

# The Question of Minimum Standards of Access and Benefit-sharing under the CBD International Regime: Lessons from the International Treaty on Plant Genetic Resources for Food and Agriculture<sup>1</sup>

Claudio Chiarolla\*

**Abstract:** With the international regime on ABS currently under negotiations to fulfil the third objective of the Convention on Biological Diversity (CBD), this article considers the possible relationship between the emerging international regime and the FAO International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), especially its benefit-sharing components, paying special attention on the lessons learned from the implementation of the ITPGRFA. In particular, it assesses whether some lessons learned from the ITPGRFA Multilateral System's implementation (MLS) may advance discussions on related international cross-sectoral issues in genetic resources. These issues include the question of whether an International Regime on ABS should expressly provide for international standards, such as mandatory minimum standards for access to genetic resources and benefit sharing in material transfer agreements (MTAs).

**Keywords:** International Regime; Access and Benefit Sharing; International Treaty on Plant Genetic Resources for Food and Agriculture.

## Background

The Earth Summit, held in Rio de Janeiro in 1992, gave rise to three key multilateral environmental agreements. One of these binding agreements is the Convention on Biological Diversity, which was ready for signature on June 5, 1992 and went into effect on December 29, 1993. With its 193 Parties as of 2008, the CBD seeks to establish a comprehensive international programme for the sustainable management of biological resources.<sup>2</sup> It covers all types of biological diversity except for human genetic material.<sup>3</sup> The Convention's three main objectives, which are stated in Article 1, are:

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\* Queen Mary, Centre for Commercial Law Studies, University of London. Email: claudiochiarolla@yahoo.it

the conservation of biological diversity; the sustainable use of its components;<sup>4</sup> and the fair and equitable sharing of the benefits arising from the use of genetic resources.<sup>5</sup>

During the negotiations of the CBD, developing countries with a rich endowment in natural resources and crop diversity bargained with developed countries offering access to their genetic resources in return for “debt relief, royalties, technology transfers and research data”.<sup>6</sup> However, the implementation of CBD’s third objective has proven to be particularly problematic.<sup>7</sup> In 2002, the perceived failure of the so called “grand bargain”<sup>8</sup> and, in particular, poorly regulated access, lack of fair and equitable benefit sharing, and claims of misappropriation of genetic resources were all factors, which contributed to the UN World Summit on Sustainable Development (WSSD) call for action to “negotiate within the framework of the CBD, bearing in mind the Bonn Guidelines, an international regime to promote and safeguard the fair and equitable sharing of benefits arising out of the utilization of genetic resources.”<sup>9</sup> Following the call, the Conference of the Parties (COP) of the CBD at its seventh meeting in 2004 decided to mandate the Working Group on ABS, with collaboration of the Working Group on 8(j), to negotiate an international regime on access and benefit-sharing with the aim of adopting an instrument/instruments to implement the provisions in Articles 15 and 8(j) and the three objectives of the Convention.<sup>10</sup>

### **Benefit Sharing Principles under the CBD and the FAO-ITPGRFA**

Article 15 of the CBD regulates access to genetic resources by, *inter alia*: reaffirming the sovereign rights of States to their natural resources; stipulating that Parties shall endeavour to facilitate access to genetic resources; providing that access shall be subject to prior informed consent (PIC) and granted on mutually agreed terms (MAT); and requesting Parties to take measures to share benefits from the utilization of genetic resources, on MAT.

Eager to participate in the sharing of benefits arising from the use of genetic resources and associated traditional knowledge (TK), biodiversity-rich countries have started the development of national and regional ABS regimes. Although their implementation does not appear to have generated the expected benefits so far,<sup>11</sup> such laws were perceived as a factor contributing to freeze long-running cross-boundary

movements of plant genetic resources with potential negative consequences on agriculture and food security.<sup>12</sup> This is because the CBD promotes the development of a regime of contractual rules for the exchange of biological resources, which is based on bilateral contracts.<sup>13</sup> However, these bilateral contacts may not be appropriate for crop research for two main reasons: first, countries are enormously interdependent in terms of plant genetic diversity, and second, a very high number of breeding materials is necessary to breed a new plant variety. Thus, in many cases, transaction costs associated with bilateral negotiations for access to the crop biodiversity – and related intellectual property rights over the material, if any – from numerous different sources may be sufficient to discourage plant breeding efforts.<sup>14</sup>

The CBD also addresses *ex-situ* conservation, which is referred to in Article 9 as “the conservation of components of biological diversity outside their natural habitats.” Under this provision Parties are encouraged to acquire, conserve, store and manage materials in national and international *ex-situ* collections. However, since the CBD only applies to genetic resources that are provided from *in-situ* conditions or have been acquired in accordance with it, international *ex-situ* collections formed before its entry into force are not governed by the Convention. As early as in 1989, the legal uncertainty regarding the status of these collections triggered the development of the International Network of *ex-situ* collections under the auspices of FAO. Before the adoption of the FAO International Treaty on Plant genetic Resources for Food and Agriculture (ITPGRFA), the bulk of materials held by this network, which comprises the International Agricultural Research Centers (IARCs) of the Consultative Group on International Agricultural Research (CGIAR), were managed in accordance with a non-legally binding instrument called International Undertaking on Plant Genetic Resources (IUPGR) as well as the *in trust* Agreement between the CGIAR Centers and FAO.<sup>15</sup> In November 1994, following a request from the CBD, the FAO Commission on Genetic Resources for Food and Agriculture (CGRFA) started negotiations to bring the IUPGR in conformity with the CBD and, in particular, its ABS provisions.<sup>16</sup> However, further developments under the IUPGR, that led to the adoption of the ITPGRFA, were delinked from the CBD discussions for various reasons.

The International Treaty on Plant Genetic Resources for Food and Agriculture not only is the remarkable outcome of this negotiating

process, but also responds to concerns arising in connection with the application of bilateral access rules to crop biodiversity.<sup>17</sup> Part IV of the ITPGRFA establishes a Multilateral System of Access and Benefit Sharing through which its Contracting Parties have decided to facilitate access to the 64 most important crops and forages to ensure worldwide food security.<sup>18</sup> Such resources are listed in Annex I of the ITPGRFA.<sup>19</sup>

In June 2006, the Governing Body of the ITPGRFA at its first session established the level, form and manner of equitable benefit sharing payments to be implemented through a standard contract called Standard Material Transfer Agreement (SMTA). The SMTA does not require a burdensome mechanism to track individual accessions, while it ensures that benefits flow back to the Multilateral System (MLS) if a product based on MLS materials is commercialised. In particular, a continuous chain of SMTAs between providers and recipients ensures that the benefit sharing obligations of the ITPGRFA are passed onto any "person or entity" that develops a product (*i.e.* seeds) derived from the Multilateral System.<sup>20</sup> Under the ITPGRFA and the SMTA, benefit sharing includes monetary (Article 6.7) as well as non-monetary benefits (Article 6.9)<sup>21</sup> and voluntary contributions (Article 6.8 and Article 6.11). If certain legal requirements are met, compulsory benefit sharing payments of 1.1 per cent of the gross income from the sale of seeds (minus 30 per cent to allow for sale costs) must be paid by recipients to the Multilateral System.<sup>22</sup> In particular, the commercialised product (*i.e.* the seeds whose sale is relevant for the benefit sharing provision of the SMTA) must: (a) incorporate the material received from the MLS and (b) shall not be freely available for further research and breeding, because of patent protection or otherwise. Beyond the physical incorporation of the material into a new product, in cases where no physical transfer of material is involved, the link established in Article 6.10 of the SMTA between the assignment of relevant IPRs and the transfer of recipients' benefit sharing obligations to the assignee suggests that "the incorporation into a proprietary product of patented information, which results from research and development carried out on MLS materials, may give rise to benefit sharing payments *per se*".<sup>23</sup>

Apart from its many technicalities, the Multilateral System, which is implemented through the use of standard contracts, presents numerous and considerable advantages for agricultural research: (i) the SMTA reduces transaction costs, because it does not require *ad hoc* negotiations

between providers and recipients of PGRFA; (ii) it provides some scope for flexibility in handling derivatives, which are “under development,” and in particular, it allows for additional conditions to be attached to their transfer (Articles 6.5 and 6.6); and, (iii) in the case of non-compliance by recipients with the SMTA, it provides for binding international arbitration (Article 8.4(c)) and confers upon FAO, on behalf of the Governing Body, third party beneficiary’s rights to represent the interests of the Multilateral System.

The particular importance of the ITPGRFA for the international ABS regime negotiations under the CBD stems from two main facts. First, to date the ITPGRFA is the only legally-binding international instrument that implements the ABS principles of the CBD. However, its ABS provisions only apply to a subset of plant genetic resources relevant for food security and sustainable agriculture, which are defined in accordance with a number of cumulative criteria. Such criteria are determined as follows: (i) the PGRFA concerned must be expressly included in the list, which is annexed to the ITPGRFA; (ii) they must be used in breeding, research and training food and agriculture; and (iii) they shall not be encumbered by third parties’ rights and other interests, in the sense that they should be under the management and control of Contracting Parties and in the public domain. Second, because of the above, any new instrument or instruments, which might be developed with the view to being adopted by CBD Parties, may need to cover all the benefit sharing instances not expressly regulated by the ITPGRFA, while not precluding the potential expansion of the latter, in particular, with respect to crops not yet included into its Multilateral System of ABS.

Finally, “the important contribution” of the ITPGRFA and its continuing relevance for the negotiation of the International Regime on ABS is emphasised in COP Decision VII/19D, which refers to it both in its preambular language – where the ITPGRFA is the only treaty to be mentioned apart from the CBD – and in the list of elements, which shall be considered for inclusion in the international regime.<sup>24</sup>

## **Recent Developments relevant for the International ABS Regime Negotiations**

The negotiation of an International Regime on Access and Benefit Sharing under the Convention on Biological Diversity made some progress so far during the fifth and sixth meetings of the *Ad Hoc* Open-

ended Working Group on Access and Benefit Sharing (ABS), which were held respectively in Montreal, October 8-12, 2007, and in Geneva, January 21-25, 2008.<sup>25</sup> In particular, the sixth ABS meeting marked a considerable step forward thanks to an innovative approach for consensus building. Actually, the contact group temporarily agreed to set aside negotiations on contentious issues concerning the nature and scope of the international regime and engaged in constructive discussions on its main components.<sup>26</sup>

The main result of this approach is that “for the first time since the launching of the process, no Party questioned the general need for an international regime,” allowing to move forward into substantive discussions and text-based negotiations.<sup>27</sup> As a consequence, the official outcome document, which was adopted by the Working Group, is a solid basis for future negotiations.<sup>28</sup> Such negotiations must be concluded “at the earliest possible time before the tenth meeting of the Conference of the Parties.”<sup>29</sup> During the upcoming ninth meeting of the COP to be held in Bonn, Germany, in May 19-30, 2008, time might not allow the Parties to advance discussions on substantive items of the international ABS regime-related agenda. However, this meeting will be crucial to decide important process-related issues, including the number of ABS Working Group meetings prior to COP 10 and funding.<sup>30</sup>

### **Work in Progress: The International Regime on ABS**

The draft “Recommendation on Possible Elements of a Decision on Access and Benefit Sharing” for consideration of COP 9 is basically the outline of the international regime’s structure and is divided into four main parts, namely: “Objective,” “Scope,” “Main Components,” and “Nature” of the International Regime.<sup>31</sup> Without giving prejudice to the eventual nature of the international regime or any of its elements, being this paper confronted with the task of identifying potential lessons from the implementation of the ITPGRFA, it wonders what specific elements of the FAO Multilateral System and the SMTA can provide a basis for furthering the ABS discussions under the CBD. Because of the legally binding nature of the ITPGRFA, the following discussion is based on the assumption that relevant comparable elements of the international ABS regime could be accomplished in a legally binding setting. This assumption is necessary merely to facilitate the comparative analysis that follows, hoping that it might be acceptable to the reader

in the light of the above disclaimer. Rather than dismissing the possibility to discuss binding elements, which might be controversial, an attempt is made to identify the reasons why stumbling blocks could emerge, which might impede to extend solutions that appear to work in the context of the ITPGRFA.

### **Lessons Learned from the ITPGRFA**

An information document prepared for COP 9<sup>32</sup> considers the role of IPRs in technology transfer in the context of the CBD and underlines “the importance of specific bilateral arrangements, in particular ...material transfer agreements or bio-prospecting agreements, in defining each party’s rights, interests and obligations.” Then, it continues, “Without giving prejudice to the appropriateness and suitability of a wholly bilateral approach ...and, conversely, to the need for overarching principles and legal obligations that would provide a surer safeguard for the equity and legitimacy of specific arrangements ...the design of such arrangements seems to be an important factor for ensuring that they operate to generate new technologies and new benefits, shares those benefits equitably, and respects the interests and concerns of the resource providers.”

On these premises, the role of the Standard Material Transfer Agreement (*i.e.* the specific bilateral arrangement, which implements the benefit sharing provisions of the ITPGRFA) and “the way it can be used to keep track of transfers of materials and to link their use to benefit-sharing is a very useful precedent” for the ABS Working Group to consider (SGRP, 2007: p. 3). In particular, the CGIAR Centres (2007: p. 3) suggest that “the SMTA functions as a certificate of source, with the source or origin of the PGRFA being the MLS itself.” Thus, the SMTA functions not only as a certificate of source or compliance with the ITPGRFA, but also as an essential mechanism for its implementation.

The key question is whether an International Regime on ABS should expressly provide for international standards, such as mandatory minimum standard terms for access to genetic resources and benefit sharing in material transfer agreements (MTAs) and the issue of how to define and manage derivatives and their products thereof, as well as potential impacts of such international regulatory mechanisms on the overarching objectives of the Convention. Some may observe that the practical possibility to introduce into the International Regime on ABS

a set of multilaterally agreed standards to be implemented though the use of private contracts, in the wake of the model adopted by the ITPGRFA, depends on the willingness of Parties to accept a bargain along the following lines. This bargain is likely to present a trade-off between the inclusion of international standards on access to genetic resources, which appears to be on top of the user countries' agenda and a range of other important issues, such as: an international definition of misappropriation; some minimum standards to deal with benefit sharing; the issue of derivatives; and an appropriate mechanism to encourage, monitor and enforce compliance with national ABS legislation, including though an "internationally recognized certificate of origin/source/legal provenance."

As regards compliance, at least one study has specifically considered the implications of ABS monitoring and enforcement through the use of private contracts, including private international law aspects that concern the applicable law to the SMTA in the context of dispute settlement.<sup>33</sup> In addition, a dedicated Expert Group has discussed in detail the options for a certificate of origin.<sup>34</sup> Therefore, the concluding part of this paper focuses on the ABS-related terms in the SMTA that regulate the issue of derivatives and it wonders how these terms can be useful for international ABS regime development under the CBD.

Derivatives and misappropriation are terms, which are not expressly defined either in the ITPGRFA or in the SMTA. Before the adoption of the SMTA, Fowler *et al.* (2004: pp. 663-4) "sought to bring clarity to these issues by proposing how the 'germplasm and related information' covered by the FAO-CGIAR Agreements should be interpreted and by describing a number of options for minimum requirements for taking out intellectual property protection on derivatives and components of designated germplasm." However, the authors note, "the FAO, the CGIAR and the international community ...may choose to retain the *status quo* in which the question of what can and cannot be done with designated germplasm is left unanswered. Choosing not to deal with the subject is itself a choice, though perhaps not the best one."

Because it creates legal uncertainty, the SMTA built-in 'constructive ambiguity' or 'strategic vagueness' concerning the extent to which IPRs should be allowed to cover materials derived from the Multilateral System

is not desirable. The same argument may possibly apply to the forthcoming ABS regulation under the CBD International Regime. However, in the context of the ITPGRFA, the above was a compromise necessary to build consensus on other aspects of the SMTA on which such consensus could be reached. More importantly, the absence of an express definition of derivatives does not impinge upon the clear-cut legal identification of derivative products for the purpose of benefit sharing, including mandatory payments. The incorporation requirement both in the definition of “Product” and in Article 6.7 of the SMTA does not leave scope for doubts regarding the fact that any product, whose commercialisation may trigger benefit sharing payments, must qualify as a derivative in the strict sense that it must contain the material received from the Multilateral System – or its genetic parts or components. In addition, the SMTA makes no reference to any particular percentage of MLS material to be incorporated into the final plant variety; therefore, there are no minimum levels of incorporation to define derivative products for benefit sharing purposes. This is the balance struck in the SMTA.

In the context of international ABS regime discussions, the critical question revolves around the issue of whether the incorporation requirement used in the ITPGRFA could be successfully employed to identify derivative products for the same benefit sharing purposes discussed above. Unfortunately, the direct application of the incorporation requirement into a context other than plant breeding may prove difficult. This is because the creation of new plant varieties inherently reduces to an activity, which makes use of multiple genetic parts and components that contain “functional units of heredity.” On the contrary, many gene products at the sub-organisms level, non-DNA molecules and proteins do not contain such “functional units of heredity;” therefore, they may fall outside of the system. This might be the case, for instance, of natural product discovery in the pharmaceutical sector. Thus, the incorporation requirement might need some further qualification to comprise categories of products, which are based on genetic resources, because product discovery would not occur without their use, although the genetic information is not eventually contained in the product. In these respect, it might be useful to further elaborate the relationship between biological resources and genetic resources as functional elements<sup>35</sup>, which may comprise both “the tangible biological

material ('micro-tangibles') and the intangible asset (the genetic information)."

Turning the attention to the concept of misappropriation, under the ITPGRFA any use of MLS materials would qualify as misappropriation, if it violates the conditions established in the SMTA, including any illegal transfer of the original material and its derivatives – which may be either "Products" or "PGRFA under development" – as well as derivative intellectual property rights. The report of the Expert Group on an internationally recognised certificate (2007: par. 26 and 41) has also emphasised that: "transfers to third parties should require maintenance of the link with the certificate and the mutually agreed terms applying to the resources." It has also noted that "additional implementation challenges and costs may be related to the coexistence of genetic resources inside and outside the system." Therefore, the complementarity between the SMTA and a certificate of compliance under the CBD International Regime is a factor, which may contribute to reduce costs from materials being exchanged outside the system.

Finally, as to the issue of establishing minimum benefit sharing conditions, monetary payments of 1.1 per cent of the gross sale of any derivative products, in accordance with the ITPGRFA, should be taken as the baseline for minimum standard payments for access to genetic resources covered within the scope of the International Regime. The above percentage was agreed by the Parties of the ITPGRFA having in mind both the nature of plant breeding, which is less capital intensive than other research and development (R&D) activities in biotechnology, and the relatively low value of each potential contribution of a PGRFA to the final product; therefore, such percentage should be acceptable as a minimum standards for other biotechnology sectors in which the use of genetic resources may have more promising applications in terms of economic returns from R&D.

### **A Note of Caution**

Rose (2003: p. 362) provocatively questions whether "the paper used over seven years of negotiations," which were necessary to develop the ITPGRFA, was "worth the trees." Koester (2002: p. 103) responds that "when faced with the question 'have we really accomplished anything?', the only answer is: what would be the condition of our biodiversity if

these conventions did not exist?" He makes an important point indeed, which is valid also in the context of the international ABS regime negotiations.

In Rose's opinion, "the answer is yes," it was worth, because the ITPGRFA "will operate to ensure availability of PGRFA, simplify transfers, promote fairness in benefit sharing, and direct some benefits towards PGRFA conservation." If all the above is being accomplished thanks to multilateral cooperation on biodiversity conservation, that is indeed a great success. However, to the extent that the ITPGRFA sets global rules, which impact on scientific research and plant breeding, the former can be considered a success story only because the affected scientific community eventually endorsed the proposed solutions – or at least could leave with them.<sup>36</sup>

In the same vein, it will be necessary to carefully ensure that the regulation that is being proposed under an International Regime on Access and Benefit Sharing gives due consideration to the practical way in which trans-national collaboration actually takes place in the research community (see, for example, Jayaraman, 2008). At this point of negotiations, one of the risks that all ABS policymakers should be taking care of is that "legislation and practice that seeks to implement the CBD do not unduly restrict the legitimate use of genetic resources, discouraging scientific research." (UK Commission on Intellectual Property Rights, 2002: Chapter 4). In this respect, it might be appropriate to increase efforts to distinguish between commercial and non-commercial research, and to set facilitated standard access conditions for those who do not seek access for commercial purposes.<sup>37</sup> However, if the potential for developing a commercial product exists, the ABS International Regime should not prevent genetic resources, which have been acquired in accordance with non-commercial terms, from being used in a commercial research programme. This may occur under a new set of mutually agreed terms that reflect a different balance of benefit sharing obligations. Therefore, a chain of MTAs would be necessary to maintain the link between the provider and any subsequent recipient of genetic resources and their derivatives. This mechanism could be essentially based on the development cycle model used within the FAO Multilateral System.<sup>38</sup>

## Endnotes

- <sup>1</sup> This article is based on a UNU-IAS working paper, which was prepared with support from the United Nations University-Institute of Advanced Studies (UNU-IAS) Biodiplomacy Programme. The author is extremely thankful to Graham Dutfield, Sam Johnston, Duncan Matthews and Balakrishna Pisupati for their feedback on earlier versions of this article. All errors and opinions expressed are of the author.
- <sup>2</sup> Glowka et al. (1994); Koester (2002).
- <sup>3</sup> Biodiversity is the variability among living organisms. This covers: (a) genetic resources, (b) the portfolio of animal and agricultural species developed throughout the world and (c) the diversity of ecosystems.
- <sup>4</sup> Article 2 of the CBD defines the term “sustainable use” as the use of components of biological diversity in a way that does not lead to its long-term decline and that meets the needs of present and future generations.
- <sup>5</sup> “Genetic resources” are defined as genetic material of actual or potential value that contains functional units of heredity.
- <sup>6</sup> Blakeney, 2002: 27-9; see also Chandler (1993).
- <sup>7</sup> UNU-IAS (2003), p. 14, reports that only 50 countries either have “adopted or are in the process of adopting measures to exercise and secure their sovereign rights over genetic resources.” See also: Chambers (2003) at p. 316.
- <sup>8</sup> Siegele (2008).
- <sup>9</sup> Paragraph 44(o) of the Johannesburg Plan of Implementation.
- <sup>10</sup> Paragraph 1 of CBD COP Decision VII/19D; previous key developments on ABS policy-making under the Convention on Biological Diversity include, inter alia: a decision by the Conference of the Parties at its fourth meeting (COP IV) establishing an expert group on ABS in 1998; a decision by COP V establishing the Open-ended Working Group on ABS in 2000; the adoption of the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising out of their Utilization at COP VI in 2002. The above list, however, is not exhaustive; for a complete overview and analysis of recent developments leading to the international ABS Regime negotiations see: Hodges and Daniel (2005), and IISD (2008).
- <sup>11</sup> IUCN (2006) reports: “Since 1993, considerable, although still insufficient, progress has been made in implementing CBD obligations and principles especially through national laws and obligations. However, the effectiveness of national and regional measures has proven to be limited resulting in WSSD’s call for an international framework.”
- <sup>12</sup> Managers of CGIAR Centres frequently attributes the significant decline in the rate of acquisition of new materials by most of Centres’ genebanks in recent years “to the highly politicised nature of access and benefit sharing issues at international, national and regional levels.” See: Halewood and Sood (2006)
- <sup>13</sup> Queen Mary Intellectual Property Research Institute et al. (2000), pp. 54-74. The conventional access agreements thus developed are called Material Transfer Agreements (MTAs).
- <sup>14</sup> Chiarolla (2006).
- <sup>15</sup> The text of the IUPGR, which was adopted in 1983 by Resolution 8/83 of the FAO Conference, is available at: <http://www.fao.org/ag/cgrfa/IU.htm>. In 1983, given the global interdependency of all countries in terms of crop diversity, FAO Countries endorsed the creation of the FAO Global System for the Conservation and Utilization of Plant Genetic Resources for Food and Agriculture. The Global System is composed by several tools, which include specialized international bodies and agreements, plant germplasm collections, scientific networks and an early warning system. Further information is available at: <http://www.fao.org/FOCUS/E/96/06/06-e.htm>. The component of the Global System that provided the formal

framework for international action to promote the conservation, sustainable use and availability of crop biodiversity was the IUPGR. In particular, Article 5 of the IUPGR recognised the principle of unrestricted access to plant genetic resources in the following terms: "It will be the policy of adhering Governments and Institutions having plant genetic resources under their control to allow access to sample of such resources, and to permit their export, where the resources have been requested for the purposes of scientific research, plant breeding or genetic resources conservation. The sample will be made available free of charge on the basis of mutual exchange or on mutually agreed terms." See also Andersen (2005).

<sup>16</sup> In 1992, the Conference of the Parties of the CBD recognised that the regime developed under the Convention on Biological Diversity was not well suited to PGRFA and handed this issue over to the FAO. See Resolution No. 3 of the Nairobi Final Act.

<sup>17</sup> The Treaty was adopted by the FAO Conference on November 3, 2001. It entered into force on June 29, 2004 and has 116 Parties (information updated until March 2008). See in general: Moore and Tymowski (2005).

<sup>18</sup> Bellon (2006).

<sup>19</sup> While the ITPGRFA encourages facilitating access to all plant genetic resources for food and agriculture, only PGRFA which are under "the management and control of the Contracting Parties and in the public domain" will be automatically included into the MLS (Article 11.2). However, such resources must be used only for the purpose of utilisation and conservation for research, breeding and training for food and agriculture, being other uses, such as chemical, pharmaceutical and/or other non-food/feed uses regulated in accordance with the CBD.

<sup>20</sup> Article 12.4 of the ITPGRFA states: "the recipient of PGRFA shall require that the conditions of the MTA shall apply to the transfer of PGRFA to another person or entity, as well as to any subsequent transfer of those PGRFA."

<sup>21</sup> Visser et al. (2005).

<sup>22</sup> Article 6.7 of the SMTA states: "In the case that the Recipient commercializes a Product that is a Plant Genetic Resource for Food and Agriculture and that incorporates Material as referred to in Article 3 of this Agreement, and where such Product is not available without restriction to others for further research and breeding, the Recipient shall pay 1.1% (less 30%, to allow for sales costs) of the Sales of the commercialized Product."

<sup>23</sup> Chiarolla (2008: p. 4).

<sup>24</sup> See, in particular, the Annex to Decision VII/19D(d)(xxii) under "relevant elements of existing instruments and processes."

<sup>25</sup> The terms of reference for the ABS Working Group are contained in the Annex to Decision VII/19D, which sets out a number of agreed parameters for the negotiation. These parameters concern, in particular: (a) the process, which shall be based on a gap analysis; (b) the nature of the international regime, which revolves around the questions of whether the latter should include one or more instruments and whether it should be legally-binding or not; (c) its scope, which includes access to genetic resources and sharing of benefits, as well as traditional knowledge; and (d) a list of elements, which shall be considered for inclusion in the regime, comprising references to relevant existing instruments and processes. See: Scott (2007).

<sup>26</sup> Such components are listed in the Annex to Decision VII/19D, including inter alia: measures to ensure benefit-sharing (i), (ii), (iii), (v), (vi), (xiii), (xiv); measure to facilitate access (iv); measures to ensure compliance with PIC and MAT (ix), (x), (xi); protection of traditional knowledge (xv), (xvi), (xviii); compliance mechanisms (xx), (xxi); measures to facilitate implementation of the regime (viii), (xix), (xxii); relevant elements of existing instruments and processes (xxiii); and others.

- <sup>27</sup> IISD (2008: p. 10).
- <sup>28</sup> CBD (2008a: and Annex, pp.11-20).
- <sup>29</sup> This deadline is established in CBD COP Decision VIII/4A, par. 6. In addition to renewing the mandate of the Working Group (WG) and setting the above timeframe for the negotiation, this Decision, in section C, established a Group of Technical Experts on an internationally recognised certificate of origin/source/legal provenance, which meet in Lima, Peru, in January 22- 25, 2007. See: CBD (2007). The Group of Technical Experts considered the possible rationale, objectives and the need for an internationally recognised certificate of origin/source/legal provenance; defined the potential characteristics and features of such an internationally recognised certificate; analysed the distinction between the options of certificate of origin/source/legal provenance and implications for achieving the objectives of Article 15 and 8(j); and identified associated implementation challenges.
- <sup>30</sup> CBD (2008b: Item 4.1. par. 79).
- <sup>31</sup> CBD (2008a).
- <sup>32</sup> CBD (2008c: par. 189).
- <sup>33</sup> Chiarolla (2008).
- <sup>34</sup> CBD (2007).
- <sup>35</sup> Tvedt and Young (2007: p. 63-5).
- <sup>36</sup> The CGIAR Centers report that over the first eight months of 2007 “a total of 97,669 samples were distributed under the SMTA” and “only three potential recipients have refused explicitly to accept materials under the SMTA.” See: FAO (2007), par. 7-8.
- <sup>37</sup> As regards the question of how to draw the line between commercial and non-commercial research, this paper has noted that within the FAO Multilateral System monetary benefits must be shared, if an IPR restriction limits the facilitated access to a derivative research product. Thus, in general, users’ applications for IPR protection are a useful element to distinguish between commercial and non-commercial research, because they are a clear indication of the intention to develop and commercialise a product to be sold on the market, including in the form of licensing.
- <sup>38</sup> Chiarolla (2008).

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