

Occasional Paper 2

Key Issues for the relationship between the Convention on Biological Diversity & the International Treaty on Plant Genetic Resources for Food and Agriculture

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Key issues for the relationship between the Convention on Biological Diversity and the International Treaty on Plant Genetic Resources for Food and Agriculture

Kathryn Garforth¹ and Christine Frison²

Introduction

While trade in valuable living organisms is an age-old practice, research on and trade in genetic resources per se is relatively new. In a modern context, there are many overlapping and sometimes conflicting aspects to genetic resources. These include: biotechnology and biosafety, trade, intellectual property rights, conservation of the environment and biodiversity, traditional knowledge, food security and poverty eradication, health, etc. One consequence of this multitude of angles to genetic resources is that their governance falls under the purview of numerous international organizations and instruments. Our focus will be on two such international agreements: the UN Convention on Biological Diversity³ (CBD) and the International Treaty on Plant Genetic Resources for Food and Agriculture⁴ (IT) at the UN Food and Agriculture Organization (FAO). Our aim is to provide an initial exploration of the key issues and concerns regarding the relationship between the two and their governance of genetic resources.

The historical context to genetic resources and international efforts to regulate them is key to understanding the relationship between the CBD and the IT. A summary of this history is provided in the annex of this paper.

In order to highlight key concerns and identify where further work is needed, this paper uses interviews and discussions with several leading individuals⁵ as well as articles, doctrine and official documents from relevant institutions to explore the subject. From our research and these interviews, five important issues have emerged. Each of these issues will be examined as follows. First, a short 'state of the art' will be summarized; second, we highlight the key issue and the different perspectives on it that we uncovered through our interviews; third, we outline particular questions that will require attention in the future.

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³ Convention on Biological Diversity, 5 June 1992, 31 I.L.M. 818 (entered into force 29 December 1993).

⁴ International Treaty on Plant Genetic Resources for Food and Agriculture, FAO Res. 3/2003, 3 November 2001 (entered into force 29 June 2004).

⁵ Those interviewed included representatives from the Commission on Genetic Resources for Food and Agriculture at the UN Food and Agriculture Organization (FAO), the Convention on Biological Diversity (CBD) secretariat, Bioversity International (formerly the International Plant Genetic Resources Institute), the private sector, government and non-governmental organizations.

Issue 1: Role of the contract

Context and state of the art

Under Article 15 of the CBD, access to genetic resources and benefit-sharing (ABS) is based on prior informed consent (PIC) and mutually agreed terms (MAT). These requirements have generally been fulfilled through the negotiation of bilateral contracts between the entity seeking access and the country providing it. In some cases, multiple bilateral ABS contracts for the same instance of access have been negotiated in order for indigenous or local communities to participate in granting PIC and sharing the benefits.

The IT, on the other hand, creates a Multilateral System of Access and Benefit-Sharing (MLS)—a common pool of the plant genetic resources for food and agriculture (PGRFA) listed in Annex I to the Treaty. The MLS is partly implemented through a standard Material Transfer Agreement (a type of contract) between recipients and providers of genetic resources. The standard Material Transfer Agreement (sMTA) is the same for all exchanges of PGRFA covered by the Annex I list of crops and forages thus ABS negotiations will not be required every time someone wants to use material from the MLS.

Issues raised

(a) What is the role of a contract – the sMTA – in implementing the MLS? Will this bilateral agreement undermine the multilateral nature of the MLS?

The answers to this question were quite varied. Some responded with an emphatic 'no', stating that the sMTA is integral to the MLS and operationalizes it. The sMTA is a means of implementing at least in part the MLS so it cannot be described as undermining it. The MLS includes provisions on access, which establish the rights and obligations of the provider and recipient of genetic resources, as well as provisions on benefit-sharing, which deal with the question of the sharing of benefits from commercialization. But the IT goes further than that by providing obligations for information exchange and technology transfer. While the MLS is applicable to member parties (i.e. States), wider aspects of the benefit-sharing obligations are implemented by a broader spectrum of actors (such as providers and recipients who are not parties to the Treaty).

Another perspective was that in their attempt to maintain the spirit of the common heritage approach (see annex), negotiators have in effect created a hybrid system: common heritage based on state sovereignty and a contract. There is a lack of legal theory underpinning this cross. ABS under the CBD is premised on the principle of state sovereignty over genetic resources and the property rights of the entity authorized to grant access and negotiate benefits. At the IT, on the other hand, there is an attempt to maintain the 'everyone can have access to everything' spirit of common heritage but giving this effect through a multilateral ABS system founded on the exercise of the sovereign rights of the Contracting Parties. The result is providers acting as the owners of PGRFA in a system that tries to maintain the spirit of a principle based on an inability to gain property rights.

A further view was that the biggest legal problem yet to be addressed is the "governing law" question. Some IT advocates suggest that the IT is "international" and hence that national law is not the basis for interpretation/implementation of the sMTA. Others think that national law remains the principle law to be applied. However, there was agreement that the MLS as operationalized through its sMTA seems to be a quite novel approach to international contract law.

Others think that the sMTA is not necessary—that the terms of the IT should have allowed the operation of the MLS without the sMTA. For some, the sMTA reduces the advantages of the MLS by adding transaction costs (see Issue 2.)

(b) Grey areas between the CBD and the IT

Since its entry into force in 1993, the ABS obligations of the CBD have applied to nearly all genetic resources, including PGRFA. With the entry into force of the IT in 2004, however, some PGRFA are now covered by a new ABS mechanism, namely the MLS. The MLS applies to all 64 crops and forages listed under Annex I of the Treaty when they are used for the purposes of food and agriculture. The existence of these two instruments and their differing rules creates the potential for a number of grey areas where it is not clear which obligations apply.⁶

First of all, countries that have ratified both the CBD and the IT will apply the rules of the MLS to those seeking to access the PGRFA listed in Annex I to the Treaty and the rules of the CBD to all other genetic resources. Countries that have only ratified the CBD, however, have no obligation to make the Annex I PGRFA available under the MLS and so can continue to apply the CBD rules for those seeking access to these resources.⁷ It is possible, therefore, to have the same genetic resource be subject to a different approach to ABS (multilateral versus bilateral) depending on the country in which it is located.

Along these lines is the question of plant genetic resources for food and agriculture and plant genetic resources that are not for food and agriculture. Both the IT and the MLS only apply to the former and the MLS in particular only applies to the Annex I crops and forages when they are accessed for the purpose of food and/or agriculture. It is possible that the crops and forages in Annex I may be accessed for purposes other than food and agriculture in which case the ABS rules of the CBD should be applied. But the distinction between what constitutes the use of a plant genetic resource for food and agricultureand what constitutes the use of a plant genetic resource for other purposes is not always clear. A good example would be the case of Golden Rice. Golden Rice is rice that has been genetically engineered to produce extra vitamin A in order combat vitamin A deficiencies in children - deficiencies which can lead to blindness. Golden Rice was obviously intended to be grown and eaten so it can be considered as the use of plant genetic resources for food and agriculture. It was also intended, however, to combat a health problem which would not be the use of a plant genetic resource for food and agriculture. Food, nutrition and health are aptly conceived as a continuum rather than as distinct categories so it can be unclear where the application of CBD rules should end and where the IT rules should begin. Determining which system of ABS should apply may become more complicated as the fields of nutraceuticals and biofortification develop and more crops are engineered to deliver specific health benefits. A further complication arises if the plant genetic resources have been accessed through the MLS with the original intention of using them for food and agriculture. If the intention subsequently changes, must the researcher trace the country of origin of the genetic resources in order to negotiate ABS terms?

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⁶ To a certain extent, these grey areas depend upon the plant genetic resources in question having been collected or accessed after the entry into force of the CBD. Genetic resources collected prior to this time are not covered by the ABS provisions of the CBD (see CBD Article 15(3)).

⁷ Presumably, someone seeking access to a specific plant genetic resource for food and agriculture (PGRFA) under the Multilateral System of Access and Benefit-Sharing (MLS) would try to go to a country that has ratified the International Treaty on Plant Genetic Resources for Food and Agriculture (IT) in order to take advantage of the presumably more facilitative access mechanism that is the MLS. Apart from anything, however, this grey area illustrates the importance of wide ratification of the IT in order to ensure the most effective functioning of the MLS. The IT is well on its way to this goal with 113 Parties as of 24 June 2007.

A final grey area concerns PGRFA not listed in Annex I to the IT. The obligations of the IT apply to all PGRFA but the MLS only applies to the PGRFA listed in Annex I. Which ABS rules are countries to apply to non-Annex I PGRFA? Should they apply the CBD model or unilaterally treat them like part of the MLS? The presumption would likely be that the CBD rules (or a national ABS system implementing the CBD) would apply, particularly given the desire of some countries to specifically keep some species out of the MLS (see Issue 2). If the Governing Body of the IT agrees to expand the list of Annex I crops and forages at some point in the future, however, this grey area could become more murky.

What to watch

- How will stakeholders apply the sMTA? Will it lead to greater exchange of genetic resources?
- Will the experience with negotiating and implementing the sMTA be used in the international regime negotiations at the CBD?
- How will conflicts linked to non-compliance with the sMTA be resolved?
- How will different countries respond to the grey areas between the CBD and the IT?

Issue 2: The ease and cost of accessing genetic resources

Context and state of the art

There are a variety of costs associated with accessing genetic resources under the terms of the CBD. These can include the cost of obtaining the necessary permits for gaining access, the actual collection of samples, and the cost of sharing benefits. These costs will vary according to the ABS system in place in a country. Costs are potentially quite low in states with minimal rules and requirements but can be much higher in countries which, for example, have already done some characterization and/or processing of genetic resources, or where contract negotiations with multiple parties are necessary.

Under the IT, accessing PGRFA is meant to cost less than accessing genetic resources under the CBD. The MLS has been designed to limit the costs of gaining access as, with the sMTA, there is no need for costly negotiations for every instance of access. Moreover, a funding strategy⁸ has been established to finance the conservation of PGRFA, partly through the funds collected through the benefit-sharing obligation.

Issues raised

One interviewee characterized the IT as convergent; its MLS brings people together. The CBD, on the other hand, requires costly negotiations every time somebody wants access to genetic resources. Further, a research and development program is itself an expensive and high-risk venture that can last 10 to 20 years. Creating high up-front costs to access material to be used in such a program will discourage the research. The IT creates minimum up-front costs to avoid this sort of chilling effect. According to GRAIN, the IT 'recognises that access itself is the main benefit to be shared, and aims to facilitate it rather than limit it by exclusive contracts and patents'.9

⁸ IT, *supra* note 4 at Article 18. The funding strategy mobilizes funds for activities, plans and programmes that help, above all, small farmers in developing countries. This funding strategy also includes the share of the monetary benefits paid under the MLS.

⁹ GRAIN. (2005) 'The FAO seed treaty', *Seedling*, October, pp21-22.

Some stakeholders think that the *one size fits all* approach of the CBD does not work; that the Convention and the ABS negotiations are trying to include too many different types of industries under one single uniform regime (i.e. pharmaceuticals are very different from botanicals, which are very different from cosmetics, etc.). The point is that the IT is specific to PGRFA, specific to agriculture and so its terms are targeted solely at that sector and presumably then, more likely to *work*.

Along similar lines is the point that there is a great deal of genetic overlap between species and that most species are already widely distributed. The terms of the IT are designed to take this into account. Nowadays, the likelihood of a country having unique material may be very small and so efforts to exclude species from the MLS, as discussed below, are not very relevant or effective. From this perspective, the bilateral approach of the CBD can only work for species that are unique to one country.

Another respondent expressed the view that there has been concern among agriculture people and others that the CBD serves as an obstacle to access. Ultimately, however, it was countries who negotiated the Convention and who agreed to its state sovereignty approach so it is also up to countries to solve barriers to access when these indeed exist. A further view on this point was that the CBD reflects restrictions on access but did not create them. Instead, an imbalance was created by the availability of ever-stronger intellectual property protection for genetic resources and living organisms (see annex). The terms of the CBD can be understood as a reaction to this unfairness (see Other Issues).

A final comment concerns the scope of the PGRFA listed in Annex I to the Treaty. The MLS is designed to facilitate access to the key crops and forages on which humans depend for the bulk of their food. There are, however, some notable omissions from the MLS such as soybean, groundnuts, sugar cane, wild relatives of cassava in the genus *Manihot*, tomato, most tropical forages, and industrial crops like rubber, oil palm, tea and coffee. Some countries intentionally negotiated to keep some types of crops and forages out of the MLS in the belief that they would be able to secure greater benefits by negotiating access to these genetic resources under the terms of the CBD. Thus while the MLS may reduce the barriers and costs to accessing some genetic resources, not all countries shared this goal in the negotiation of the IT and preferred to keep access to some PGRFA within the scope of the CBD.

What to watch

- Will the sMTA and benefit-sharing obligations bring enough money into the MLS to support and efficiently implement the system?
- Will the providers and users of material under the MLS have the capacity to implement the provisions of the MLS and thus be able to exchange material according to the terms of the sMTA?
- Will negotiators at the CBD continue with a generalized approach to the different sectors covered
 by the ABS rules of the Convention or will they consider the example of the MLS and the sMTA
 of the IT as a way to try and reduce ABS costs for some specific sectors under a new international
 regime?
- Will countries be able to design systems to implement ABS under the CBD in a manner that
 allows them to control access and negotiate benefit-sharing but without making the cost of access
 so high that it deters individuals from seeking access?

Issue 3: Relationship between the institutions

Context and state of the art

There is no question that there is overlap between the CBD and the IT: both are instruments of international law and both address (at least in part) a similar issue, namely genetic resources. That said, though, their approaches to regulating genetic resources are different. On the one hand, the CBD covers nearly the full range of genetic resources from all types of organisms (only human genetic resources have been excluded to date)¹⁰ and requires negotiations for access to and benefit-sharing from all these genetic resources. The IT, on the other hand, confines itself to addressing the specific issues associated with PGRFA and attempts to maintain the spirit of the common heritage approach that was found in the *International Undertaking on Plant Genetic Resources*¹¹ through the creation of the MLS (see annex). The perspective behind the IT is well summarized in the first and third recitals of its preamble where the Contracting Parties state that they are:

'Convinced of the **special nature** of plant genetic resources for food and agriculture, **their distinctive features and problems needing distinctive solutions**; [and] ... Cognizant that plant genetic resources for food and agriculture are a common concern of all countries, in that all countries depend very largely on plant genetic resources for food and agriculture that originate elsewhere' [emphasis added].

This overlap between the CBD and the IT means that the two instruments should ideally work in harmony in order to achieve their common objectives. The question remains, however, as to whether the instruments that govern and administer the agreements (i.e. the CBD Secretariat and Conference of the Parties on the one hand, and the IT Secretariat and Governing Body on the other) can collaborate in practice. Past history suggests there is the opportunity for both tension and cooperation. The history of the negotiations of the CBD indicate a desire to move international conservation efforts away from what had become a highly politicized debates about the access and use of and property rights to genetic resources at the FAO.¹² On the other hand, the FAO and CBD have a long-standing relationship and FAO has been a key contributor to a number of CBD programmes of work.¹³ The IT may simply be another element in this cooperative relationship.

¹⁰ Conference of the Parties (COP) Decision II/11 Para 2, 'Access to genetic resources'. There are also certain categories of genetic resources that do not fall within the scope of the Convention. These include genetic resources collected before the conclusion of the CBD (Article 15(3)) and genetic resources beyond national jurisdiction, e.g. marine genetic resources on the high seas and deep seabed and perhaps genetic resources in Antarctica (see CBD Articles 4 and 5; 'Marine and Coastal Biodiversity: Review, Further Elaboration and Refinement of the Programme of Work. Study of the relationship between the Convention on Biological Diversity and the United Nations Convention on the Law of the Sea with regard to the conservation and sustainable use of genetic resources on the deep seabed', UNEP/CBD/SBSTTA/8/INF/3/Rev.1 (22 February 2003) Para. 69-72; Lohan, D. and Johnston, S. (2005) *Bioprospecting in Antarctica*, United Nations University Institute of Advanced Studies, Yokohama, p27. ¹¹ *International Undertaking on Plant Genetic Resources*, FAO Res. 8/83.

¹² McGraw, D.M. (2002) 'The story of the Biodiversity Convention: From Negotiation to Implementation', in P.G. Le Prestre (ed) *Governing Global Biodiversity: The Evolution and Implementation of the Convention on Biological Diversity*, Ashgate, Burlington, VT.

¹³ For more details on this relationship, see FAO, 'Cooperation with the Convention on Biological Diversity' CGRFA-11/07/17.

Issues raised

A number of the people interviewed commented that it is in the interests of the CBD and the IT to work together. Their interests—environment and agriculture—have become more closely aligned and are certainly more similar to one another than they are to trade, for example. To a certain extent, the secretariats of the two instruments have already engaged in collaboration by, for example, coordinating statements made to the Intergovernmental Working Group on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore at the World Intellectual Property Organization (WIPO). On the other hand, collaboration to promote their common interests may be difficult due to the political sensitivities involved and neither the CBD nor the IT may be strong enough to resist trade interests.

Another perspective was that the IT secretariat is currently being established, and one of the key actions it will need to take is to make early contact with the CBD in order to strengthen their relationship. Opportunities exist but it is still too early to determine whether or not they will develop common positions in other fora (mainly because the scope of both instruments is different).

Some respondents pointed to the Biodiversity Liaison Group¹⁴ (BLG) as a mechanism for cooperation between the two institutions now that the IT has been invited to join. Indeed, one can understand the IT as contributing a perspective on genetic diversity to the BLG which already included perspectives on ecosystem and species diversity.¹⁵ Another view was that there should be greater reporting between the two secretariats with each as a standing item on the agenda of the decision-making body of the other. This communication could filter down to the national level and encourage interactions there. To this end, two of the functions of the Governing Body of the IT are to take note of relevant CBD Conference of the Parties (COP) decisions and also to inform the COP of matters regarding the implementation of the Treaty while the CBD COP has decided to establish and maintain cooperation with the Governing Body of the IT.¹⁶

In contrast, some respondents felt that the relationship between the IT and the CBD is vague, not well defined and sometimes conflicting. These are two different institutions with separate secretariats and organs. Information and knowledge are not well exchanged and both would profit from a deeper and better relationship. This is perhaps particularly the case with negotiators who attend the meetings of the two instruments. Participants in the IT processes are generally 'agriculture people' while participants in CBD processes are generally 'environment people' with little overlap between the two. The people from both fields do not always understand each other and struggle to see common interests. There also tends to be a lack of awareness and understanding of one instrument by the people involved with the other. For

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¹⁴ The Biodiversity Liaison Group (BLG) originally consisted of the secretariats to the biodiversity conventions, namely, the CBD, the Convention on International Trade in Endangered Species of Fauna and Flora (CITES), the Ramsar Convention on Wetlands, the Convention on Migratory Species and the World Heritage Convention, see COP Decision VII/26, 'Cooperation with other conventions and international organizations and initiatives'. The IT was subsequently invited to join and participated in its first meeting of the BLG in September 2006.

¹⁵ CBD Article 2 defines 'biological diversity' as 'the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems'. The IT can be seen as representing the diversity within species whereas CITES, for example, would represent the diversity between species and the Ramsar Convention the diversity of ecosystems.

¹⁶ IT, *supra* note 4 at Article 19.3(1) and (m); COP Decision VI/6 Para 4, 'The International Treaty on Plant Genetic Resources for Food and Agriculture'.

this reason, at the very least, there is a need for better representation of agriculture persons at the CBD, and *vice versa*.

Others pointed out that there will always be a certain amount of institutional struggle between the two. FAO and the Commission on Genetic Resources for Food and Agriculture have been dealing with agriculture and managing their own affairs for a long time. The IT now joins this existing system. There may be some sentiment that the CBD is trying to *take over* agriculture so everyone tries to protect their turf. The Parties to the CBD have recognized the potential role of the IT in their programme of work on agricultural biodiversity and in achieving the objectives of the Convention¹⁷ but there is overlap between the CBD's agricultural biodiversity programme of work and the IT. The objectives of the current programme of work include promoting the conservation and sustainable use of genetic resources of actual and potential value for food and agriculture, and promoting the fair and equitable sharing of the benefits arising out of the use of genetic resources.¹⁸ Genetic resources includes plant, animal and microbial genetic resources¹⁹ so the focus of CBD efforts has been broader than but inclusive of PGRFA.²⁰ The agricultural biodiversity programme of work is scheduled for an in-depth review at COP-9 in 2008.²¹ It will ultimately be states who agree to a revised programme of work so it will be up to them to resolve the overlap between the CBD and the IT in this area.

What to watch

- Will the negotiation of an international ABS regime at the CBD bring together people from the IT and the CBD?
- Will the CBD and the IT continue to develop in harmony or will issues arise that create tension or conflict between the two? Possible issues that could arise include the handling of non-Annex I material (see Issue 1) or the development of a new treaty on animal genetic resources.
- Will countries be able to coordinate their implementation of and representation at the two instruments?
- Will the institutions that administer the two instruments be able to share their common fields and continue to deepen their cooperation or will political sensitivities and bureaucratic turf wars deteriorate their relationship?
- In revising the CBD's programme of work on agricultural biodiversity, will countries put their faith in the IT and relinquish PGRFA to it or will they wish to keep their options open and maintain the CBD as a forum for discussions on ABS and PGRFA?

¹⁷ COP Decision V/5 Paras 11 and 12, 'Agricultural biological diversity: review of phase I of the programme of work and adoption of a multi-year work programme'; and COP Decision VI/6 Para 2.

¹⁸ COP Decision V/5, Annex 5, Para 2(b) and (c).

¹⁹ COP Decision V/5, Appendix, Para 3(a).

²⁰ While it is not the focus of this paper, the FAO's Commission on Genetic Resources for Food and Agriculture also has a mandate to address aquatic genetic resources and the genetic resources of micro-organisms and invertebrates in addition to plant and animal genetic resources. The work of the Commission has, to date, focused on these latter two categories but its Multi-Year Programme of Work adopted at its eleventh regular session in June 2007 foresees work on other types of genetic resources at upcoming meetings of the Commission. This could similarly raise issues in the relationship between the CBD and the Commission.

²¹ The in-depth review is provided for in the annex to COP Decision VII/31 'Multi-year programme of work of the Conference of the Parties up to 2010'. The in-depth review at COP-9 will be preceded by consideration of agricultural biodiversity at the thirteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice to be held in February 2008.

Issue 4: The role of industry in IT and CBD negotiations

Context and state of the art

The ABS negotiations at both the IT and the CBD have obvious implications for companies that work with genetic resources. Under the IT, the potential breadth of the companies that may be affected is necessarily limited by the defined scope of the Treaty to PGRFA. At the CBD, on the other hand, the open-ended nature of the term *genetic resources* means that a much broader range of industries may be implicated in its discussions. This can include companies working in the fields of pharmaceuticals and agriculture (including horticulture) as well as cosmetics, enzymes and others.

Industry was involved in the negotiations for both the IT and its sMTA right from the start. Indeed, industry involvement and willingness to constructively participate was key to the successful conclusion of the negotiations of the IT. The narrower scope of the IT also meant that there was a reasonably well-defined sector that was interested in the outcome of the negotiations. Companies could thus come together with a common position that could be represented in the negotiations. The International Seed Federation (ISF, formerly ASSINSEL) largely filled the role of representing industry in the negotiations of both the IT and the sMTA. At the CBD, on the other hand, industry involvement in the ABS negotiations has only begun relatively recently. To date, it has largely involved just one or two sectors of industry that may be affected by the outcomes, namely the biotechnology and pharmaceutical industries. Their involvement has included participation by individual companies at meetings, representation of groups of companies by various coalitions, and the formation of a new lobby group – the American Bioindustry Alliance.

Issues raised

One of the views expressed about the role of industry in the negotiations of the IT and the sMTA was that industry involvement helped to inform the negotiations of business norms and realities. This helped to create outcomes that are based on existing practice. Industry *buy in* to the process and the outcomes also means that industry should be willing to cooperate in the implementation of the IT. In contrast, the relative lack of industry involvement in the ABS negotiations at the CBD may mean that whatever is created through the international regime negotiations will serve to chill the use of genetic resources as industry will find it too onerous to implement and comply with the requirements. Some also feel that industry involvement in the CBD's ABS negotiations is useless, that companies try to contribute information but no one is listening.

At the same time, however, industry perspectives on the IT versus the CBD are quite different. As described above, industry involvement in the IT and the sMTA negotiations was confined to the segment that uses PGRFA. These companies recognized the importance and necessity of access to genetic resources to their work and so were willing to cooperate to develop a system that would facilitate access even if that required mandatory sharing of monetary benefits in certain circumstances. Industry representation by ISF at the IT negotiations meant that a broad range of companies was represented including not just large firms engaged in plant breeding but also small- and medium-sized enterprises. The group itself took a leadership role and did not just advocate the lowest common denominator position. This dynamic had changed somewhat, however, by the time the sMTA was being negotiated. Large companies became much more prominent both on the delegations of certain developed countries and by sending their own delegations to meetings. States were in a weaker negotiating position as they

tried to encourage voluntary participation by industry in the MLS. This led to pressure to decrease the percentage of monetary benefits to be shared under the MLS and resulted in a more complicated sMTA with lower benefit-sharing amounts than might otherwise have been agreed. On the other hand, if developing countries had insisted on a higher percentage for benefit-sharing, there likely would have been no agreement on the sMTA at all. Furthermore, even if countries had agreed to a higher percentage in the sMTA, industry likely would have refused to participate in the MLS and so there would have been little to no benefit-sharing. At the CBD, however, the perspectives are potentially much more varied. To date, industry interests have been towards having less rather than more rules and the industry presence has been dominated by large companies.

What to watch

- What role will industry play as Parties begin to implement the IT? Will companies enter into sMTAs to gain access to material under the MLS? What will the consequences be if they do not?
- How will industry involvement in the international ABS regime negotiations at the CBD evolve?
- Will Parties to the CBD be able to negotiate an international ABS regime that can accommodate a broad range of affected industries?
- Will industry contribute information on the economic and commercial realities of the use of genetic resources to the international regime negotiations and will the Parties negotiate a regime founded on this information?

Issue 5: Relationship between Article 8(j) of the CBD and Article 9 of the IT

Context and state of the art

Article 8(j) of the CBD obliges Parties, subject to their national legislation, 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 biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices'.

This provision is frequently summarized as addressing traditional knowledge, innovations and practices of indigenous and local communities.

At COP-4 in 1998, the Parties to the CBD decided to establish an Ad Hoc Open-Ended Inter-sessional Working Group on Article 8(j) and Related Provisions. The Working Group has met four times as of mid-2007 and developed a programme of work on Article 8(j) and related provisions. The Article 8(j) Working Group has developed its own *customary* rules of procedure which see indigenous people serving as cochairs and speaking with equal status to Parties. The CBD is widely recognized for the high level of participation of representatives of indigenous and local communities in its processes and such participation is likely to be further encouraged by the recent establishment of the Voluntary Trust Fund

to Facilitate the Participation of Indigenous and Local Communities in the Work of the Convention on Biological Diversity.²²

While the Article 8(j) Working Group addresses a wide range of issues, it is worth noting in this context that it has been mandated to collaborate with the ABS Working Group in the negotiation of the international regime. The form of this collaboration is still being determined.

In the IT, Article 9 of the Treaty deals with "Farmers' Rights". It states that:

- 9.2 (...) the responsibility for realizing Farmers' Rights, as they relate to plant genetic resources for food and agriculture, rests with national governments. In accordance with their needs and priorities, each Contracting Party should, as appropriate, and subject to its national legislation, take measures to protect and promote Farmers' Rights, including:
- (a) protection of traditional knowledge relevant to plant genetic resources for food and agriculture;
- (b) the right to equitably participate in sharing benefits arising from the utilization of plant genetic resources for food and agriculture; and
- (c) the right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture. (...)

It is important to note that these two provisions apply mainly to *in situ* (on-site) resources whereas both treaties deal with both *in situ* and *ex situ* (off-site) resources. There is a clear political distinction between the two categories. Emphasis is currently placed on *ex situ* resources mainly because developed countries have more 'control' over these resources as they are generally conserved in developed countries—most *ex situ* genetic resources are contained in the gene banks of Northern governments, private companies, botanical gardens or research facilities.²³ Attempts to address the conservation and sustainable use of *in situ* resources, on the other hand, will frequently raise issues of land claims and the rights of indigenous peoples who live in the areas where the *in situ* resources are located. For obvious reasons, the political will to take measures concerning *in situ* resources may often be lacking.

Issues raised

Views on the relationship between Article 8(j) and Article 9 ranged from the two being mutually exclusive to farmers' rights being a sub-category or development of Article 8(j) and the CBD principles regarding traditional knowledge, innovations and practices. One respondent felt that there was not much link between the two at the moment as the implementation of Article 9 is to be done at the national level. Another interviewee felt that the implementation of both articles is at the national level and one person commented that the implementation of Article 9 may help the implementation of Article 8(j). Another issue that was raised concerned the involvement of representatives of indigenous and local communities in the IT. The CBD has become a platform for indigenous groups and it will be interesting to see how similar involvement may or may not evolve at the IT with farmers' organizations. There has been some evidence of such involvement at the IT to date through several agricultural organizations such as La

²³ FAO (1997) State of the World's Plant Genetic Resources for Food and Agriculture, FAO, Rome, p98; see also table one in Fowler, C., Smale, M. and Gaiji, S (2001) 'Unequal Exchange? Recent Transfers of Agricultural Resources and their Implications for Developing Countries', Development Policy Review, 19(2), p181.

²² See COP Decision VIII/5 part D, 'Article 8(j) and related provisions'.

Via Campesina and the International Federation of Agricultural Producers (IFAP) but it has not reached the same scale as the involvement of indigenous groups at the CBD.

What to watch

- Will countries develop the political will to address the human rights concerns that underlie both Article 8(j) and Article 9 and that are integral to the conservation and sustainable use of *in situ* genetic resources?
- Will countries undertake the implementation of Article 8(j) and Article 9 in their national jurisdictions in a coordinated manner?
- Will the participation of representatives of farmers' organizations in IT processes increase and will IT procedures evolve to facilitate such participation?

Other issues

(a) Disclosure and certificates of origin/legal provenance/source

When the Parties to the CBD adopted the voluntary Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization at COP-6 in 2002, they recognized that other approaches may be needed for the implementation of ABS. The issue of certificates and/or disclosure of origin has been raised as one possible 'other approach'. Disclosure of origin is used here as a general term that refers to different proposals concerning the disclosure of information on genetic resources and/or traditional knowledge in patent applications. Certificates of origin are proposed as one tool for implementing potential disclosure of origin requirements. In essence, the idea entails requiring a person (natural or legal) who is applying for a patent on a biological or genetic resource to include as part of the patent application a certificate from the relevant authority attesting that the resource and any associated traditional knowledge have been obtained in full compliance with the law of the country of origin. The purpose of certificates of origin is to try to prevent instances of biopiracy where biological and genetic resources are acquired and patented without the patentee complying with the ABS requirements of the country from where the resources were obtained. Others have suggested refinements to the certificates concept. These include creating certificates of source or certificates of legal provenance. These concepts would not necessarily require tracking back a genetic resource all the way to its country of origin (i.e. where the resource is found *in situ*) but just to the place where the patent applicant obtained it (e.g., a gene bank or botanical garden) or illustrating that the resource was obtained from a provider entitled to grant access.

Within the IT, the MLS is considered to be the origin of any accessed material as it secures appropriate benefit-sharing. Therefore, the debate over whether to create international requirements for disclosure or certificates of origin is not as relevant for the IT. However, it is an issue to be considered given the centrality of certificate/disclosure of origin discussions in the CBD and also at the World Trade Organization and WIPO. According to one respondent, disclosure/certificates of origin are one of or the most important issue on the ABS agenda and could have a very visible role in the development of the international ABS regime. For others, the certificates of origin debates are turning in circles and not adding options to the ABS regime to be designed. While the creation of an internationally-recognized certificates of origin system would put pressure on users of genetic resources to secure PIC and MAT, some see the certificates debate as creating additional complications without providing solutions to the question of *how* to obtain prior informed consent and mutually agreed terms in practice.

From the perspective of the IT, the whole discussion of disclosure and certificates of origin may be counter-productive because all that matters is that the resources come from the MLS. This is enough to ensure that a benefit-sharing mechanism is in place and it eliminates concerns regarding PIC. Others think that there is not much difference between the sMTA and its requirements concerning passport data (i.e. information on the genetic resource that follows the material when it is exchanged, which might include: an identification number, taxonomic descriptions, the providing country or international collection, and information on when, where and by whom the material was collected) and the information that could be required by a certificate of origin. A further view was that the relationship between the disclosure and certificates of origin discussions at the CBD and the IT is unclear; however, any design of the certificate should consider the special treatment of PGRFA under the IT, otherwise the certificate could risk impacting the transfer of PGRFA covered by the Annex 1 list of crops and forages.

In this regard, the CBD convened a meeting of a Group of Technical Experts on certificates in January 2007. During the meeting, the experts recognized that PGRFA fall within the scope of the IT and that duplications with the Treaty should be avoided.²⁴ There has thus been recognition of the fact that the creation of a certificates system at the CBD must also involve consideration of the modalities of the IT. Another outcome from the meeting of the Group of Technical Experts was a potential shift in terminology. The Group 'recognized that the basic role of the certificate is to provide evidence of compliance with national access and benefit-sharing regimes. Thus, it found it practical to refer to the certificate as a certificate of compliance with national law, in accordance with the Convention'.²⁵ This avoids the debate over the different proposals for certificates of origin, source, or legal provenance, at least in name. It also suggests, however, that a certificates system could help monitor compliance with the IT and its benefit-sharing requirements, depending on the sorts of checkpoints that are established. The outcomes from the Group of Technical Experts are by no means the last word and it will be interesting to see how the debate evolves as the negotiations shift back to the ABS and Article 8(j) Working Groups whose next meetings are scheduled for October 2007.

(b) Intellectual Property Rights

Intellectual property rights (IPRs), particularly in the form of patents and plant breeders' rights, have been touched on in other parts of this paper. There is no doubt that IPRs are of great relevance to the provisions and implementation of both the CBD and the IT. The question here, however, is the extent to which they are relevant to the relationship *between* the two agreements. In this respect, IPRs may not be of fundamental importance but they are certainly an issue worthy of consideration.

One way that IPRs impact the relationship between the IT and the CBD is through the issue of the cost of access to genetic resources. As discussed above, the CBD is frequently perceived as imposing high costs and barriers to access whereas the IT is intended to facilitate access through the MLS and the sMTA. This understanding of the CBD, however, takes a very short-sighted view of history. The rules on state sovereignty of the CBD which require PIC and MAT for ABS were created in response to the continued flow of genetic resources from South to North where they became the subject of IPRs with few if any benefits returning to the source country. This practice continued despite the attempt by the International Undertaking to make plant genetic resources, at least, the common heritage of humanity (see annex.) As

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²⁴ CBD, 'Report of the Meeting of the Group of Technical Experts on an Internationally Recognized Certificate of Origin/Source/Legal Provenance', UNEP/CBD/WG-ABS/5/2 Para. 18 of annex.

²⁵ *Ibid*, Para. 7 of annex.

described above and in the annex, restrictions on access to genetic resources began as the availability of intellectual property protection for these resources expanded. In what Kristin Rosendal (2006) describes as an 'arm's race', the rules on accessing genetic resources that are contained in the CBD are simply a reaction to the restrictions imposed by IPRs.²⁶

A second aspect to the issue of IPRs in the relationship between the CBD and the IT concerns the different approaches of the two agreements to IPRs. According to one interviewee, the IT merely tolerates IPRs whereas the CBD is much more accepting of them as a potential component of benefit-sharing. As described by GRAIN, the ABS provisions under the CBD 'created the need to enter into partnership with them [the biopirates]. It became not a defence against the brave new world of IPRs, but the entry ticket to it'.²⁷ That said, Article 16(5) of the Convention requires IPRs to be supportive of and not to run counter to the objectives of the CBD. In addition, the language in Article 12.3(d)(ii) of the IT, which addresses IPRs over material accessed from the MLS, was some of the most contentious language in the negotiations of the IT and one of the last parts of the Treaty to be finalized. It shall be interesting to watch whether the IT's attempt to maintain the spirit of the common heritage approach will be embraced by its Parties or whether the debates over IPRs that that have raged at the CBD will be echoed at the IT.

Conclusion

The wide range of opinions expressed on the different issues we have examined makes it difficult to come to any over-arching conclusions. Perhaps the diversity of views best illustrates the complexity of the governance of genetic resources and the ongoing work that is needed to understand and develop the relationship between the CBD and the IT at both the international and national levels. In this regard communication among the different actors is crucial. Negotiators at the CBD and the IT need to speak to one another and be informed of what is taking place in the other forum; the secretariats need to engage with each other to minimize the inevitable political struggles; and national ministries of environment and agriculture need to share information and cooperate in order to ensure that both the CBD and the IT models of ABS are tools for the conservation and sustainable use of genetic resources.

One thing that is certain is that the relationship between the CBD and the IT is dynamic. As the two instruments continue to develop so their relationship will evolve. In the immediate future, the negotiations for an international regime on ABS are set to play a major role in shaping the interactions between the CBD and the IT. One option for the international regime may be to follow the lead set by the IT and take a sector-by-sector approach to regulating genetic resources. The lessons learnt from one sector could help inform the discussions and implementation in another so long as the particularities of each sector are kept in mind. On the other hand, a sector-by-sector approach may result in too many rules particularly when it is difficult to predict in advance the different fields in which a genetic resource might usefully be applied.

²⁶ Rosendal, G.K. (2006) 'The Convention on Biological Diversity: Tensions with the WTO TRIPS Agreement over Access to Genetic Resources and the Sharing of Benefits' in Oberthür S. and Gehring, T. (eds) Institutional Interaction in Global Environmental Governance: Synergy and Conflict Among International and EU Policies, MIT Press, Cambridge, Mass, p80.

²⁷ GRAIN (2005) 'Re-situating the benefits from biodiversity: A perspective on the CBD regime on access and benefit-sharing', Seedling, April 2005, pp5-7.

With proper design, development and implementation, the ABS instruments of both the CBD and the IT should be able to work in harmony for the conservation and sustainable use of genetic resources and the fair and equitable sharing of the benefits arising from their use. If the two proceed along separate but parallel paths, however, they are likely to perpetuate the confusion they were designed to resolve to the detriment of sustainable agriculture, food security, conservation and sustainable use and, ultimately, human, economic and environmental well-being.

Annex The historical context to the IT and the CBD

The historical context²⁸ to genetic resources and international efforts to regulate them is key to understanding the relationship between the Convention on Biological Diversity (CBD) and the International Treaty on Plant Genetic Resources for Food and Agriculture (IT). The modern origins of these two treaties can be traced to the expansion in the scope of the intellectual property rights (IPRs) – primarily in the form of plant breeders' rights and patents – available to protect genetic resources and living organisms over the course of the twentieth century. In many instances, developing countries have been the source of the genetic resources that become subject to the intellectual property protection. In the 1980s, concern arose that genetic diversity from developing countries was being used for profit in the North with no return to the countries of origin. Initial concern focused on plant breeding and the development of new plant varieties in the North through the use of the genetic diversity from the South. Developing countries wanted access to these new varieties in the same way that developed countries had access to resources in the South.

The result was the creation in 1983 of the *International Undertaking on Plant Genetic Resources*²⁹ (IU) under the auspices of the UN Food and Agriculture Organization (FAO). Article 2.1(a) of the IU declared plant genetic resources, including breeders' lines, land races, and wild and weed species, to be the common heritage of mankind. This meant they should be free and open to everybody.

A number of developed countries did not support the IU as they felt it ran counter to their economic interests. In an effort to bring these countries on board, three 'agreed interpretations' of the IU were negotiated over the years.³⁰ These included language that IPRs were not in conflict with the IU and the agreed interpretations largely led to the abandonment of the common heritage approach. Genetic resources as common heritage was further weakened by the CBD, which granted states sovereignty to the genetic resources found within their borders (Articles 3 and 15(1)). Unlike the IU, the CBD entered into force as binding international law thus officially marking the end of genetic resources as common resources.

The third objective of the Convention as set out in Article 1 is:

'(...) the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding'.

This helps to explain the rationale behind placing genetic resources within national jurisdiction. Countries could now set the terms for access to these resources, thus allowing them to profit from their biodiversity, further encouraging conservation. The CBD was thus based on both a premise—that

²⁸ Parts of this description of the historical context are drawn from: Garforth, K. and Cabrera, J. (2004) 'Sustainable Biodiversity Law: Global Access, Local Benefits. A Scoping Study on Future Research Priorities for Access to Genetic Resources and Benefit-Sharing', Centre for International Sustainable Development Law, Montreal; Frison, C. (2006) 'The Principles of Sustainable Development in the Context of the International Treaty on Plant Genetic Resources in Food and Agriculture', *McGill International Journal of Sustainable Development Law and Policy*, 2, pp155-174.

²⁹ International Undertaking on Plant Genetic Resources, FAO Res. 8/83.

³⁰ Agreed Interpretation of the International Undertaking, Res. 4/89, UN FAO, 25th Sess., UN Doc. C/89/24 (1989) being Annex I to the *International Undertaking*; Farmers' Rights, FAO Res. 5/89, being Annex II to the *International Undertaking*; FAO Res. 3/91 being Annex III to the *International Undertaking*.

developing countries had an equitable right to their own resources—and a promise—that these resources could be used to generate funding for development and conservation.

Article 15 of the Convention is entitled 'Access to Genetic Resources'. It reiterates the sovereign right of states over their natural resources and declares national governments to have the authority for determining access to genetic resources. Access to these resources is premised on the negotiation of bilateral access contracts (although there is no obligation within the CBD that limits these relationships to a bilateral approach). Article 15 states the general principles on which access is to be granted, namely mutually agreed terms and prior informed consent, but the specific bargain between access to the resources and the sharing of benefits is left open for negotiation by the parties concerned. The article also requires the Parties to the Convention to take measures for sharing the benefits from use of genetic resources with the Party providing such resources.

In adopting the CBD, states also called for resolving issues associated with the Global System for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Sustainable Agriculture (which includes the IU) and to bring it in line with the new international reality.³¹ To this end, the FAO began negotiations in the mid-1990s to turn the International Undertaking into a binding treaty that was in harmony with the CBD.

IT in context

The IT was adopted by the FAO Conference on 3rd November 2001 and entered into force on 29 June 2004. It was negotiated over more than seven years in order to create a legally binding international instrument addressing the special problems associated with plant genetic resources for food and agriculture (PGRFA). It was discussed within the framework of FAO and its Commission on Genetic Resources for Food and Agriculture as a revision of the IU.

This new Treaty aims to complete one of the objectives set by Agenda 21 in the Earth Summit of 1992³², that is the conservation and sustainable utilization of plant genetic resources for food and sustainable agriculture. Its text is in harmony with the CBD, as requested by Resolution 7/93 of the FAO Conference. The Treaty applies to plant genetic resources for food and agriculture that is to say, to 'any genetic material of plant origin of actual or potential value for food and agriculture' (Articles 3 and 2§4).

The objectives of the Treaty as outlined in Article 1 are:

'1.1 (...) the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security.

³¹ Resolution 3 of the Nairobi Final Act of the Conference for the Adoption of the Agreed Text on the Convention on Biological Diversity (May 1992).

³² United Nations Conference on Environment and Development, Agenda 21, Chapter 14, Program Area 14G: 'Conservation and sustainable utilization of plant genetic resources for food and sustainable agriculture', Rio de Janeiro, § 14.60, http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm, accessed 8 December, 2005.

1.2 These objectives will be attained by closely linking this Treaty to the Food and Agriculture Organization of the United Nations and to the Convention on Biological Diversity' [emphasis added].

To attain these goals, the Treaty imposes on its member Parties the obligation to conserve and utilize PGRFA in a sustainable manner. It also imposes an obligation on member States to facilitate access to the resources under their management and control and in the public domain (Article 12).

In addition, Part IV, Articles 10 to 13 of the Treaty significantly provide for the establishment of a Multilateral System of Access and Benefit-Sharing (MLS) for plant genetic resources of the world's major food crops and forage species.³³ These crops and forages, listed in Annex I of the Treaty, are crucial for food security and constitute the foodstuffs on which countries are most dependent.³⁴ While the MLS applies restrictively to the crops listed in Annex I, the other rights and obligations deriving from the Treaty such as those concerning conservation and sustainable use apply to all PGRFA. The MLS provides that the Contracting Parties, in the exercise of their sovereignty, agree to grant facilitated access to the PGRFA of these crops and forages under their management and control and in the public domain, in accordance with the terms and conditions set out in Article 12 of the Treaty. These terms and conditions include the requirement that recipients shall not claim IPRs that would limit facilitated access to the PGRFA or their genetic parts and components, in the form received from the MLS (Article 12.3(d)).³⁵ Article 13 provides that access to PGRFA, exchange of information, access to and transfer of technology, capacity building and the sharing of monetary and other benefits of commercialization are part of the benefit-sharing system of the MLS.

Concerning the commercialization of PGRFA, there is an obligation requiring that a recipient of material from the MLS who commercializes a product that is a PGRFA and that incorporates material accessed from the MLS must pay to a fund under the control of the Treaty's Governing Body an equitable share of the benefits arising from such commercialization (Article 13.2(d)(ii)). This obligation is only triggered if further access to the material or resultant product is restricted by the recipient, for instance through IPRs, otherwise payment is voluntary. The terms and conditions of the MLS, including details on the type and level of payments to be made, are established in a standard Material Transfer Agreement (sMTA) adopted by the First Session of the Governing Body of the Treaty. Parties should take measures to provide such access to other Contracting Parties through the MLS in order to facilitate access to PGRFA within their respective jurisdictions.

The MLS will allow small farmers and breeders to access the genetic resources needed to respond to their food production imperatives. It is also expected to assist in facilitating the development of improved and diverse crop varieties through easy access to the widest possible range of genetic materials in order to answer the challenges of producing food and other crops and forages in a more sustainable and cost-effective manner. Finally, the MLS is expected to contribute to the economic development of small

33 However, many important crops and forages vital to food security like soybean are excluded from the system.

³⁴ This list of crops and forages is established according to criteria of global food security and interdependence and it is estimated that these crops and forages, combined, provide about 80% of our food from plants.

³⁵ The vagueness of the phrase 'genetic parts and components, in the form received...' provides a major definitional challenge for the parties. Clarification of this and other terms are, however, some of the priority issues to be dealt with by the Governing Body of the Treaty during its initial meetings.

³⁶ IT, Article 12.4; First Governing Body meeting, Res. 2/2006, 'The Standard Material Transfer Agreement' (sMTA). The sMTA itself is contained in Appendix G to the report of the 'First Session of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture', IT/GB-1/06/Report.

entrepreneurial farmers and breeding companies in competition with large companies by facilitating free or easy access to germplasm as well as providing for the sharing of benefits from the commercialization of products which they contributed to maintaining or developing.

While progress was being made on a multilateral ABS system at the FAO, the Parties to the CBD made slow progress in implementing the third objective of the Convention. Some developing countries created national systems for controlling access to genetic resources and requiring benefit-sharing³⁷ but found these systems and the contractual negotiations they require to be expensive to operate and requiring highly skilled human resources from a number of sectors. They also felt that the national implementation of ABS was being hindered by a lack of cooperation from developed countries where most of the users of genetic resources are located. In an attempt to elaborate the ABS requirements of the CBD and help countries develop measures to implement these requirements, the Parties agreed to the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization at their sixth meeting in 2002. The Bonn Guidelines are voluntary, however, and so do not place obligations on users or user countries. This led developing countries, and a group of mega-diverse countries in particular, to call for the negotiation of an 'international regime' on ABS.38 Language to this effect was included in the Johannesburg Plan of Implementation from the 2002 World Summit on Sustainable Development and translated into an agreement to launch such negotiations at the seventh Conference of the Parties (COP) to the CBD in 2004. At the CBD's COP-8 in 2006, two permanent cochairs of the Ad Hoc Open-Ended Working Group on ABS were named to lead the negotiations and the Working Group has a timeline of 2010 for the completion of its work.

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³⁷ Two of the best known examples are Executive Order 247, *Prescribing Guidelines and Establishing a Regulatory Framework for the Prospecting of Biological and Genetic Resources, Their By-Products and Derivatives, for Scientific and Commercial Purposes, and for Other Purposes, 18 May 1995, from the Philippines; and Biodiversity Law*, No. 7788, 27 May 1998 from Costa Rica.

³⁸ The initial member countries of the Like-Minded Group of Mega-diverse Countries were Brazil, China, Colombia, Costa Rica, Ecuador, India, Indonesia, Kenya, Mexico, Peru, South Africa and Venezuela. Since then, Bolivia, the Democratic Republic of the Congo, Madagascar, Malaysia and the Philippines have also joined.