Chapter 5
ABS: INTERFACE BETWEEN THE CBD AND IPRS

The long-cherished goals of the CBD as set out in Article 1 are conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the utilization of GRs. The system envisaged to achieve these goals is contractual regulation of access to GRs\(^1\) conditioned by PIC from the stakeholders of the resources together with MAT for benefit sharing\(^2\). The motivating factor behind the conclusion of the CBD as well as the major challenge in achieving its objectives is the prevention of misappropriation of GRs. Misappropriation could be understood in simple terms as obtaining GRs without taking consent from their custodians and also not in compliance with the requirements of the domestic law designed for regulating access. The range of misappropriation varies from taking the resources for commercial as well as non-commercial use and research without paying due diligence to the concerned regulatory laws. Notably, the CBD has never tried to mention anywhere the term misappropriation or the so-called “biopiracy”. It is also interesting to note that though it talks about conservation, the CBD operates on and elaborates mainly the commercial exploitation of biological diversity and its components. When it comes to notice that the GRs misappropriated could be enclosed and huge profits could be made using the strong private property regime of patent monopoly, the stakeholders who hold proprietary rights over the resources under the CBD mandate are completely thrown out of the picture. The nature of GRs is such that they could be easily taken out and transferred across the borders. Adding to this, its proprietary value is doubled by the knowledge associated with it regarding various uses and properties. It is quite interesting to see that many countries have established

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\(^1\) The Convention on Biological Diversity, 1992, Article 1
\(^2\) Id. Article 15 (4) & (5)
their national access laws for preventing misappropriation and ensuring the CBD goals. But the general impression of the CPs to the CBD is that the national laws premised on the CBD alone cannot deter the persons against misappropriation, especially facilitated through the IP system which lacks corresponding obligation to respect the CBD objectives while granting patent rights to inventions based on GRs and associated TK. The present chapter deals with this highly conversed issue that attracts the attention of a multitude of international agencies.

Respecting the rights of holders of GRs and associated TK before using it is the central objective of the CBD and the principles of PIC and MAT are devices to this end. Regulation of access is directly related to sharing of benefits and instruments like ITPGRFA treats access to GRs itself as a benefit. The CBD intends that the benefit sharing aspect should not be undermined while dealing with GRs and associated TK. Use of GRs and associated TK generates maximum benefits when use is for research and development that results in patenting and subsequent commercialization of inventions. This is because the grant of patent confers a monopoly right on the patent owner to exclusively make, use and sell the product. This exclusive monopoly in the event of commercialization enables the patentee to derive huge returns in respect of his invention. So the benefits arising from patenting could be channelized to the owners of the GRs and TK involved in the invention. Thus obtaining a share of the benefits of patenting and subsequent commercialization of inventions using GRs and associated TK assumes much significance in the ABS process.

If we look at the instruments governing IPR that are crucial to GRs and associated TK, the TRIPS Agreement and the UPOV Convention are of profound importance. The TRIPS is an umbrella convention that lays down the minimum international standards of IPR protection to be offered in national legislations. TRIPS for the first time mandated patent protection for
inventions based on biological materials. GRs and associated TK constitute the raw materials for research and development to bring out new biotechnological inventions resulting in grant of patents. Hence grant of patents gets linked with the ABS process of the CBD. The UPOV Convention stands for protection of new varieties of plants where breeding of such varieties is done on PGRs which are the subject matter of the CBD too. So the possibility of ensuring benefit sharing conforming to the principle of PIC assumes much significance in the context of its relationship with IPR. Based on this proposition, the present chapter will explore the relationship between CBD and IPRs in the context of TRIPS and UPOV and enquire whether the relationship could promote the benefit sharing objective of the CBD. Since the interrelationship is between two different property regimes, the study will also help us to understand the practical issues and frictions that could arise at the operational and implementation levels of the two property regimes. Ultimately, the focus of the chapter is the issue of compatibility between the present IPR regime and the CBD mechanism in light of the findings in the previous chapters that when IPR interferes, the benefit sharing mechanisms under the CBD, the Nagoya protocol as well as the ITPGRFA fail to achieve their purported goals effectively. The chapter further probes deep into the compatibility issue by examining the contract-based ABS regime of the CBD.

5.1 Relationship between TRIPS and CBD – A Brief History of the Issue

TRIPS and CBD were negotiated almost simultaneously in point of time and shared similar concerns on different issues pertaining to patenting of biotechnological inventions\(^3\). During the negotiation of Article 27 of the

TRIPS, the idea of extending patent protection to life forms or biotechnological inventions was highly contested\(^4\) and equilibrium was set in Article 27.3 giving the parties the right to exclude from patentability plants and animals other than microorganisms and diagnostic and surgical methods for treatment of humans and animals. It also mandated to ensure some form of protection to plant varieties either through patents or through *sui generis* system and called for the review of Article 27.3(b) in 1999. Many writers consider the affirmation of national sovereignty over natural resources through the CBD as a response to the developments in the GATT in the area of IPR\(^5\). While negotiating the CBD, matters related to IPR came up for consideration, but there was no consensus as to how to link the two issues due to politico-economic reasons. The importance of the negotiations on TRIPS within the framework of Uruguay Round was also noted, but there was no agreement as to the link between the two negotiations. Impact of IPR over biodiversity was a major area of discussion during the negotiation of the CBD and the concern continues still though it is the end of the second decade after its adoption\(^6\). The wordings of the CBD strive to provide a delicate balance calling for the harmonious operation of the two instruments\(^7\).

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\(^4\) G. Kristin Rosendal (1999), *Biodiversity: Between Diverse International Arenas* in Helge Ole Bergesen, Georg Parmann, and Øystein B. Thommessen (Eds.), *Yearbook of International Co-operation on Environment and Development 1999/2000* (London: Earthscan Publications), p. 397-47. The major opposition from the developing countries include: patents benefitting only economically and technologically strong countries, patenting of animal and plant varieties and food and pharmaceutical products raising serious concern for basic human needs, application of IPR system hindering transfer of technology to the developing world, probability that IPR system would disregard the very real contributions of generations of farmers to the world’s plant genetic resources thereby threatening global food security etc.


\(^6\) The deliberations during the Nagoya Protocol is also containing references to IP aspects of biological diversity.

\(^7\) *Supra* n.1, Article 16.5 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
some of the Member States of the CBD started expressing concern that the TRIPS Agreement and the CBD are inherently in conflict with each other which brought the matter before the Committee on Trade and Environment of the WTO\(^8\).

The Committee on Trade and Environment (CTE) is a body of the WTO constituted under the 1994 Marrakesh Ministerial Decision on Trade and Environment\(^9\), mandated to identify the relationship between trade and environmental measures. It aims to promote sustainable development and to make appropriate recommendations on whether any modifications are required in the provisions of the multilateral trading system, compatible with the open, equitable and non-discriminatory nature of the system\(^10\). The CTE works around the ten items listed in the Decision on Trade and Environment out of which Item 8 relates to the relevant provisions of the TRIPS Agreement\(^11\). The CTE work programme prior to the 1996 Ministerial law in order to ensure that such rights are supportive of and do not run counter to its objectives.\(^6\)


\(^9\) www.wto.org

\(^10\) Ibid.

\(^11\) Supra n.8 The Items include 1) the relationship between the provisions of the multilateral trading system and trade measures for environmental purposes including those pursuant to MEAs, 2) the relationship between environmental policies relevant to trade and environmental measures with significant trade effects and the provisions of the multilateral trading system, 3) (A) the relationship between the provisions of the multilateral trading system and charges and taxes for environmental purposes, 3) (B) the relationship between the provisions of the multilateral trading system and requirements for environmental purposes relating to products, including standards and technical regulations, packaging, labelling and recycling, 4) the provisions of the multilateral trading system with respect to the transparency of trade measures used for environmental purposes and environmental measures and requirements which have significant trade effects, 5) the relationship between the dispute settlement mechanism in the multilateral trading system and those found in the MEAs, 6) the effect of environmental measures on market access, especially in relation to developing countries, in particular to the least developed among them, and environmental benefits of removing trade restrictions and distortions, 7) the issue of export of domestically prohibited goods, 8) the relevant provisions of the TRIPS agreement, 9) the work programme envisaged in the decision on Trade in services and Environment and 10) input to the relevant bodies in respect of appropriate arrangements for relations with intergovernmental and non-governmental organisations referred to in Article V of WTO
Meeting in Singapore contained three relevant items, i.e., Items 1, 5 and 8; regarding Item 8 *inter alia*, the CTE was not able to come to a resolution wherein the issues discussed related to the relationship of the TRIPS agreement to the environment generally, the generation of, access to and transfer of environmentally sound technology, environmentally unsound technologies, indigenous and traditional knowledge and certain Multilateral Environment Agreements, in particular the CBD. Views differed on the impact of IPRs on the achievements of the objectives of the CBD, but the discussions characterised uncertainty over several matters. The two matters about which greater certainty of views seemed present were in relation to technology transfer and knowledge of traditional and local communities. Some developed country delegations asserted that strong IPR regimes in developing countries facilitated the transfer of technology. Scepticism about this assertion was expressed by some developing countries. As regards traditional and local knowledge, several developing countries expressed concern that IPRs are not broad enough to be a basis for appropriate compensation for use of such knowledge. Regarding the relationship between TRIPS Agreement and the CBD, the Members expressed divided opinions as to whether there is any inconsistency or conflict between the two instruments. Some countries submitted that the two instruments have different scope, subject matter and intent but do not conflict with each other in terms of obligations and objectives. Another group of countries wanted

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13 Supra n.8, para. 132
14 Supra n.12
15 Ibid.
16 Id. para. 146
17 Ibid. Other submissions in this regard include: By ensuring adequate protection for the innovator, the TRIPs Agreement promotes the CBD’s objective of furthering technology transfer related to the commercialization and use of genetic resources. By setting as an objective the equitable sharing of the benefits of commercialization or other uses of genetic resources, the CBD addresses IPRs indirectly and identifies technology transfer as one form of benefit sharing its Parties should promote. The CBD does not address
to examine the possible inconsistencies between the CBD provisions and the TRIPS and in this regard, a non-paper submitted by India on 19 July 1996 proposed some changes in the TRIPS to accommodate the CBD\textsuperscript{18}. One recommendation was to modify Article 29 of the TRIPS to require a clear mention of the biological source material, the known country of origin and all information pertaining to knowledge and practices of the use of biological source material by indigenous communities in the country of origin\textsuperscript{19}. This part of the patent application was suggested to be open to full public scrutiny immediately after filing of the application. In order to remedy the lack of PIC mechanism in the TRIPS Agreement, the document made the suggestion that MTA with the country of origin would serve the purpose when the inventor wants to use the biological material and an Information Transfer Agreement (ITA) would be needed while making use of TK\textsuperscript{20}. It was also suggested that an obligation must be imparted upon the patent owners to execute ITAs for any traditional or indigenous knowledge which is already in the public domain or is a part of the recorded or otherwise publicly accessible knowledge systems\textsuperscript{21}. In another submission made before the CTE\textsuperscript{22}, India had categorically stated that

\textbf{\textquoteleft\textquoteleft} TRIPS and CBD represent two significantly separate multilateral approaches to the utilization of living resources. While TRIPS seeks

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to promote and foster technological innovation by ensuring the certainty of IP protection and of world markets for at least some biotechnological inventions, its provisions are silent on how this protection can achieve the objective of sustainable development, especially in developing countries. The CBD seeks to facilitate access to living resources, while focusing on conservation and sustainable use, as well as the equitable sharing of the benefits of such use. In its effort to create a stake for developing countries in conservation and sustainable use, as well as the equitable sharing of benefits of such use the CBD emphasizes the need to share with them benefits which include the need to share in the development and transfer of technology. 23

Ultimately, the CTE decided that further work is required on Item 8, and called for exchange of information between the CTE and the CBD. 24 In the Singapore Ministerial Declaration, December 1996, the CTE was directed to carry out its work under the existing terms of reference 25.

Though there were no significant changes recommended by the CTE, its work has led to the conversion of some trade and environment issues as the key components of the Doha negotiation round 26. The negotiations focussed on three main themes; (i) relationship between WTO rules and Multilateral Environmental Agreements (MEAs), (ii) collaboration between WTO and MEA Secretariats, and (iii) elimination of tariff and non-tariff barriers on environmental goods and services 27. In the Doha negotiations, the main aim of the developing countries in relation to the issue of biodiversity was to stress on the need to incorporate the CBD objectives within the text of

23 Id. para. 12
24 Supra n.12
25 See Singapore Ministerial Declaration, 1996, para 16
26 See www.wto.org
27 Ibid.
the TRIPS agreement\textsuperscript{28}. For this, in the pre-Doha phase, they used the review of Article 27.3(b) and the work undertaken by the CTE as the major tools and succeeded in obtaining an international mandate to find out the relationship between the two agreements in the form of an outstanding implementation issue\textsuperscript{29}. In the Doha declaration implementation issues are divided into two, one for immediate action as contained in the decision on Implementation Issues and the other for future actions as contained in the Compilation of Outstanding Implementation Issues raised by Members. Actually, in the Ministerial Conferences of the WTO, it was the developed countries who tried to bring linkages between the issue of trade and environment and we could see the developing countries’ resistance to this agenda as they feared that environmental standards may hinder their economic development\textsuperscript{30}. But during the Doha Negotiation Round, the developing countries had changed their strategy and accepted the inclusion of trade and environment debate in the negotiating mandate, realising that they cannot achieve economic development without the cost of environment\textsuperscript{31}. Along with this they also tried to bring in their own agenda of linking the environment-trade debate with that of sustainable development so as to derive economic benefit out of trade liberalisation\textsuperscript{32}. The handicap of Doha is that though it recognised the importance of most of the issues raised by the developing countries, it had failed to provide any specific commitment to provide for their resolution\textsuperscript{33}.

In the Doha Ministerial Declaration, 2001, the General Council of the WTO had instructed the TRIPS Council to examine the relationship between

\textsuperscript{28} David Vivas Eugi, “Issues Linked to the Convention on Biological Diversity in WTO Negotiations: Implementing Doha Mandates” available at http://www.ciel.org/Publications/Doha_CBCD-10oct02.pdf
\textsuperscript{29} Ibid.
\textsuperscript{31} Ibid.
\textsuperscript{32} Ibid.
\textsuperscript{33} Ibid.
the TRIPS Agreement and the CBD, the protection of TK and folklore and other new relevant developments raised by Members pursuant to Article 71.1 while pursuing its work programme under Article 27.3(b) and 71.1. So the result of the Doha Declaration in relation to access to GRs is that the CTE’s agenda to enquire the relationship between the TRIPS and the CBD was assigned to the TRIPS Council. Paragraph 19 of Doha poses an interesting situation as far as the GRs are concerned. In the previous chapter, we have found that the subject matter of GRs is the tangible resource along with the intangible information contained in it whether it is in the form of actual value that is TK associated with it or the potential value that is the hitherto unknown hereditary information. So the TRIPS Council has to also deal with the TK associated with GRs. Under the paragraph 19 mandate, the TRIPS Council has also to deal with the protection of TK and folklore. So the knowledge over biodiversity which falls under the larger framework of TK will also form part of the second agenda. It is not clear how the international community is going to address this issue particularly in light of the new dialogues requiring disclosure of origin of GRs, PIC and MAT which may result in overlapping. Attention is drawn to the fact that CBD established proprietary right only for TK associated with GRs. Such a specific legal background is not available for other forms of TK and folklore. Universal adoption of the CBD (with notable exception of the US) had made a strong case before the international community to find out the ways and means for the harmonious operation of the same with the TRIPS Agreement. The CBD had also devised a sufficient platform for defining the scope, extent and nature of the proprietary rights involved in GRs and associated TK. As regards other forms of TK and folklore, even though much hues and cries are there, invariably nothing in concrete could be traced to legally assert the nature of property rights involved in them. TK associated with GRs forms a part of the larger framework of TK throwing us uncertain whether the TRIPS

34 Doha Declaration, 2001, para. 19
Council will exclude biodiversity related TK from the discussion of its second agenda.

COP is the governing body of the CBD and its decisions are binding on the Members. Considering the importance of IPRs in the implementation on the CBD, in its decision II/12, it requested its Executive Secretary to liaise with the WTO and inform it about the goals of the CBD and to invite the WTO Secretariat to assist the COP in the preparation of a paper that identifies the synergies and relationship between the objectives of the CBD and the TRIPS to be submitted as an input to the CTE meeting\(^\text{35}\). The COP also requested the Executive Secretary to undertake a preliminary study analysing the impact of IP system on the conservation and sustainable use of biodiversity and equitable sharing of benefits out of the use of its components to gain a better understanding on the implications of Article 16.5 of CBD\(^\text{36}\). Accordingly the two documents were submitted to the CTE\(^\text{37}\). In Decision III/17, it recognised the importance of implementing IPR provisions of the CBD and of international agreements relating to IPR in a mutually supportive way and encouraged governments and various national and international agencies to carry out studies in this regard. It also recognised the need for further study to develop a common appreciation of the relationship between IPR and the relevant provisions of the TRIPs and the CBD, especially in relation to technology transfer, conservation, sustainable use and benefit sharing under the CBD\(^\text{38}\). It has requested for

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\(^{35}\) See COP Decision II/12 (a)

\(^{36}\) Id. Decision II/12(c)


\(^{38}\) COP decision III/17, para. 8
observer status in the TRIPS Council the application for which is still pending since 1999.39

The TRIPS Council started reviewing Article 27.3(b) in 1999 itself and the mutual supportiveness of the agreement with the CBD was one of the topics for its discussions. In this connection, the TRIPS Council has requested information from various international agencies linked to the system like the CBD Secretariat40, FAO41, UPOV42, etc. Various State positions43 submitted in this regard had differed in respect of the possible inconsistencies between the two agreements. Pursuant to the Doha mandate, the TRIPS Council started receiving specific documents from Member States detailing different views on inconsistencies between TRIPS and CBD and the different ways to resolve the same. Thus we could see that though the three international agencies are intrinsically linked in enquiring the

39 Conference of the Parties to the Convention on Biological Diversity, Note by the Executive Secretary on Access to Genetic Resources, UNEP/CBD/COP/5/21 dated 1 March 2000, para. 25
40 CTE, Review of the Provisions of Article 27.3(b), Relationship between the TRIPS Agreement and the Convention on Biological Diversity and Protection of Traditional Knowledge and Folklore, IP/C/W/347/Add.1 dated 10 June 2002. Also cited as WT/CTE/W/210
41 FAO, Review of the Provisions of Article 27.3(b), Relationship between the TRIPS Agreement and the Convention on Biological Diversity and Protection of Traditional Knowledge and Folklore, IP/C/W/347 dated 7 June 2002.
42 UPOV, Review of the Provisions of Article 27.3(b), Relationship between The TRIPS Agreement and the Convention On Biological Diversity and Protection Of Traditional Knowledge and Folklore, IP/C/W/347/Add.3 dated 7 June 2002
relationship between the TRIPS and the CBD, the active player is the TRIPS Council. The CTE’s recommendation to the WTO will be based on the outcome of TRIPS Council deliberations. The latter would be having serious impact on the functioning of the CBD under the Nagoya protocol that has set an international framework for benefit sharing. This shows the need for a detailed analysis of the work of the TRIPS Council in exploring the relationship between TRIPS and CBD, and the potential conflict between the two instruments. In achieving this task, the issue of compatibility and the effectiveness of the contract based approach of the CBD as worked out by the TRIPS Council will be dealt in this chapter and further deliberations in the TRIPS Council on the possible solutions to alleviate the inconsistency will be discussed in the next chapter.

5.2 CBD and TRIPS: Conflicting Relationship? – An Analysis

Three major views emerged in the TRIPS Council regarding the relationship between the TRIPS and the CBD. One is that there is a conflicting relationship between the two. Second is that there is no conflict, but foresees a need to ensure mutually supportive implementation of the two and the third view is that there is no conflict 44. Regarding the conflicting relationship, it is contented that there are many areas of actual and potential conflict between the two instruments and are the result of lack of recognition of the CBD principles in the TRIPS 45. One conflicting area is that TRIPS permits the grant of patents which are private rights over products based on GRs and contains no provisions preventing such patent claims in one country over GRs that are under the sovereignty of another country 46. Many writers

44 Supra n.28; Also refer Note by the Secretariat, The Relationship between the TRIPS Agreement and the Convention on Biological Diversity, Summary of Issues Raised and Points Made, IP/C/W/368/Rev.1 dated 8th February 2006 para. 7 which states about the four different approaches of the nations in this regard. 45 Ibid. 46 See Disclosure Group, The Relationship between the TRIPS Agreement and the Convention on Biological Diversity and the Protection of Traditional Knowledge.
view this statement as to mean that TRIPS is placing supremacy to private rights over public rights. Though the statement regarding the conflict is correct, the view taken by the writers does not seem to be true. In the previous chapter we have seen that the CBD has established strong property jurisprudence for the protection of BRs and associated TK. The property in BRs has both tangible and intangible components the ownership of which could be in different hands. The CBD is recognising state sovereignty over the resources without mentioning anything about ownership. So there is flexibility for the government to decide whether the ownership rests with the State or the people or held collectively by both. If the intangible component in the GRs is in the form of TK over the resources, the holder of such knowledge could be an individual or a community depending upon the customary practices. Without considering these varying and differing aspects of ownership, we cannot explore the possible synergies between the two agreements. The first question is whether CBD is talking about any public rights as different from the TRIPS Agreement. Private rights are considered rights associated with individuals, thus involving the concept of single ownership. It is to be noted that all the TRIPS categories of IP are not showing the feature of single ownership and the classic example is GIs. We have discussed this aspect in one of the previous chapters and found that GIs do not show the single ownership attribute. Again, for the intellectual input of humans as a sine qua non for IP protection, it becomes clear from the definition of GI that the only intellectual activity as regards many items covered by GIs is the name of the items covered and no single person can be virtually identified as the master mind behind the creation of that name. GIs are specifically protecting the quality of the product based on human input like some technique or other knowledge or the quality arising from natural

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IP/C/W/356 dated 24 June 2002 para. 8. Also see Communication from India IP/C/W/195 dated 12 July 2000, para. 13 &14

47 Supra n.28; Also see supra n.30
input like geographical location, soil, climate etc. Given the broad definition of the term GI in the TRIPS there is a possibility of indirectly protecting the genetic materials and associated TK in limited case where the protection is given to the indication\textsuperscript{48}. But the nature of protection so offered is so limited affording just the defensive means to prevent the use of the indication that is entirely different from misappropriation. Conceptually, the difference between the GRs and GIs is that the link between the GI and the man is an established property right while no such link is established between GR and man even though the bondage is stronger compared to GIs. The human contribution of naming to geographical properties is present in GIs which is ultimately protected there. For GRs, value rests with its uses/properties which are identified and maintained by human beings for generations, but not protected by means of any sort of IPRs. GRs do have the economic value and property background to be protected even as a TRIPS category, if we apply the logic behind the inclusion of GIs as a form of IP. The present analysis does not intend to assert that TRIPS is consistent with the sovereign rights guaranteed in the CBD. It is absolutely true that there is no obligation under the TRIPS framework that mandates an inventor to respect the property rights recognised for the GRs or associated TK under the CBD while making use of the same in his invention. This is irrespective of the question whether an invention results in patenting or not. The importance of patenting in this regard is that it gives way to enclosure through another private (individual) property regime which is internationally recognised with strong enforcement mechanism. Both the rights of the patentee and sovereign rights over the resources are internationally recognised but the enforcement of the former is properly executed while the latter is completely

\textsuperscript{48} For a detailed account see, Gopalakrishnan, N. S. \textit{et.al} “Exploring the Relationship Between GIs and TK: An Analysis of the Legal Tools for the Protection of GIs in AsiaQ ICTSD Program on Intellectual Property and Sustainable Development, ICTSD, Geneva, Switzerland, (2007)
neglected in the TRIPS scenario. This could be treated as discrimination instead of differentiation. The reason is that as far as the patent regime is concerned, GRs and associated TK constitute things in public domain that is meant for appropriation without consent. It has failed to appreciate the full-fledged property (collective) regime created over GRs and associated TK under the auspices of the CBD though evolved simultaneously in point of time. In order to keep the TRIPS domain dynamic and vibrant, it should cater to the evolving needs of the society. There must be recognition in the TRIPS Agreement of the fact that the GRs and associated TK do not fall within the public domain, instead they represent strong private property characteristics quite similar to many of the TRIPS components.

Regarding the conflicting relationship between the TRIPS and the CBD, another argument put forward is that TRIPS allows the genetic material to be used in an inventive process without regard to the CBD principles of PIC and benefit sharing leading to illegal access. It is further argued that national laws alone cannot prevent such situations of illegal access outside their national jurisdictions. Reference has also been made to TRIPS facilitated use of TK associated with GRs in the same way that result in the grant of bad patents that do not adhere to the standards of patentability viz., novelty, inventive step and industrial application. This submission could be treated as an extension of the first statement that the TRIPS is not recognising the sovereign or proprietary rights of the countries as well as the concerned communities/individuals, for the underlying reason behind non-recognition of the principles of PIC and benefit sharing is that natural resources and the knowledge associated with them constitute a public domain for the inventor under the TRIPS framework. Appropriation with

49 See Note by the Secretariat, "The Relationship Between the TRIPS Agreement and the Convention on Biological Diversity, Summary of Issues Raised and Points Made", IP/C/W/368/Rev.1 dated 8 February 2006; also see Supra n.46; Supra n.28 p.7
50 Supra n.46, para. 7, India, "Protection of Biodiversity and Traditional Knowledge: The Indian Experience", IP/C/W/198 dated 14 July 2000
human intervention makes a natural resource eligible for patent protection in the TRIPS domain\textsuperscript{51} and this principle is supported by various theories for justification of private property\textsuperscript{52}. For a proper appreciation of the position, it would be better to refer to the relevant arguments of those who see no conflict between the two systems. One view is that there is no conflict between the two instruments and that they could be implemented in a mutually supportive way through national measures\textsuperscript{53}. This proposition is founded on the reasons that the two have differing non-conflicting objectives and purposes and they deal with different subject matter and that by correctly applying the patentability criteria, valid patents could be issued for inventions containing genetic material that do not run counter to the CBD objectives and sovereign rights\textsuperscript{54}. Another view that sees no inherent conflict between the two instruments, does not hide the concern that the implementation may not be mutually supportive; this could be taken as an argument that goes in line with the possibility of potential conflict. Now to ascertain the situation, the view that both the agreements have different and non-conflicting objectives and purposes and are dealing with different subject matter is partially correct. Rightly pointed out by India, TRIPS is talking about appropriation of living resources by means of Article 27 while CBD is talking about the already prevailing proprietary rights over them\textsuperscript{55}. The argument that by correctly applying the patentability standards, patents that do not run counter to the sovereign rights guaranteed by the CBD could be ensured is absurd. This is because, even though an invention may be satisfying the patentability criteria, it need not be complying with the CBD requirements of prior informed consent for accessing the resources and sharing of the benefits arising out the utilization of the GRs. The reason is

\textsuperscript{51} Diamond v. Chakrabarthy 447 US 303 (1980)
\textsuperscript{52} Labour Theory of Locke, Personality theory of Hegel etc supports this view.
\textsuperscript{53} Supra n. 49, para. 7
\textsuperscript{54} Ibid.
\textsuperscript{55} See TRIPS Council, Communication from India IP/C/W/195 dated 12 July 2000
that there is no corresponding obligation in the TRIPS framework to comply with the CBD requirements while applying for a patent for an invention containing GRs and/or associated TK.

The argument of some countries that there is no crisis in the existing patent system\textsuperscript{56} though has some justification is not completely true. As far as the large number of patents issued worldwide on various fields is concerned, the mistakenly granted patents in the area of GRs and associated TK constitute bare minimum. But there are a large number of patents granted on inventions based on GRs and associated TK resulting in misappropriation. The reason being the difficulty in establishing whether it satisfied the requirement of patentability given the differences in the knowledge systems and the tests applied for finding out inventive step\textsuperscript{57}. The case of absence of sufficient material to prove that the contract-based domestic regimes are \textit{per se} inefficient to deal with the alleged issue of misappropriation\textsuperscript{58} is also not logical. True that the Member States of the CBD have enacted biodiversity legislations only recently and are at very nascent stage to provide concrete examples of misappropriation. But anyone familiar with the TRIPS system of IP enforcement can foresee that so long as there is no TRIPS mandate to respect and comply with the CBD requirements of PIC and benefit sharing, an inventor need not go for the same to obtain a patent. Many countries have provided the TRIPS Council the actual or potential cases of biopiracy they have come across\textsuperscript{59}. Non-compliance with the access law of a providing country is not a ground for opposition or revocation of a granted patent also. The implication is that however stringent the laws of a providing country may be, the lack of an

\textsuperscript{56} \textit{Supra} n.49

\textsuperscript{57} For example, States like the US follow a lower patentability standard in interpreting novelty and inventive step in the case of biotechnology patents. The whole issue of life patenting is illustrative of this.

\textsuperscript{58} \textit{Supra} n.49

\textsuperscript{59} Peru, Analysis of potential cases of Biopiracy, IP/C/W/458 dated 7 November 2005
international mandate in the TRIPS level will make the whole effort futile. One may argue that a contract stipulating that no IPRs could be obtained in violation to the law of the providing country would help in this situation and we could see similar line of arguments by the United States in its various submissions\(^60\). The problem with such contract lies when it crosses the national borders for enforcement. The recognition and enforcement of foreign judgement is limited by means of many defences such as fraud, breach of natural or substantial justice and public policy. Especially the public policy defence sets a limit to accept the foreign law and legal system as part of the enforcing court's duty to protect the fundamental social norms prevailing in the society in which enforcement is sought\(^61\). Yahoo! ÍÑazi case illustrates this point very well. The French Jewish and anti-racist groups initiated legal action against the California based Yahoo! web portal when the latter allowed Nazi memorabilia (items such as SS daggers, swastikas, photos of death camp victims, replicas of Zyklon B poison gas canisters etc.) to be sold on its US auction pages\(^62\). As the French laws bar the display or sale of racist materials, the French court ordered that French internet surfers should be denied access to US pages hosting the auction. Though Yahoo! banned the sale of hate-related items from all the sites, it challenged the decision on the ground that the offending sites were aimed primarily at the American market and were therefore protected by the US freedom of speech laws. Subsequently, the US Federal Court ruled that Yahoo! was not bound to tailor its non-French sites to French laws. This clearly demonstrates the difficulty of enforcing foreign judgments based on contractual obligations in

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\(^{60}\) See IP/C/W/434; IP/C/W/469


US that are not expressly regulated in US through legislation. In the contract-based access regime, the authority dealing with its violation will always be the courts in the country of origin and enforcement of such judgments in foreign countries is always problematic. Especially in the US context, which is not a Party to any of the international treaties or Conventions in relation to foreign judgment enforcement, many of the case laws suggest that it is enforcing such judgments only in its best interest. The recognition and enforcement of foreign judgment is limited by many defences such as fraud, breach of natural or substantial justice and public policy which operate as "safety valves" against judgments and legal processes which they cannot accept. Especially the public policy defence sets a limit to accept the foreign law and legal system as part of the enforcement court's duty to protect the fundamental social norms prevailing in the society in which enforcement is sought. The cost of enforcement is also very high. In countries which are not party to the CBD, the policy of the State is to promote patenting and enforcement of a norm other than provided under the TRIPS Agreement need not be in line with its domestic policy. In that way, it would be easy for foreigners to access the resources without consent rather than going for the complex access and benefit sharing procedures. So this will not ensure that misappropriation of TK/resources could be effectively prevented. Patents cannot be revoked since there is no such ground for revocation of the patent and commercialization of products also cannot be prevented. It is doubtful whether such a contract could do anything before a patent office abroad. The other claim of options outside the patent system like information sharing between the patent offices and searchable databases are only supplementary measures and will not constitute a substitute for a TRIPS mandate to stick on to the CBD objectives.

\[\textit{Supra n.61}\]
\[\textit{Supra n. 49}\]
Another point to be noted is that though the Nagoya Protocol of the CBD for benefit sharing is in place, there is no effort to bridge the gap between the TRIPS and the CBD in that instrument too. So as regards the IP interface of the CBD, there is little contribution from the side of the Protocol.

The contentions that TRIPS permits appropriation of genetic material and associated TK without recognising the sovereign rights promised by the CBD and that TRIPS promotes patenting or securing of IPR without giving due regard to the CBD goals of PIC and benefit sharing are true. In the present TRIPS framework, the GRs and associated TK constitute the raw material for biotechnological research and are considered as the part of nature forming a public domain. The structure permits the researcher to take his share and invent on it without seeking anybody's consent. This is because for centuries, the domain of BRs and the knowledge associated with them lacked the recognition by the modern legal systems the traditional property rights it enjoyed. It was only through the CBD that people began to have a perception of property over them that too different from the common western notion of individual property. The proponents of inherent conflict talks about the struggle the new property is facing within the TRIPS system. The newly recognised property which conventionally formed part of the public domain strives to have its own existence simultaneously with the IP system. The main characteristic of the property propounded by the CBD is that in the natural form itself, the BRs and associated TK over them constitute one form of property and in the modified form that go for IP protection or commercialization, the owners of the resources still retain their right though in a compensatory nature. This subsequent right could be equated with the right of a patentee over his patented invention when a subsequent researcher wants to improve upon it. The struggle confronted by the BRs and the knowledge over them is because of the absence of any
provisions in the TRIPS agreement to treat them as property. And the proponents are absolutely right in arguing that this could be eliminated only through an amendment in the TRIPS.

5.3 Efficacy of the National Contract-Based Framework of the CBD in Combating Misappropriation

During the TRIPS deliberations, majority of the nations shared the view that there is incompatibility between the TRIPS Agreement and the CBD at the very outset or at the implementation level. Even though the US restated its stand that there is no conflict apparently or at the operational level, it also took active role in bringing out solutions to combat the issue of misappropriation and granting of bad patents. According to the US, the best way to deal with this issue is contractual arrangements and tailored legislative requirements outside the IP system. The other solutions suggested relates to disclosure of the country of origin and source of the genetic material/TK involved in the invention, evidence of PIC from the country of origin of the GRs/TK in different regulatory planes like the TRIPS and PCT with differing legal effects. So the present section of this chapter will be dealing only with the favouring and opposing views on the national contract based solutions and its efficacy to create synergies between the TRIPS and the CBD. Other solutions suggested will be discussed in detail in the next chapter.

The proponents of the national contract based approach are of the view that to effectively deal with the issues of erroneous patents and to ensure that the goals of the CBD are met with, tailored national solutions outside the IP system incorporating legislative requirements must be opted. Such legislative requirements must facilitate persons who wish to make use of the resources and associated TK to conclude contracts with the concerned

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65 Ibid. para. 29
authorities competent to grant access wherein such contract could include various components such as use of permits, contractual obligations, visa systems and civil and/or criminal penalties for non-compliance\textsuperscript{66}. Such contractual arrangements could be used for establishing the rights and duties of the parties to the contract. Permit systems imposing criminal and civil liabilities could serve as the evidence of PIC. It is argued that contract based system could effectively regulate collection of resources and ensuring of benefits from their use. The proponents also submitted that contracts could include requirement of mandatory disclosure to appropriate authorities of any future commercialization utilizing the GRs or TK irrespective of patenting. It was further provided that clearly defined national focal points authorised to provide access could be delineated, facilitating the researcher to get PIC. Reporting obligation could be established regarding progress of research. In case of developing an invention out of the resources or the knowledge, an obligation to notify the relevant authorities could be established in a contract system along with the obligation to share the benefit arising out of the commercial and non-commercial use of the invention. The contract could be made mandatory to be disclosed in any patent application claiming any invention utilizing the GRs. These are some of the features of the national based system as proposed\textsuperscript{67}. It is also argued that the civil and criminal liability provisions could be directly used to effectively regulate and enforce the ABS regime and suits for breach of contract could result in specific performance and damages\textsuperscript{68}. Contracts can specify choice of law provisions and jurisdiction and the judgements could be enforced worldwide under international provisions relating to enforcement of foreign judgements\textsuperscript{69}. Contracts could be associated with Member Country’s visa

\textsuperscript{66} \textit{Ibid.}
\textsuperscript{67} \textit{Id. para.30}
\textsuperscript{68} \textit{Id. ara.31}
\textsuperscript{69} \textit{Ibid.}
systems for proper appreciation of the domestic law by foreigners.\textsuperscript{70} Regarding the question of erroneously granted patents, it is contented that the solutions within the patent system like post grant opposition, re-examination and revocation proceedings are directly addressing this issue and additional measures like the establishment of searchable databases of TK could increase the available information on prior art thereby helping the patent examiners.\textsuperscript{71} Production and use of such databases would also help in locating the stakeholders thereby promoting the objective of CBD under Article 8(j) to enable the wider application of the knowledge, innovations and practices of the local and indigenous communities with their approval and participation and to encourage sharing of benefits with them.\textsuperscript{72} Introduction of a provision in the patent legislation requiring the applicant to reveal information material to patentability would also help in preventing the grant of erroneous patents.\textsuperscript{73} It is also argued that the contract based approach is flexible enough to take into account the difference of interests in negotiations and the importance of the GRs and the knowledge in the development of the claimed invention and cites the possibility that if the GR is available from many sources, the researcher may opt the country providing it on most favourable terms.\textsuperscript{74} It is also submitted that by implementing a contract based system, there is no need to wait for the result of TRIPs deliberations.\textsuperscript{75} Such a system could effectively take care of those violating the domestic legal requirements and will not cause unintended and negative effects on the IP system.\textsuperscript{76} Another merit claimed of this approach is the possibility to clarify the present ambiguities like the definition of various terms, clarify the rights and obligations on both the sides thereby avoiding

\textsuperscript{70} Ibid.
\textsuperscript{71} Id. para.32
\textsuperscript{72} Id. ara.23
\textsuperscript{73} Id. para.32
\textsuperscript{74} Id. para.33
\textsuperscript{75} Ibid.
\textsuperscript{76} Ibid.
confusion and misunderstanding. Thus the contractual system is suggested as highly adaptable to each country’s legal system providing flexibility to protect their TK and GRs without undermining the economic incentives of IP protection and without negating the share of benefits where there is no patent protection. Contractual means also provide for effectively serving the CBD provision for handling biotechnology and distribution of its benefits under Article 19. Contractual arrangements pose the possibility to share both monetary and non-monetary benefits. The United States is the strongest proponent of the national contract based approach and most of the arguments cited above are its submissions in the TRIPS Council.

In response to this national contract law based approach, it is submitted that considering the transboundary use of GRs often involving acquisition of the material in one country and patenting in another country, reliance on the national or regional measures would not be sufficient to deal with the problem and to increase transparency, multilateral approach is warranted. It is argued by Brazil and India that country practices may differ where acts illegal in one jurisdiction need not be the same in another and the situation makes it clear that contractual remedies are effective only when they are obligatory and enforceable across the borders. It is also submitted that contracts alone cannot deter those acting in bad faith as there is every possibility to supersede domestic ABS regimes. It is also contended that internationally there is no obligation to legislate on the issue of PIC and ABS.

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77 Ibid.
78 Ibid.
79 Ibid.
80 Id. para.34
81 The major submissions of the US in this regard could be seen in IP/C/W/434, IP/C/W/449, IP/C/W/469
82 Supra n.49, para. 60
83 Ibid., see also Brazil and India, The Relationship Between the TRIPS Agreement and the Convention on Biological Diversity and the Protection of Traditional Knowledge, IP/C/W/443 dated 18 March 2005
84 Ibid.
especially for countries not Parties to the CBD\textsuperscript{85}. A national contract based regime with an international outlook cannot be a proper remedy for the problems prevailing the ABS system since misappropriation and issuance of bad patents are continuing even where such system is already established and that there is no need to bring in unnecessary matters of State responsibility for enforcement of foreign contracts when WTO could serve as the proper forum to deal with the matter\textsuperscript{86}. Unequal bargaining power of the parties and lack of obligation to enter into and enforce the terms of the contract are the other defects advanced in relation to the contract system\textsuperscript{87}. TRIPS council has shown a divided opinion in relation to the transaction cost involved in the contract system, its fragmented nature and the generally long term nature of research and its implications on the contract\textsuperscript{88}. Regarding the effectiveness of the remedies proposed, it is provided that civil and criminal remedies will not do much of a deal in third countries where the use is without permission from the competent authorities and without entering into ABS agreements with the country of origin\textsuperscript{89}.

The fact that national ABS solutions alone are not a remedy to solve the question of misappropriation and grant of erroneous patents is made clear in the previous section of the present chapter and the same is not discussed in detail here. To be effective, an international mandate in the TRIPS level is needed since WTO members cannot be compelled to enforce non-WTO instruments. This could be better understood from the US submission above where the US argues that the contractual system could facilitate the researcher to obtain the resource from the country that provide the material

\textsuperscript{85} \textit{Ibid.}; Also see Jonathan Curci Staffler, \textit{Towards a Reconciliation Between the Convention on Biological Diversity and TRIPS Agreement: An Interface Among Intellectual Property Rights on Biotechnology, Traditional Knowledge and Benefit Sharing} 2002 available at \url{www.iprsonline.org}

\textsuperscript{86} \textit{Id.} para. 62

\textsuperscript{87} \textit{Id.} para. 63

\textsuperscript{88} \textit{Id.} para. 65 and 66

\textsuperscript{89} \textit{Id.} para. 67
on most favourable terms when the genetic material is available from many sources. This is against the philosophy of the CBD that vests the ownership of the resources with the country of origin that has the exclusive right to provide access. The US proposition is thus not only against the principle of CBD, it also departs from the basic principle of contract law “\textit{nemo dat quod non habet}” no one can confer a better title than what he actually has. The authority to provide access emanates from the ownership and for GRs, it is established only through the CBD. This makes it clear that the US understanding of the contractual solution itself is basically flawed especially in light of the fact that the question of obtaining the resource on most favourable terms does not and could not arise in the CBD context. Rightly proposed by the US, there are many positive elements for a contractual agreement in clearly defining the rights and obligations of the parties. To be more precise, the very existence of the CBD system is the contractual arrangement for ABS and the purpose of the CBD could be achieved only through the creation of a contractual relationship. A contractual relation can adequately take care of many of the concerns in relation to ABS like what is to be accessed, quantum of the material to be accessed, permitted uses, duration of access, mutual rights and obligations, reporting obligation, nature, quantum and mechanism of benefit sharing etc and contract is a prerequisite for the purpose of ABS. But in the context of obtaining of IPR, the contractual obligation fails in ensuring the CBD objectives. For example, if a company or a researcher enters into an access contract for research, it/he might later realise the commercial potential of the research result and might opt for obtaining a patent protection and commercialization of the same. In this process, even though there may be a contractual obligation that consent should be taken before obtaining of IPRs and benefits are to be shared, in the patent context, they are not forming a condition precedent for the grant. The patent application will only be examined as to whether they fulfil the patentability criteria of novelty, inventive step and industrial application and
not whether the raw materials are legally acquired. Similarly, the argument of the US that solutions within the patent system like re-examination and revocation proceedings can directly address the issue of mistakenly granted patents is not correct. Even if there is a contractual obligation that consent is to be taken before obtaining a patent, non-performance of that obligation cannot affect the validity of a granted patent. For developing nations, these procedures are costly and time consuming. Thus the absence of a corresponding obligation in the TRIPS regime weakens the contractual framework created by the CBD. Yet another instance is the obtaining of GRs not for research, but once the same crosses the borders, it is used for research purposes and later IPRs is obtained over them. In such circumstances also, the contract based solution fails. Problems in the enforcement of judgments upholding contractual obligations across the boarders are similar in the context of IP as well as non-IP related situations in the case of GRs, but the differing aspect is that such a judgment even if enforced across the borders cannot affect the validity of a granted patent. It is very important to distinguish the access for research and obtaining of IPRs over the resources and associated TK from other instances of access and subsequent commercialization. IP protection turns them the subject matter of another property regime which is seldom related to the goals of the CBD. Considering the prime objective of CBD as benefit sharing, the private enclosure facilitated through TRIPS does not incorporate any mandate to respect this obligation. The contract entered into between the provider and the patent applicant does not constitute a relevant document before the patent office which makes the whole game of ABS at the mercy of the recipient. Moreover, this result in conceptual incoherence with the nature of the property we have discussed in the earlier chapter i.e., the difficulty of the owner to get parted with the ownership over the resources even in the advanced and purified forms. The present situation upsets this by creating new property rights over it and making the inventor the owner of the same.
This does not and could not arise in other contexts where IPR is not involved. So theoretically and practically, contract based approach can effectively take care of other forms of ABS while access for research and IPR demands a TRIPS based solution.

There is another argument put forward by the US that a requirement in the patent legislation to disclose the information material to patentability can also effectively deal with the situation. But such a requirement imposed in the patent legislation of the provider country cannot deal with a case where the patent is obtained in a foreign jurisdiction. Such a requirement can create an impact provided the same is mandated in the TRIPS level imposing deterrent effect by affecting the validity of the patents granted and that is what is precisely argued by some countries to impose disclosure requirements in the TRIPS in relation to source and country of origin of the GRs and the TK used in the invention and evidence in relation to PIC and benefit sharing.

To sum up, the national contract based approach alone cannot act as an effective solution to address the issue of misappropriation and the grant of bad patents. The contractual tools together with domestic ABS legislation could effectively take care of situations other than the obtaining of IPRs without consent and benefit sharing, but are useless in the context of patenting where the mandate is that no additional conditions could be imposed for the grant of a patent other than those specified in the TRIPS. This makes it clear that only a TRIPS based solution can adequately deal with the issue.

**5.4 UPOV**

UPOV is another international instrument that has linkages with the CBD as the subject matter of the former forms new varieties of plants. The
Convention stands for protection of breeders’ rights in relation to new varieties of plants which are novel, uniform, stable and distinctive. For the development of new varieties of plants, access to PGRs is essential. Just like the vacuum found in the TRIPS, the UPOV is also silent with respect to enforcement of the CBD goals of PIC and benefit sharing. In an exchange of dialogue with the CBD Secretariat, the Members of the UPOV had made it very clear that they do not want to impose any additional conditions for the grant of rights upsetting the present system. Till date, there is no effort on the part of the Convention to address the above said gap. The problem becomes more pertinent noting the fact that there is space in the ITPGRFA system also that may facilitate a breeder to obtain plant variety protection without any responsibility to share the benefits while creating hindrance to the open access system of the ITPGRFA.

5.5 Conclusion

The lesson learned from chapters 2, 3 and 4 as well as the present chapter is that even though there is no conceptual incoherence between the property regimes under the TRIPS and the CBD, the IPR system is creating unrest in the proprietary domain of the CBD. Unless this turmoil is properly addressed, the ultimate objective of the CBD viz., sharing of benefits from the commercial exploitation of GRs and associated TK will collapse. The treatment of natural resources as the product of nature or public domain or public goods is the starting point of this issue and the resultant appropriation was legalised and qualified through the TRIPS. The basis of extension of

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90 International Convention for the Protection of New Varieties of Plants, Article 14
91 Article 6
92 Article 8
93 Article 9
94 Article 7
patent monopoly to life forms was purely the commercial interest involved in it, practically ignoring the social dimensions of the issue. From the analysis of the contract based CBD framework, it is very clear that a stand-alone CBD system before the mighty TRIPS is like David before Goliath. It leads us to accept the fact that a solution purely based on the CBD cannot undo the situation of misappropriation of GRs and associated TK. So the possible conclusion is that only a TRIPS based solution can adequately deal with the situation by creating a link between the CBD and the TRIPS.