

## Selected Online Resources

This section provides a selection of resources related to the International Treaty and the policy area of conservation and sustainable use of crop diversity that are available online.

### ***International Instruments***

- International Treaty on Plant Genetic Resources for Food and Agriculture. 2001.  
Available at: <ftp://ftp.fao.org/docrep/fao/011/i0510e/i0510e.pdf>
- Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture. 2011. Available at:  
[http://typo3.fao.org/fileadmin/templates/agphome/documents/PGR/GPA/GPA2/GPA2\\_en.pdf](http://typo3.fao.org/fileadmin/templates/agphome/documents/PGR/GPA/GPA2/GPA2_en.pdf)
- Convention on Biological Diversity. 1992.  
Available at: <http://www.cbd.int/convention/text/>
- Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity. 2010.  
Available at: <http://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>
- International Code of Conduct for Plant Germplasm Collecting and Transfer. 1993.  
Available at:  
<http://www.fao.org/docrep/x5586E/x5586eOk.htm#xiv.%20appendix%20e%20%20%20international%20code%20of%20conduct%20for%20plant%20germplasm%20collecting%20a>
- Genebank Standards. 1993.  
Available at: <ftp://ftp.fao.org/docrep/fao/meeting/015/aj680e.pdf>

## **Training Resources**

- Educational Modules on the International Treaty  
Available at: [http://www.planttreaty.org/educational\\_modules](http://www.planttreaty.org/educational_modules)
- Virtual Library of the International Treaty  
Available at: [http://www.planttreaty.org/content/vl\\_panel](http://www.planttreaty.org/content/vl_panel)
- Crop Genebank Knowledge Base  
Available at: <http://cropgenebank.sgrp.cgiar.org/>
- Bioversity International - Training Materials  
Available at: [http://www.bioversityinternational.org/training/training\\_materials/](http://www.bioversityinternational.org/training/training_materials/)
- Collecting Plant Diversity: Technical Guidelines  
Available at: [http://cropgenebank.sgrp.cgiar.org/index.php?option=com\\_content&view=article&id=390&Itemid=557&lang=english#chapters](http://cropgenebank.sgrp.cgiar.org/index.php?option=com_content&view=article&id=390&Itemid=557&lang=english#chapters)
- *In Situ* Conservation of CRW - eLearning Modules  
Available at:  
[http://www.crowildrelatives.org/capacity\\_building/elearning/elearning.html](http://www.crowildrelatives.org/capacity_building/elearning/elearning.html)
- Global Partnership Initiative for Plant Breeding Capacity Building  
Available at: <http://km.fao.org/gipb/>
- E-learning course on pre-breeding for effective use of plant genetic resources  
Available at: <http://km.fao.org/gipb/>
- Marker-assisted Breeding Learning Module  
Available at: <http://www.generationcp.org/mab/>
- The International Treaty on Plant Genetic Resources for Food and Agriculture: Implementing the Multilateral System - Learning Module  
Available at:  
[http://www.bioversityinternational.org/training/training\\_materials/international\\_treaty.html](http://www.bioversityinternational.org/training/training_materials/international_treaty.html)

All the above internet links were accessed on 7 November 2011.

## Further Reading

For the list of reference materials on which the lessons of this educational module are based, refer to the Bibliographic References sections of each lesson. Below you find a selection of resources for further reading related to the topics dealt with in this module.

Ceccarelli, S., Guimaraes, E. P., and Weltzien, E. 2009. *Plant Breeding and Farmer Participation*.

Available at: <http://www.fao.org/docrep/012/i1070e/i1070e00.htm>

Chishakwe, N. E. 2008. *An Overview of the International Regulatory Frameworks that Influence the Conservation and Use of Underutilized Plant Species*.

Available at: [http://www.bcienegociosverdes.com/Almacenamiento/Biblioteca/205/An\\_overview\\_of\\_the\\_international\\_regulatory\\_frameworks....pdf](http://www.bcienegociosverdes.com/Almacenamiento/Biblioteca/205/An_overview_of_the_international_regulatory_frameworks....pdf)

Engels, J. M., and Visser, L. 2003. *IPGRI Handbooks for Genebanks No. 6: A guide to effective management of germplasm collections*.

Available at: [http://cropgenebank.sgrp.cgiar.org/images/file/learning\\_space/genebankmanual6.pdf](http://cropgenebank.sgrp.cgiar.org/images/file/learning_space/genebankmanual6.pdf)

FAO. 2011. *Payments for Ecosystem Services and Food Security*.

Available at: <http://www.fao.org/docrep/014/i2100e/i2100e.pdf>

Frison, C., López, F. and Esquinas-Alcázar, J. T. 2011. *Plant Genetic Resources and Food Security*.

See: <http://www.earthscan.co.uk/?TabId=102577&v=513281>

Jaenicke, H., et al. 2009. *International Symposium on Underutilized Plants for Food Security, Nutrition, Income and Sustainable Development*.

Available at: <http://www.actahort.org/books/806/>

Jarvis, D. I. et al. 2011. *An Heuristic Framework for Identifying Multiple Ways of Supporting the Conservation and Use of traditional Crop Varieties within the Agricultural Production System*.

See: <http://www.tandfonline.com/doi/abs/10.1080/07352689.2011.554358>

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Mace, E. S., et al. 2006. "Rationalization of Taro Germplasm Collections in the Pacific Island Region Using Simple Sequence Repeat (SSR) Markers", *Plant Genetic Resources: Characterization and Utilization* 4, no. 3.

See: <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=928600>

Saad, M. S. and Rao, V. R. 2001. *Establishment and Management of Field Genebank*.

Available at:

[http://cropgenebank.sgrp.cgiar.org/images/file/learning\\_space/fieldbank\\_manual.pdf](http://cropgenebank.sgrp.cgiar.org/images/file/learning_space/fieldbank_manual.pdf)

Smale, M. 2006. *Valuing Crop Biodiversity: on-farm Genetic Resources and Economic Change*.

Available at:

<http://www.ifpri.org/sites/default/files/pubs/pubs/otherpubs/cropbiodiversitytoc.pdf>

Sthapit, B. R., et al. 2008. *Mobilizing and Empowering Communities in Biodiversity Management*.  
Available at: [http://portals.wi.wur.nl/files/docs/Sthapit%20et%20al,%202008a%20-%20Mobilizing%20and%20empowering\(2\).pdf](http://portals.wi.wur.nl/files/docs/Sthapit%20et%20al,%202008a%20-%20Mobilizing%20and%20empowering(2).pdf)

Sthapit, B. R. and Jarvis, D. I. 1999. *Participatory Plant Breeding for on-farm Conservation*.  
Available at: <http://www.agriculturesnetwork.org/magazines/global/agrobiodiversity/participatory-plant-breeding-for-on-farm>

Thijssen, M. H., et al. 2008. *Farmers, Seeds and Varieties: Supporting Informal Seed Supply in Ethiopia*.  
Available at: [http://www.wur.nl/NR/rdonlyres/EF09A9DA-EB08-479F-9799-2D86CD5384C7/71901/TOC\\_Intro.pdf](http://www.wur.nl/NR/rdonlyres/EF09A9DA-EB08-479F-9799-2D86CD5384C7/71901/TOC_Intro.pdf)

Von Lossau, A. and Li, Quingsong. 2011. *Sourcebook on Sustainable Agriculture Management*.  
Available at: [http://www.agrobiodiversity.cn/uploads/media/Sourcebook\\_EN.pdf](http://www.agrobiodiversity.cn/uploads/media/Sourcebook_EN.pdf)

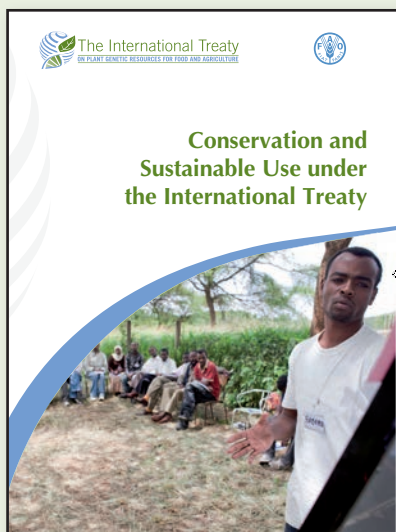
Witcombe, J. R., et al. 2011. "Impact of Introduction of Modern Varieties on Crop Diversity", in Lenné J. M. and Wood, D., *Agrobiodiversity Management for Food Security: A Critical Review*.  
Available at: <http://books.google.com/>

All the above internet links were accessed on 7 November 2011.

## Acronyms and Abbreviations

<b>AEGIS</b>	A European Genebank Integrated System for Plant Genetic Resources for Food and Agriculture
<b>AHTC</b>	<i>Ad Hoc</i> Technical Committee
<b>Benefit-sharing Fund</b>	Benefit-sharing Fund of the Funding Strategy (of the International Treaty on Plant Genetic Resources for Food and Agriculture)
<b>CATIE</b>	Tropical Agricultural Research and Higher Education Center
<b>CBD</b>	Convention on Biological Diversity
<b>CGIAR</b>	Consultative Group on International Agricultural Research
<b>CGIAR Centres</b>	International Agricultural Research Centers of the Consultative Group on International Agricultural Research
<b>CGN Netherlands</b>	Centre for Genetic Resources of the Netherlands
<b>CIAT</b>	International Center for Tropical Agriculture
<b>CIKS</b>	Centre for Indian Knowledge Systems
<b>CIP</b>	International Potato Center
<b>Commission</b>	Commission on Genetic Resources for Food and Agriculture (FAO; until 1995 “Commission on Plant Genetic Resources”)
<b>CBM</b>	Community Biodiversity Management
<b>Crop Trust</b>	Global Crop Diversity Trust
<b>CTDT</b>	Community Technology Development Trust
<b>CWR</b>	Crop Wild Relatives
<b>DNA</b>	Deoxyribonucleic acid
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FFS</b>	Farmer field schools
<b>GEF</b>	Global Environment Facility
<b>GIPB</b>	Global Partnership Initiative for Plant Breeding Capacity Building
<b>Global Plan of Action</b>	Global Plan of Action for the Conservation and the Sustainable Utilization of Plant Genetic Resources for Food and Agriculture

<b>Governing Body</b>	Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture
<b>IBC</b>	Institute of Biodiversity and Conservation (Ethiopia)
<b>ICARDA</b>	International Center for Agricultural Research in the Dry Areas
<b>IFAD</b>	International Fund for Agricultural Development
<b>International Treaty</b>	International Treaty on Plant Genetic Resources for Food and Agriculture
<b>ISO</b>	International Standard Organization
<b>IUCN</b>	International Union for Conservation of Nature
<b>Kew Gardens</b>	Royal Botanic Gardens Kew (United Kingdom)
<b>MTA</b>	Material transfer agreement
<b>Multilateral System</b>	Multilateral System of Access and Benefit-sharing (of the International Treaty on Plant Genetic Resources for Food and Agriculture)
<b>NBSAPs</b>	National Biodiversity Strategies and Action Plans
<b>PGRFA</b>	Plant Genetic Resources for Food and Agriculture
<b>PPB</b>	Participatory plant breeding
<b>SCPI</b>	Sustainable crop production intensification
<b>SEARICE</b>	Southeast Asia Regional Initiatives for Community Empowerment
<b>Second Global Plan of Action</b>	Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture
<b>Second State of the World Report</b>	Second Report on the State of the World's Plant Genetic Resources for Food and Agriculture
<b>SMTA</b>	Standard Material Transfer Agreement
<b>UNEP</b>	United Nations Environment Programme



## Module II - Conservation and Sustainable Use under the International Treaty

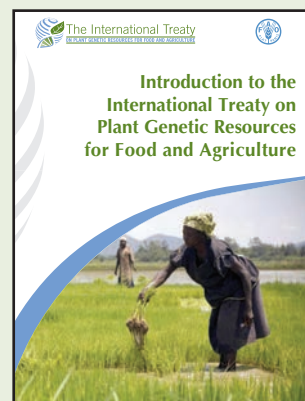
Module II explains the provisions of the International Treaty dealing with conservation and sustainable use of crop diversity and presents examples for their implementation.

The module provides technical aspects for learners with more of a political background in agriculture, and illustrates the legal framework of the International Treaty to learners that have more of a research and scientific background related to PGRFA.

*Already appeared in this series:*

## Module I - Introduction to the International Treaty on Plant Genetic Resources for Food and Agriculture

This module was especially designed for newcomers to the crop diversity policy area. It outlines the main components of the International Treaty in the context of current global challenges and the broader legal framework governing crop diversity.



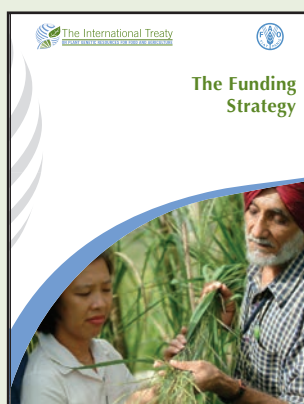
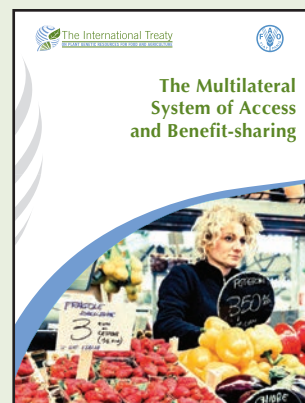
*The full series will be further composed by:*

## Module III - Farmers' Rights

Module III will present the provisions of the International Treaty that deal with the rights of farmers with regard to crop diversity, and provide examples of the realization of Farmers' Rights in different national settings.

## Module IV - The Multilateral System of Access and Benefit-sharing

This module will explain the operation of the Multilateral System of Access and Benefit-sharing, with a special focus on the Standard Material Transfer Agreement used in germplasm exchanges.



## Module V - The Funding Strategy

Module V will present the Funding Strategy for the realization of the objectives of the International Treaty, with a particular focus on the operation of the project cycle of the Benefit-sharing Fund and how to apply for funds under this multilateral financing mechanism.

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**“Conservation and Sustainable Use under the International Treaty” is the second in a series of educational modules being developed under the coordination of the Secretariat of the International Treaty to strengthen capacities for the effective implementation of the International Treaty among its stakeholder groups. The work on these training materials was officially welcomed by the Governing Body of the International Treaty at its fourth session.**

**The educational modules are aimed at all stakeholder groups of the International Treaty, including policy makers and their staff, civil servants, gene bank staff, plant breeders, farmers’ organizations and other civil society organizations. They are also designed as information and awareness raising materials for the use of media, academia, prospective donors and other interested institutions.**

**This publication is a limited release for stakeholder evaluation. An updated version is foreseen to be published together with the forthcoming modules of the series.**

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