

Access and Benefit-Sharing under the FAO Seed Treaty

The first Session of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR/hereafter: Treaty) held in Madrid June 12-16 2006, answered many open questions concerning the way in which access to genetic resources from the multilateral system and the sharing of benefits will be handled in the future. The following article describes the current situation and suggests ways to improve a state of affairs that still is less than satisfactory.

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The Treaty governs the access to plant genetic resources and the sharing of benefits arising from the use of species listed in Annex 1¹ and administered by the signer states (including all national seed banks but also in situ crops). The extensive ex situ collections of the International Agricultural Research Centres (IARCs) of the Consultative Group on International Agricultural Research (CGIAR) will also be added to the system. The Standard Material Transfer Agreement (SMTA), approved at the first meeting of the Governing Body, sets out the terms of access and benefit sharing.

The present article treats only the terms of access and benefit sharing. Other very important parts of the Treaty concerning conservation, sustainable use of plant genetic resources, or farmers' rights, will not be discussed.

1. Access to Genetic Resources:

The inclusion of many national seed banks and the material under the auspices of the CGIAR in the multilateral system will simplify access to very large collections of plant genetic resources. Compared to the bilateral negotiations for access and benefit sharing under the Convention on Biological Diversity, access to plant genetic resources for food and agriculture under the terms of the SMTA is easy: just fill out an SMTA.

¹ Including most important food crops such as corn, wheat, rice potatoes, millet, but also many fruits, vegetables and fodder plants (64 species in all). Soy and tomatoes are the most important food crops not included in the multilateral system.

1.1. Access for all?

All countries, research institutes, and companies benefit from the simplified access under SMTA regardless of whether or not they make their collections available to the system. In other words, the system rewards freeloaders who keep their own collections to themselves but still want to benefit from the multilateral system. According to the terms of the Treaty these rules will be reviewed. Paragraph 11.4 states that "within two years of the entry into force of the Treaty, the Governing Body shall assess the progress in including the plant genetic resources for food and agriculture referred to in paragraph 11.3 in the Multilateral System. Following this assessment, the Governing Body shall decide whether access shall continue to be facilitated to those natural and legal persons referred to in paragraph 11.3 that have not included these plant genetic resources for food and agriculture in the Multilateral System, or take such other measures as it deems appropriate."

At its first session the Governing Body decided to delay this assessment until the third session. In other words, everyone has access to the multilateral system for the time being. Also, the terms of engagement with non-contracting parties and companies within their jurisdiction have not been clearly defined. This state of affairs must not be allowed to go on indefinitely.

1.2 Patents prevent access

Paragraph 12.3(d) provoked considerable controversy during Treaty negotiations. Indeed, the current compromise² leaves many questions unanswered. Specifically, it is not clear whether an unaltered gene (isolated from a plant in the multilateral system) is covered by these terms and whether, in a case like this, a patent application may be filed. Only a very narrow interpretation that excludes patents on isolated materials does justice to the spirit of the Treaty, which seeks to facilitate rather than restrict access to plant genetic resources. It would be intolerable if (freeloading) companies or universities, benefiting from easy terms of access, were to come into the system to isolate valuable genes and then proceeded to use patents to make these genetic materials off limits to others. In this case, the system would actually serve to diminish the access to genetic materials.

The wording of the adopted SMTA replicates Paragraph 12.3 (d) word for word. A clear decision on this urgent question was evidently avoided. As a result, users receiving materials from the system do not know what they are allowed to patent. It would be best to settle this matter on a political level within the Governing Body – admittedly a difficult process and one

² Par. 12.3 (d) Recipients shall not claim any intellectual property or other rights that limit the facilitated access to the plant genetic resources for food and agriculture, or their genetic parts or components, in the form received from the Multilateral System;

that was not planned. Even just putting it on the agenda will not be easy. At best the question might be resolved in a dispute settlement procedure in which an international body such as the International Chamber of Commerce holds the power of arbitration. However, only the provider, the recipient, or the so-called third party beneficiary (representing the Governing Body) may initiate this procedure. NGOs on the other hand cannot formally intervene against violations of SMTA (and, thus, of the Treaty).

1.3 Free access must be secured even outside the Treaty.

Comprehensive patents on plants and parts thereof pose a significant danger to the free and easy access of breeders and farmers. Take – as one example among many – patents on gene sequences which, rather than affecting only one crop, are found in rice, wheat and maize, as well as in bananas and vegetables. Thus even someone with access to crops outside the system can exert considerable influence on the access to genetic resources inside the system. The important political debates about these matters will continue to take place outside the Treaty – in the context of the revision of national patent laws, of free trade agreements and of the TRIPS agreement of the WTO. Here, an urgently needed change of the system will require a serious commitment.

1.4 Possibilities for changing terms of access under the Treaty

The following activities may improve the access to plant genetic resources in the framework of the Treaty. They might also provide lobbying opportunities for NGOs.

- Signatories contact private holders of plant genetic resources and encourage them to make their collections available to the multilateral system.
- At its third session, the Governing Body should restrict the access of freeloading states and especially legal persons, thus increasing the pressure on countries and corporations alike to make their collections available. This demand goes beyond the option considered in paragraph 11.4, which only refers to legal persons within the jurisdiction of a contracting party.
- The interpretation of paragraph 12.3 (d) needs to be put on the agenda of the Governing Body. The object is to exclude, as fully as possible, the patentability of materials received from the multilateral system. If this is not possible, a resolution by dispute settlement should be considered.

2. Benefit sharing under the FAO Seed-Treaty

Paragraph 13.2 (d) (ii) of the Treaty³ stipulates that a fair share of the benefits arising from the commercialization of plant genetic resources be paid into an account specified by the Treaty if said product⁴ is covered by intellectual property rights which are restricting the free access for further research and breeding. This passage raises several questions that were not fully addressed when the SMTA was adopted in Madrid.

2.1 Who must share benefits arising from commercial use?

Since the benefit-sharing requirement is limited to those who restrict the availability of a product, the definition of what it means to be "available without restriction" is of great importance. It has to be made clear that a patented product cannot be included in the definition of "available without restriction". Industry representatives and some parties are suggesting that a patent does not restrict the availability of a product for further breeding by others if the laws of the country that grants the patent include a research exemption. This argument obscures the fact that the whole purpose of breeding is to produce seed for the market and that there is a big difference between a research exemption in patent law and the breeders exemption in PVP laws. It was quite clear during the negotiations for the Treaty that "without restriction for further research and breeding" means that a product is available for further breeding by a "breeders exemption", as defined in PVP laws, which allow the breeder the right to sell new varieties developed from this product without restriction. This is not the case if patented traits or plants are used. It is clear that there will be almost no obligation to share any benefits if patents with research exemptions are included in this definition of "available without restriction".

As defined in the adopted SMTA the term "available without restriction" does not resolve the problem.⁵ It remains unclear just who, in the end, will be required to share their benefits. Will all patent holders have to pay or just some of them? If the Convention on Biodiversity is any indication the lack of clear definitions can severely limit the implementation of an agreement. Thus it is important that the Governing Body agree on a definition that unambiguously declares all patents to constitute a

³ The Contracting Parties agree that the standard Material Transfer Agreement referred to in Article 12.4 shall include a requirement that a recipient who commercializes a product that is a plant genetic resource for food and agriculture and that incorporates material accessed from the Multilateral System, shall pay to the mechanism referred to in Article 19.3f, an equitable share of the benefits arising from the commercialization of that product, except whenever such a product is available without restriction to others for further research and breeding, in which case the recipient who commercializes shall be encouraged to make such payment.

⁴ In the SMTA "Product" is defined as "Plant Genetic Resources for Food and Agriculture that incorporate the Material or any of its genetic parts or components that are ready for commercialization, excluding commodities and other products used for food, feed and processing."

⁵ Definition in the SMTA: "Available without restriction": A Product is considered to be available without restriction to others for further research and breeding when it is available for research and breeding without any legal or contractual obligations, or technological restrictions, that would preclude using it in the manner specified in the Treaty.

restriction on the access of breeders. If this is not possible, a resolution by means of arbitration might be considered. (See 1.2)

2.2. How much is an "equitable share" of benefits?

The adopted SMTA defines an "equitable share" as 1.1% of the selling price from which, moreover, an additional 30% may be subtracted. In real terms this puts the equitable share at 0.77% of the selling price practically a give-away⁶ for plant genetic resources with specific material characteristics (materials without such characteristics will be somewhat more expensive than in the past). But only those who restrict the access to their product through intellectual property rights will pay even this small price. In the end, very little benefit sharing money will flow back into the multilateral system. A rough and optimistic calculation may illustrate this point: ten years from now the global seed market (in USdollars) will be worth some 30 billion dollars. Ten percent or 3 billion dollars worth of seed will have been bred with genetic resources from the multilateral system, of which, again, only 10% (\$ 300 million) are protected by a patent and thus subject to benefit sharing at 0.77%. The resulting 2.31 million dollars per year do not even cover the treaty's administrative budget. The mountain has produced a molehill. According to paragraph 13.3 the benefit sharing funds from the multilateral system are supposed to benefit farmers "in all countries, especially in developing countries, and countries with economies in transition, who conserve and sustainably utilize plant genetic resources for food and agriculture". Having made available a large proportion of the plant genetic resources in the system these farmers now come away empty-handed. An important goal of the treaty would be missed. There are two ways to avoid this disastrous development:

- An African proposal was adopted as part of the SMTA under which users of the multilateral system would be required to share any and all benefits at a reduced rate of 0.5%. Under this regime the income of the multilateral system would no doubt increase. But given a choice between paying 0.5% on all sales and paying 1.1% on sales covered by patents most users in all likelihood will not chose the African proposal.
- Paragraph 13.2 (d) (ii) of the treaty also states that "[...] the Governing Body [...] may also assess within a period of five years from the entry into force of this Treaty [i.e. before 2009], whether the mandatory payment requirement in the MTA shall apply also in cases where such commercialized products are available without restriction to others for further research and breeding." Extended in this way (and at roughly the level proposed by the African model, i.e. 0.5%) these mandatory payments would actually constitute something like a real sharing of benefits with farmers and would

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⁶ See also the report written by W. Smolders: ftp://ftp.fao.org/ag/cgrfa/BSP/bsp27e.pdf

⁷ Thanks to Walter Smolders for the figures.

promote the conservation and sustainable use of plant genetic resources.

2.3 Ways to improve benefit sharing under the Treaty

The following activities have the potential to improve benefit sharing under the Treaty. They might also provide lobbying opportunities for NGOs.

- The Governing Body should agree that all patents restrict the access of breeders and are subject to benefit sharing requirements.
- The mandatory review of benefit sharing terms results in an extension of mandatory payments to all commercial seed sales. This extension will also help to put the funding for the conservation activities on a broader basis.

3. Conclusions

Important questions concerning access and benefit sharing remain. Who should get easy access to the multilateral system and how many collections are added to the system? Should all users of the multilateral system be required to give back to the system a share of their commercial benefits, thus building a fund to preserve the planet's plant genetic resources? Increased participation and more efficient NGO-lobbying at future meetings of the Governing Body will be necessary.

October 2006