regulating access to biodiversity and Traditional knowledge on the one hand and Intellectual Property on the other hand. However, it is not adequate to consider that TRIPs plus regime will hurt the cause of CBD. As we have seen, in some cases oppositions are not that obvious; even more, some concepts such as considering genetic resources as a commodity do not seem very different among the different agreements. Indeed, we need to bear in mind that intentions in both CBD and TRIPs have different directions, but many not opposite. Hence, in working towards a better position for the purpose of the conservation of biodiversity and the protection of traditional knowledge, developing countries should be aware of the contents of the different agreements and at the same time be critical of what the underlying thought is of such agreements.

Though, to achieve this lots of advocacy work is needed to changes and recognition of the developing countries' interests. Protests against such far-reaching treaties are growing, also. The issue here is that because of TRIPs restrictions, there is very few opportunity to carry out the provisions of the CBD. Countries do not face sanctions if they do not live up to CBD commitments, while they face huge trade sanctions if they are found to violate TRIPs. There is thus inequity in the weight of TRIPs and CBD, making it more difficult to use CBD provisions such as benefit-sharing and sovereignty over resources to be implemented and carried out.

#### VII. THE ROLE OF IPRS FROM DEVELOPING COUNTRIES PERSPECTIVE

In the current scenario, the negotiating power of developing countries over their biological and genetic resources is weak. On the other hand, developed countries try to patent the biological and genetic resources and at the same time restrain imitation of technology when their technology is transported abroad. So, the costs of among others lost markets seem to be a strong motivation to argue that IPRs are needed in order to protect the developed countries and their transnational corporations. The same arguments can be used to show that IPRs could even be beneficial to developing countries. So it seems, according to those arguments that two parties could win by increasing protection of intellectual property. Evidences given by a number of scholars both in favor and against this argument are discussed in the subsequent paragraphs.

As patents regulate access to protected technology, the use of that technology by consumers or other technology-users will be subject to royalty payment and any other conditions imposed by the patent holder. Besides,

local initiatives to develop new technologies, building on already existing ones will be more difficult and expensive.<sup>35</sup> This may in turn slow down the process of new initiatives in the development of technologies. Especially small local initiatives will be turned down because of the costly access.

The absence of strong IPRs and the subsequent possible threat of copied technology is a reason for not investing in a certain country, according to some. Owners of technology choose then not to enter the unprotected market, and also not to export their goods to countries with weak protection. Hence, the profitability of firms diminishes, and in turn disables the attraction of new technologies by developing countries. The argument is that if the latter had stronger protection, then exports would rise, thereby increasing trade flows, and also enabling inflows of technologies.

On the other hand, technology itself and the products in which it processed will become more expensive: patented technology means that with every use of the technology or the product, royalties should be paid, making it more expensive for technology-consuming countries. Higher royalty payments are a deep concern for developing countries often lacking sufficient resources, and might even exacerbate already negative terms of trade and balance of payments positions. According to Correa, the financial resources spent on royalty payments could have benefited local investments in R&D.<sup>36</sup>

Besides, owners of technology are in the position that they can refuse to transfer their technology, thereby discouraging and blocking further industrial initiatives. According to studies of the United Nations, industrialized countries tend to sell more and more embodied knowledge, instead of transferring directly the technology to countries through foreign investment or licensing agreements. In turn, this could lead to more exports from developed to developing countries, meaning less opportunities for developing countries to access technology, while worsening financial problems.<sup>37</sup>

The strengthening of IPRs may also result in the restriction of imitative practices, which may slow down significantly the process of catching up with technology. The argument thus stating that developed countries are better

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<sup>35</sup> K. E. Maskus, *COMPETITION POLICY AND INTELLECTUAL PROPERTY RIGHTS IN DEVELOPING COUNTRIES: INTERESTS IN UNILATERAL INITIATIVES AND A WTO AGREEMENT* (WTO, Geneva, 1999).

<sup>36</sup> C. M. Correa, *INTELLECTUAL PROPERTY RIGHTS, THE WTO AND DEVELOPING COUNTRIES, THE TRIPs AGREEMENT AND POLICY OPTIONS, THIRD WORLD NETWORK*, (Penang, Malaysia, 2000).

<sup>37</sup> *Ibid.*

off with stronger IPR is therefore trivial, as technology becomes more expensive, harder to copy and increasingly embodied. According to Carlos Correa, the strengthening of IPRs may even have a reverse effect on the access to technology for developing countries.<sup>38</sup> This barrier may in turn even block or slow the process of industrial development. Moreover, according to Nagesh Kumar significant amount of technological learning took place under weak IPRs regime in these developing countries.<sup>39</sup>

Hence, it can be easily argued that by no means it is clear that strengthening of IPRs will increase innovative activity even in the industrialised countries especially for solving the problems faced by developing countries with regards to ABS regime.

#### VIII: THE BONN GUIDELINES – A RIGHT STEP AHEAD

The COP of the CBD adopted *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization* in 2002<sup>40</sup>. All genetic resources covered by the CBD and benefits arising from the commercial and other utilization of such resources are covered, including traditional knowledge, innovations, and practices that are associated with genetic resources such as indigenous medicinal and local farming practices. Human genetic resources are explicitly excluded.

The fundamental of these guidelines is to contribute to the sustainable use of genetic resources and to provide a transparent framework to facilitate access and ensure benefit sharing at national level. For developing countries, the important of these guidelines is that this redressal towards the aim for legal regime for access and benefit sharing. The guidelines also clarify and complement many of the existing obligations under the CBD, viz. (i) prior informed consent, (ii) mutually agreed terms, (iii) relation to traditional knowledge, and (iv) role of intellectual property.

Though, the guidelines are clear in many respect and a right step ahead towards a framework guidelines for ABS regime at the national level, still it has not defined the important terms like what is genetic resource? At the same time it misses the opportunity to address what benefit sharing actually meaning? Whether it is limited only to the royalty payments or profits or would it include the other broad areas like scientific collaborations and

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<sup>38</sup> *Ibid.*

<sup>39</sup> RIS, WORLD TRADE DEVELOPMENT REPORT 2003, Research and Information System for the Non-aligned and Other Developing Countries, New Delhi, India.

<sup>40</sup> CBD, Conference of the Parties, Decision VI/24 A (2002) information available at <http://www.biodiv.org>.

technology transfer as well. The policy makers idea regarding not to defined these specific terms is still unclear. Whether they want this definitions and terms to be resolved at the national level can be argued. However, these point is crucial for the aspect of the benefit sharing mechanism especially from the developing countries who are seeking benefits arising from their biodiversity and genetic resources.

### IX. CONCLUSION

How far do IPRs help or restrict on the access and benefit sharing is still unknown. Intellectual proerpty rights may be a help or a hinderance. The law on patents and trade secrets could be useful arrangements in the service of developing countries seeking to enhance their scientific and technological capacities. However, many of these countries still facing the problem that their option for developing appropriate IPR laws have become much more limited and not in place. But, it can be argued that we cannot afford to wait for conclusive proof one way or another before making decisions on the design of appropriate ABS regime with strong IPRs at national level especially for the developing countries. It is vital to consider whether and how the IPRs may be applied in the ABS context to minimise the risk without (a) being construed as an illegal barrier to trade or (b) foreclosing opportunities for developing countries to use IPR law to get the equitable benefits from the use of their genetic resources.