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### Agenda item 11

## INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

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#### I. Introduction

1. Plant genetic resources have been defined as any material of plant origin containing functional units of heredity and being of actual or potential value.¹ Plant genetic resources are considered components of agrobiodiversity, which is a subset of biodiversity relevant to agricultural production. These components may be distinguished by function (components directly providing food, indirectly contributing to food production, e.g. soil micro-organisms, and opportunistic species occurring in agricultural production systems such as birds adapted to pasture lands), or by the integration of different levels of biodiversity (diversity within the species, diversity between species, or ecosystem diversity). Although plant genetic resources have been the basis of many locally and industrially produced herbs and medicines, many plant genetic resources are used mainly for food and agriculture.

- 2. All countries depend on genetic resources that originated elsewhere for food and agriculture. Many plant genetic resources for food and agriculture (PGRFA) have travelled the world and have become major components of the diet in parts of the world outside their area of origin. No region is endowed with the same richness of plant genetic diversity, but some exhibit a much wider diversity than others. Dependence on introduced species reaches its extreme in Australia, the Mediterranean, northern Europe, northern Asia, the United States and Canada. In these regions, more than 90 percent of production is derived from introduced species. Even in Asia, 30 percent of production stems from external species. The major mutual interdependence of different countries and regions in relation to plant genetic resources suggests that continuously conserving and utilizing PGRFA globally is extremely important.
- 3. The International Treaty on Plant Genetic Resources for Food and Agriculture (hereafter referred to as the Treaty) makes a major contribution to he conservation and promotion of the use of plant genetic resources. It provides an internationally agreed policy framework that allows the continued or renewed international exchange of plant genetic resources and regulates the sharing of benefits derived from these. Various elements of the Treaty contribute to this function, in particular the guidelines for specific measures to promote the sustainable use of PGRFA, the innovative multilateral system of access and benefit sharing and its standard material transfer agreement, the Funding Strategy and its Benefit-sharing Fund, and the provisions on Farmers' Rights.
- 4. This document provides some background information on the mechanisms of the Treaty, followed by the status of the implementation of policies and decisions agreed by the Treaty's Governing Body. It then provides several examples of the work that the Treaty is undertaking in the Asian region to promote the implementation of the Treaty. Finally, guidance is sought from the Regional Conference.

# II. The mechanisms of the International Treaty on Plant Genetic Resources for Food and Agriculture

5. The International Treaty on Plant Genetic Resources for Food and Agriculture was adopted by the FAO Conference in November 2001. The Treaty's objectives are the conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA) and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity (CBD), for sustainable agriculture and food security. The Treaty currently has 124 Contracting Parties (CPs). The Governing Body of the Treaty held its Third Session in June 2009 and the Fourth Session of the Governing Body of the Treaty will be held in the Asian

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<sup>&</sup>lt;sup>1</sup> Modified from Article 2 of the ITPGRFA

region in Bali, Indonesia from 14 to 18 March 2011. The Treaty covers all plant genetic resources for food and agriculture. It recognizes Farmers' Rights.

- 6. Overall, there are two pillars of the Treaty. The first is the multilateral system (MLS) of access and benefit-sharing (ABS) for plant genetic resources. The MLS places 64 of the most important crops which account for 80 percent of the food derived from plants into an easily accessible global pool of genetic resources that is available for research, breeding and training for food and agriculture. All material within the MLS is transferred from the Provider to the Recipient under standard material transfer agreements, or SMTAs. The conclusion of an SMTA is reported to the Governing Body of the Treaty via the Secretary.
- 7. The second pillar of the Treaty is a Funding Strategy including a Benefit-sharing Fund which supports projects and programmes for the benefit of farmers in developing countries and countries with economies in transition. The Funding Strategy aims to enhance the availability, transparency, efficiency and effectiveness of the provision of financial resources for the implementation of the Treaty. A Benefit-sharing Fund specifically supports projects and programmes for the benefit of farmers in developing countries with a focus on three priorities: onfarm conservation and management of plant genetic resources; sustainable use; and information exchange, technology transfer and capacity building. The Benefit-sharing Fund is the mechanism of the MLS which implements commercial benefit-sharing for the genetic resources in the Treaty Genepool.
- 8. The MLS of the Treaty sets out four primary benefit-sharing mechanisms to facilitate access to food crops for global food security and climate change adaptation in agriculture: (1) exchange of information relating to plant genetic resources; (2) access to and transfer of technology; (3) capacity building for conservation and sustainable use for plant genetic resources; and (4) sharing of benefits arising from commercialization of plant genetic resources. By providing facilitated access to important PGRFA within the MLS and a Funding Strategy to promote on farm conservation and sustainable use of PGRFA as well as technology transfer, information sharing and capacity building, the Treaty could serve as a reference system for discussions related to international access and benefit-sharing mechanism at other fora.
- 9. In particular, if a product resulting from the genetic material received from the MLS comes under restriction for further research, breeding and training for example, if the product is patented then the Recipient of the material shall pay 1.1 percent minus 30 percent of all net sales from that product to the Benefit-sharing Fund of the Treaty. As discussed above, this fund then supports projects for the conservation and sustainable use of plant genetic diversity by farmers and other agricultural stakeholders in developing countries. This fund is the second pillar of the Treaty's MLS. Thus, when plant germplasm is transferred and used under the Treaty MLS, it generates benefits for food security that will be channelled back to support the conservation of genetic resources and genetic diversity in developing countries through the BSF.
- 10. Article 9 of the Treaty provides the foundation of Farmers' Rights. Subject to national legislation and as appropriate, Farmers' Rights include: the protection of traditional knowledge relevant to plant genetic resources for food and agriculture. In Resolution 6/2009 adopted by the Governing Body of the Treaty on the implementation of Farmers' Rights under Article 9 of the Treaty, the Governing Body "Encourages ... relevant organizations ... to submit views and experiences on the implementation of Farmers' Rights as set out in Article 9" and policy objective (ix) of document 16/5 is entitled "Respect for and cooperation with relevant international agreements and processes."
- 11. Although climate change poses great challenges for agriculture and food production, the Treaty offers solutions for adaptation to (and to a limited extent for mitigation of) climate change. By providing facilitated access to important PGRFA within the MLS and a Funding Strategy to promote on-farm conservation and sustainable use of PGRFA as well as technology transfer, information sharing and capacity building, the Treaty could serve as a model system for other

components of biodiversity with regard to access and benefit-sharing in the international access and benefit-sharing (ABS) negotiations and discussions in the framework of the CBD and the FAO Commission on Genetic Resources for Food and Agriculture (CGRFA).

### III. The status of the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture

12. Rapid and steady progress has been made on the implementation of the Treaty's MLS on access and benefit-sharing and its Benefit-sharing Fund. In the last three years, the following results have been achieved:

#### A. THE MULTILATERAL SYSTEM OF THE INTERNATIONAL TREATY

- 13. The establishment of the Treaty Genepool has been completed and now includes more than 1.3 million samples of plant genetic resources for food and agriculture. It is the world's largest genepool of agricultural plant genetic resources.
  - The MLS successfully launched and stabilized with 440 000 transfers of genetic material from August 2008 to August 2009.
  - More than 600 transfers of genetic material occur every day in the MLS under the standard material transfer agreements (SMTAs).
  - More than 1.3 million accessions of plant genetic material of the 64 most important food crops for global food security have already been included in the MLS.
  - Standard material transfer contracts of the Treaty have been accepted and are used worldwide by the providers and users of genetic resources in the public and private sectors (with one stated exception of a multinational company).
- 14. Information Technology Infrastructure for the MLS has been established.
  - A global information technology system has been designed, programmed and completed for the MLS of the Treaty (consisting of a datastore and PID server).
  - Information technology systems have just been completed, which will operate the MLS and they are being installed at the United Nations International Computing Centre (UNICC) in Geneva, with industry-standard trade secret protection, following extensive consultations conducted among the CPs and genebank managers.
  - Following a few final tests, the systems will be launched on the global Internet this summer, in the form of two systems: (i) a server, which will serve unique and permanent identifiers to users of the MLS so as to simplify, standardize and streamline their use of SMTAs; (ii) a global datastore which will receive the data on all the SMTAs entered into and will be accessed by the third party beneficiaries of the STMA for the resolution of possible disputes that might arise from the SMTAs. Part of this datastore will be public and part of it will remain undisclosed under industry-standard security protection. Disclosure of SMTA data in the public part of the datastore is optional, and the public data so far contain mostly data disclosed by the international genebanks of the Consultative Group on International Agriculture Research (CGIAR).
- 15. The dispute resolutions mechanism of the Treaty has been established. FAO has become the first UN Agency to resolve genetic resource disputes as a third party beneficiary.
  - Dispute resolution procedures for the genepool of the Treaty have been adopted.
  - As a third party beneficiary of the Treaty, FAO is the first UN agency to resolve disputes that arise from genetic resource transfers and, perhaps, enforce them in national courts.
  - The Treaty is becoming a model for other UN agencies, e.g. WHO and CBD-UNEP, to create similar systems for virus-sharing and general benefit-sharing.

### B. THE FUNDING STRATEGY INCLUDING A BENEFIT-SHARING FUND (BSF) UNDER THE TREATY

16. The Governing Body of the Treaty has established the Benefit-sharing Fund pursuant to article 19 of the Treaty. The Fund provides for the resources under the direct control of the Governing Body, including the mandatory and voluntary contributions pursuant to Article 13.2 of the International Treaty and the voluntary contributions from any source to implement the Funding Strategy provided for in Article 18 of the International Treaty. The Benefit-sharing Fund is administered through the Trust Account referred to in Article 19.3 (f) of the International Treaty. The Governing Body has adopted operational procedures for the administration of the Benefit-sharing Fund. This strategic plan is on-track and significant progress has been made since June 2009.

- In the context of the Funding Strategy of the Treaty, the Governing Body adopted a strategic plan for the implementation of the BSF and set an objective of US\$116 million over a period of five years in 2009.
- Since 2009, in implementation of the plan, Spain has contributed US\$2.2 million to the Benefit-sharing Fund and Italy has announced a voluntary contribution of US\$1.2 million to the b-sharing fund of the Treaty on the occasion of the International Week of Biodiversity.
- Most significant has been the recent announcement by UNDP, indicating that it intends to commit more than US\$10 million to this work this year. A series of member countries are actively engaged with investment announcements expected in the months ahead, with an additional US\$1 million investment to be announced in June 2010.
- Other voluntary funds for the implementation of the Benefit-sharing Fund of the Treaty's Funding Strategy have been received in the biennium 2008/2009 from Ireland, Norway, Italy, Spain and Switzerland.
- 17. In summary, the Treaty has launched the first global Benefit-sharing Fund for genetic resources. The fund is the first fully operational mechanism in the history of genetic resource law, which implements international benefit-sharing for plant genetic resources within a binding legal architecture. The Treaty's benefit-sharing mechanisms have funded 11 benefit-sharing projects in developing countries and least-developed countries in 2008-09. The Treaty is thus the first multilateral mechanism providing financial support as a form of shared benefits arising from the access to plant genetic resources for food and agriculture.
  - The Benefit-sharing Fund was established under Article 19.3(f) of the Treaty.
  - The Third Session of the Governing Body saw the Treaty's benefit-fund become fully operational.
  - This Benefit-sharing Fund, now known as the "Leading the Field" initiative is a key priority for the Governing Body, particularly at this critical early stage.
  - The fund should have a global impact, addressing the loss of plant global biodiversity experienced over the last one hundred years, in addition to securing food crops for a growing population.
- 18. The Benefit-sharing Fund of the Treaty has funded the first 11 projects since the creation of genetic resource law. As a central element of the Treaty, the Benefit-sharing Fund was established to invest in high impact projects addressing food security, adaptation to climate change and agricultural biodiversity. The fund prioritizes sustainable use and on-farm management of plant genetic resources for food and agriculture, information exchange, technology transfer and capacity building.
  - In December 2008, the first call for proposals of the Fund was opened.
  - The Governing Body's Bureau selected and approved eleven small-scale projects in June 2009. All eleven projects that the fund invested in are now being implemented.
  - All eleven projects address food security and climate change through support for conservation and sustainable use of plant genetic resources.

19. The second Call for Proposals was initiated on 28 June 2010 and is open until 8 September 2010 and focuses on supporting farmers to adapt to climate change.

- The Call focuses on supporting farmers in developing countries to stay ahead of the climate change by adapting their food crops to climate change impact.
- Within one year, the Benefit-sharing Fund was scaled up from US\$500 000 to US\$13.5 million.
- The second Call focuses on strategy development to produce climate change adaptation strategies for farmers who need to adapt their crops to new conditions.

20. The Benefit-sharing Fund of the Treaty has also received the first germplasm-based payment in April 2010. This results directly from genetic material transferred within the MLS of the Treaty. The payment relates to a triticale breeding line transferred from Centro Internacional de Mejoramiento de Maiz y Trigo (CIMMYT), known in English as the International Maize and Wheat Improvement Center, to Canada and which has recently been commercialized. The material has entered into trials in Canada and has been found to be well adapted. This payment is a voluntary payment as the material is currently not under a patent claim. It is a first, practical illustration that the MLS and its benefit-sharing mechanisms are well functioning.

#### IV. Support to the implementation of the International Treaty in Asia

- 21. The Asian region is endowed with a rich diversity of plant genetic resources for food and agriculture (PGRFA) and agrobiodiversity in general. It is, on the one hand, a recognized centre of origin and diversity of many crop species important for global food security, but on the other hand it is highly dependent for its food and agriculture on genetic resources originating from other regions. And these external resources are becoming even more significant because of the need to address the dual challenges of climate change and food security. The value of these resources for the Asian region will only be realized if effective, priority-setting action plans support optimal PGRFA conservation and sustainable use, and if their exchange among countries and regions is facilitated.
- 22. Given the region's important status and contributions, the Secretariat of the Treaty has, since the adoption of the Treaty by the FAO Conference in November 2001, always considered Asia a high priority and has worked very closely with countries in the region to implement the Treaty and fulfill its objectives. A brief overview of activities that the Conference undertook in recent years to support the implementation of the Treaty in Asia is presented below.
- 23. The Fourth Session of the Governing Body of the Treaty is scheduled to be held in the Asian region in Bali, Indonesia from 14 to 18 March 2011. Arrangements for the Session are progressing satisfactorily and the Secretariat and the host government maintain close and regular contact and consultations regarding the preparation of the Session.
- 24. The Fourth Session of the Governing Body of the Treaty presents a number of opportunities for the region. The Call for Proposals 2010 was opened on 28 June 2010 and the announcement of successful applications will be made at the Governing Body meeting. The call offers significant opportunities for projects in the Asian region.
- 25. The Bureau of the Fourth Session of the Governing Body, at its second meeting, adopted the text of the second call for proposals and requested to the Secretariat to open the Call until 8 September 2010. The Call and all its annexes have been made available through the Treaty's Website.<sup>2</sup> The Call for Proposals 2010 seeks two types of plant genetic resources projects:
  - Strategic action plans at a regional, subregional, ecoregional or crop regional level. These grants would have a ceiling of US\$ 400 000 each.
  - Immediate action projects. The ceiling of each would be US\$ 300 000.

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<sup>&</sup>lt;sup>2</sup> http://www.planttreaty.org/funding\_en.htm

26. Through the Benefit-sharing Fund projects, the Treaty will continue to focus on facilitating adaptation of the key food crops to the challenge of food security and climate change. Climate change affects agriculture and food production in complex ways. It affects food production directly through changes in agro-economical conditions and indirectly by affecting growth and distribution of incomes and thus demands for agricultural produce. Although climate change poses a great challenge to food security, the Treaty offers solutions for adaptation to and partly to mitigation of climate change. It will see at least US\$10 million invested in projects addressing adaption to climate change and global food security.

- 27. The Bureau of the Governing Body of the Treaty has established a timeline for the Call for Proposals 2010. The first step foreseen in the Call for Proposals 2010 is the preparation of preproposals. Pre-proposals can be submitted until 8 September 2010. Those who submit successful pre-proposals will be asked to submit a full proposal by mid-October and these will be examined and graded by a panel of experts. Successful grants will be announced at the next Governing Body meeting in Bali, March 2011. The Treaty Secretariat is promoting this Call through its global network, and applications from the Asian region are strongly encouraged. The Call presents opportunities for Asian countries to keep their farmers ahead of the climate change curve
- 28. A project on the conservation, dissemination and popularization of location specific farmer-developed varieties by establishing village level enterprises in India is among the first projects funded by the first cycle of the Benefit-sharing Fund of the Treaty and is already under implementation. The project aims to disseminate and popularise documented farmer-developed varieties and traditional varieties among the farming community of Kerala by establishing village-level enterprises. Though these varieties are known for the location-specific specialities, disease resistance and better productivity, the diffusion of the varieties are limited to certain areas. Concrete efforts are being made to widen diffusion and scaling up, for instance, the selected farmer breeders who developed the varieties will be assisted to establish nurseries. Altogether, 16 enterprises will be established both among the women groups and farmer breeders.
- 29. The Treaty is also championing early financial leadership and has created a high level task force, media opportunities and a series of international events to showcase those member countries investing in this fund. At this early stage this also offers great opportunities for the Asian region.
- 30. In order to facilitate the implementation of the Treaty, and in particular its MLS, the Secretariat of the Treaty has established, in partnership with FAO and Bioversity International, a joint capacity programme for developing countries. The objectives of the joint capacity building programme are to improve knowledge among national stakeholders of issues underlying the implementation of the Treaty and in particular the MLS and to improve institutional, legal and administrative infrastructure for the operation of the MLS. Multiple countries in Asia will have received assistance from the programme.
- 31. The Secretariat will continue to firmly support and serve the region in promoting the conservation and sustainable use of PGRFA as the members seek to provide facilitated access to PGRFA within the MLS, including through the administration of the Funding Strategy as well as the promotion of technology transfer, information sharing and capacity building. The Treaty provides a consistent and robust framework to assist the region in achieving sustainable agricultural development.

#### V. Guidance sought

- 32. The Regional Conference may wish to:
  - emphasize the essential role of genetic resources for food and agriculture for achieving food security and addressing challenges of the Region, including adapting to climate change;

b) call upon governments in the region to strengthen national programmes and policies for the conservation and sustainable utilization of genetic resources for food and agriculture, and for the fair and equitable sharing of benefits arising from their use, including through adequate and predictable funding;

- stress the need to develop appropriate, non-conflicting and complementary national
  policies and legislation relating to the conservation, exchange, and use of genetic
  resources for food and agriculture, including such areas as access to genetic
  resources and benefit-sharing;
- d) request FAO, the Secretariat of the Treaty and their partners to continue giving priority to supporting countries in the region in the development of relevant national programmes and policies for the conservation and sustainable utilization of genetic resources for food and agriculture, and for sharing the benefits arising from their use.