

The FAO International Treaty (IT) on Plant Genetic Resources for Food and Agriculture and other international agreements

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**What are plant genetic resources (PGR)?
Seeds, fruits, cuttings, pollen, and more--the raw
material for crop breeding that underpins food
security, and plant research.**



The US National Plant Germplasm System provides much PGR, but more is needed



The IT and the Convention on Biological Diversity (CBD)

- The IT is a legally-binding Treaty under the UN Food and Agriculture Organization.
- The objectives of the IT are:
 - the conservation and sustainable use of PGRFA (Plant Genetic Resources for Food and Agriculture) and
 - the fair and equitable sharing of the benefits arising out of their use.
 - The IT is in harmony with the CBD, and focused on sustainable agriculture and food security.
- The CBD is a legally-binding Convention.
- The objectives of the CBD are:
 - the conservation of biological diversity
 - the sustainable use of its components and
 - the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

The IT and the CBD

- **The IT:**
 - 130+ nations are Parties to it; in force since June 2004.
 - The US signed (2002) but has not yet ratified it.
 - The Executive Branch transmitted the IT to the Senate to seek its advice and consent to ratification in 2008. [It is pending in the Senate].
- **The CBD:**
 - 190+ nations are Parties to it; in force since Dec. 1993.
 - The US signed (1993) but has not yet ratified it.

The IT and the CBD

- **The IT:**

- Nations have sovereign rights over “their” PGRFA and in exercise of those rights Parties agree to:
- Establish a multilateral system (MLS) for benefit-sharing, and facilitated access to certain PGRFA for crop genetic improvement for food security.
- Provisions for PGRFA in International Agricultural Research Centers (e.g., CIMMYT, IRRI)

- **The CBD:**

- Nations have sovereign rights over their natural resources.
- Emphasizes contractual (bilateral) arrangements.
- “Prior informed consent” can be required by a nation, and “benefit sharing” takes place via “mutually agreed terms” regarding access to germplasm.

The IT and the CBD

- **IT's scope includes all PGRFA.**
The MLS includes:
 - PGRFA of 64 food and feed crops key to food security; more crops may be included in the future.
 - Held in ex situ collections by national governments (e.g., US National Plant Germplasm System), in the public domain; or held by IARCs; or
 - Donated or made available by private entities.
- **CBD's scope and coverage:**
 - Most genetic resources under national jurisdiction exchanged internationally post-29 Dec. 1993.
 - Depending on a nation's interpretation, the CBD's access and benefit-sharing regime might include major crops not covered by the IT MLS such as soybean, tomato, cotton, peanuts.

The IT and the CBD

- **Benefit-sharing under the IT:**
 - In a broad sense, benefit-sharing under the IT will come from nations who are obliged to conserve PGRFA and make them available for research and breeding.
 - In a narrow sense, benefit-sharing will flow from individual PGRFA transactions via the Standard Material Transfer Agreement (SMTA) which details obligations of recipients and the providers. Funds do not flow back directly to the country of origin: they are invested in projects supporting farmers in developing countries who conserve crop diversity in their fields, and assisting farmers and breeders globally.
- **Benefit-sharing under the CBD:**
 - Negotiated by providers and recipients (e.g., in contracts for exchanging genetic resources); in some cases national governments are involved.
 - In many nations, will be guided by the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of the Benefits Arising from their Utilization, which will come into force this month.
 - National implementation procedures are under development, and will be key to the Nagoya Protocol's effects.

The IT and the CBD

- **Germplasm access and exchange under the IT:**
 - Via the SMTA, which includes conditions for end use (excludes non-food and non-feed), conservation, management of IPRs, and benefit-sharing upon commercialization.
- **Germplasm access and exchange under the CBD:**
 - Variable terms, negotiated by parties to individual contracts.
 - National implementation of the Nagoya Protocol might affect those terms, and might not be tailored to the needs of agriculture, involving problematic requirements.

Effects of IT and CBD on US PGR users

- **IT:**
 - Has not affected use of PGRFA acquired pre-IT, nor of domestic US PGRFA.
 - Use of PGRFA acquired internationally post-IT has been affected by terms and conditions of SMTA.
 - In some cases, the IT's SMTA has facilitated international access to PGRFA for U. S. public-sector researchers, genebanks, etc., but in other cases it has not.
- **CBD :**
 - Generally has not affected use of PGRFA acquired pre-CBD, nor of domestic US PGRFA.
 - Use of PGRFA acquired internationally post-CBD affected by terms and conditions of exchange consistent with U. S. law.
 - Effects of the Nagoya Protocol will be determined by its implementation.
 - Since 1993, access to genetic resources internationally has become increasingly problematic.

Effects of the US ratifying and becoming a Party to the IT

- US PGRFA users, both public and private-sector, would have guaranteed access to PGRFA from other nations and IARCs: if needed, international law would be a tool for asserting that right.
- Terms of access specified by the SMTA.
- US government obliged to provide PGRFA access to non-US users essentially via current NPGS practices, but accompanied by the SMTA.
- Terms of access to NPGS PGRFA would not change for US users.

Effects of the US ratifying and becoming a Party to the IT

- Thus, if the US were a Party to the IT, the NPGS would incur additional obligations for reporting, information-sharing and curation, but it is already fulfilling nearly all of those. Other public and private-sector PGRFA users would incur no additional obligations.
- As a Party, the US government could effectively represent US germplasm users at the IT's Governing Body, advance US priorities and interests, and strive to improve some aspects of the IT and the SMTA.