



C/40/17

ORIGINAL: English only

DATE: October 13, 2006

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

COUNCIL**Fortieth Ordinary Session
Geneva, October 19, 2006**

PRESENTATION BY THE FOOD AND AGRICULTURE ORGANIZATION
OF THE UNITED NATIONS (FAO) ON THE
INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES
FOR FOOD AND AGRICULTURE (IT/PGRFA)

Document prepared by the Office of the Union

1. On October 11, 2006, the Office of the Union received the presentation on the IT/PGRFA by Mr. Clive Stannard, Senior Liaison Officer, Interim Secretariat of the IT/PGRFA, Agriculture, Biosecurity, Nutrition and Consumer Protection Department of the FAO. This presentation is contained in the Annex to this document.

2. *The Council is invited to take note of and comment on the content of this document and its Annex.*

[Annex follows]

THE INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES
FOR FOOD AND AGRICULTURE

Distinguished Delegates,
Ladies and Gentlemen,

It is a great pleasure to be here today, at the invitation of the UPOV Council, to inform you about the International Treaty on Plant Genetic Resources for Food and Agriculture and, in particular, the outcome of the first meeting of its Governing Body, which was held in Madrid, Spain, from 12 to 16 June 2006.

Our two institutions – the Treaty and the UPOV Convention – are major building blocks of the overall policy and regulatory framework for food and agriculture, and it is right and useful that our governing bodies keep each other informed, and seek synergy, in mutual respect for their individual mandates.

Both the Treaty and UPOV are currently expanding. The Treaty, which was adopted on 3 November 2001, and which only came into force on 29 June 2004, following the accession of its fortieth member, currently has 105 states and the European Community as members. UPOV is also growing, and I am pleased to see that you now have 62 members.

FAO – through its intergovernmental Commission on Genetic Resources for Food and Agriculture, to which 165 countries currently belong – has, since 1983, worked to create a coherent and effective policy and regulatory framework for plant genetic resources for food and agriculture: the Treaty is the fruit of that effort. The task began when the 1981 session of the FAO Conference was marked by strong tensions between developed and developing countries over plant genetic resources. Developing countries felt that they were not being adequately consulted in the international effort to collect plant genetic resources, which were being rapidly eroded, nor benefiting equitably for making their resources available.

The FAO Commission was established to bridge and resolve these tensions. In 1983, the FAO Conference adopted the voluntary International Undertaking on Plant Genetic Resources. It sought to “ensure that plant genetic resources of economic and/or social interest, particularly for agriculture, will be explored, preserved, evaluated and made available for plant breeding and scientific purposes”. A number of developed countries, however, were not willing to adhere to the Undertaking, without greater clarity. This was achieved through a series of agreed interpretations, negotiated by the Commission, and adopted by the FAO Conference. They were intended to achieve a balance between the interests of developed and developing countries, and between the rights of breeders (formal innovators) and farmers (informal innovators). The agreed interpretations recognized that Plant Breeders’ Rights – and UPOV was specifically identified – were not inconsistent with the Undertaking. They simultaneously recognized Farmers’ Rights. The basis of Farmers’ Rights was stated to be “the enormous contribution that farmers of all regions have made to the conservation and development of plant genetic resources, which constitute the basis of plant production throughout the world”.

It was agreed that “the best way to implement the concept of Farmers’ Rights [would be] is to ensure the conservation, management and use of plant genetic resources, for the benefit of present and future generations of farmers.” The sovereign rights of nations over their genetic resources were recognized.

The Commission also resolved another bone of contention between developed and developing countries, namely the legal status of the *ex situ* collection of plant genetic resources of the International Agricultural Research Centres of the Consultative Group on International Agricultural Research, some 600,000 accessions of the world’s major crops. A legal study showed that this was indeed a very unclear question, and the Commission accordingly established the International Network of *Ex Situ* Collections under the Auspices of FAO, into which the Centres brought their materials by formal agreements in 1994. They agreed to forego any claim to ownership, and hold them in trust for the international community.

Work was also underway to develop practical measures to support conservation and sustainable use, with particular reference to developing countries. The first report on *The State of the World’s Plant Genetic Resources for Food and Agriculture*, and the *Global Plan of Action for Plant Genetic Resources for Food and Agriculture*, were adopted by 150 countries at the Leipzig International Technical Conference in 1996.

But in 1992, a major change came about in the international nexus around genetic resources, with the adoption of the Convention on Biological Diversity (CBD). This binding international agreement reaffirms national sovereignty over *all* genetic resources, and seeks to ensure their conservation and sustainable use, and the fair and equitable sharing of the benefits. Governments may regulate access to genetic resources, on mutually agreed terms, and through prior informed consent.

Clearly, the voluntary arrangements that had been set in place through the FAO would need to be recast in the form of a binding international instrument, which would reflect the specific nature of agricultural genetic resources, and take into account the interests and needs of the agricultural community. The 1993 FAO Conference decided to launch such negotiations. They would lead to the international Treaty.

It is crucial here to stress what UPOV knows well, namely that agricultural genetic resources are of a very different nature to wild genetic resources, and that “bioprospecting” for pharmaceuticals is categorically different from the work of plant breeders in developing plant varieties. Whereas the pharmaceutical model foresees investigating the chemistry of a species to identify bioactive substances, isolating these, synthesizing them, and marketing them under patents, plant breeding combines and recombines domesticated plant genomes – which are themselves the product of 10,000 years of farmer selection, and exchange throughout the world, between farmers, between ecological zones, and between regions and continents – in order to create higher-yielding and better quality varieties. This iterative and productive reuse of the portfolio of plant genetic resources for food and agriculture, to which so many have contributed, and on which so many draw, is crucial to food security, and the basis of the breeder’s exemption in your Convention. As a result of millennia of exchange, countries and regions are interdependent, that is, all countries depend very largely for their food and agriculture on crops that originated elsewhere. Measured in terms of food calorie intake from

plants within national diets, countries depend on average for about 70% on crops coming from outside their region. In our interdependent world, twenty major food crops provide 90% of our food from plants. They are crucial for food security. If the genetic diversity within crops is lost, it is lost forever.

While national sovereignty allows governments to make multilateral arrangements if they so wish, in the application of the CBD, it is a fact that where governments have moved to regulate access to their national genetic resources, they have almost exclusively done so – apart from the Treaty – through access and use contracts, under private law, on the bioprospecting model.

With our focus on agriculture and food security, we must look at the specificity of agricultural biodiversity, and see if such contracts are a good model for agriculture. They are very difficult to combine with the realities of plant breeding. Users will want exclusivity, to hold and investigate materials under conditions of trade secrecy, and will not make available to others the raw materials on which they are working. Research results will be secret, greatly reducing their contribution to the national and international good. The implications are grave for public research, which is crucial in meeting, in particular, the needs of developing countries: potential providers are loath to provide the public sector with access, and receivers starve the public sector of scientific information. Because the model assumes a patented product, it would push agricultural innovation towards patents, and skews the research agenda away from traditional breeding, smaller crops, and the needs of the poor and developing countries. The high transaction costs associated with negotiating, monitoring and enforcing contractual access would be a major disincentive to the use of agricultural genetic resources. What we are seeing is also a market failure, that is, an unwillingness to make such contracts, in situations of uncertainty, high transaction costs, and years of research before the potential value can be identified. This limits the contribution of agricultural genetic resources to the overall good. At the same time, the collection and exchange of plant genetic resources for food and agriculture has greatly declined in the past decade, because of the uncertainties around access and benefit-sharing.

This is the challenge the International Treaty on Plant Genetic Resources for Food and Agriculture addresses: how to construct an internationally agreed framework for the conservation and sustainable use of plant genetic resources for food and agriculture, and the fair and equitable sharing of the benefits, within this increasing privatization, and in the context of a continuing loss of plant genetic diversity.

Before going on, I must stress that the Treaty is more than just an instrument for access and benefit-sharing. It addresses and provides an internationally agreed framework for all the questions that the Undertaking earlier addressed, but on a much sounder footing. Its objectives are also the conservation and sustainable use of all plant genetic resources for food and agriculture, and its overall objective is sustainable agriculture and food security. For the first time in any binding international instrument, the Treaty recognizes Farmers' Rights, the responsibility for which lies with national governments. It also provides for Contracting Parties to implement a Funding Strategy to mobilize substantial resources for agreed plans and programmes for farmers in developing countries, especially in least developed countries, and in countries with economies in transition, who conserve and sustainably utilize plant

genetic resources for food and agriculture, taking into account the priorities of the *Global Plan of Action* that I mentioned earlier.

However, the most innovative part of the Treaty is undoubtedly the Multilateral System of Access and Benefit-sharing, which covers a list of 64 crops established according to the criteria of food security and interdependence, which provide about 80% of the food we derive from plants. Governments have established this system in the exercise of their sovereignty. They will bring into the Multilateral System all plant genetic resources for food and agriculture that are under their management and control and in the public domain, and encourage private institutions and companies to do so. The crucial collections of the Consultative Group on International Agricultural Research, and of the Tropical Agriculture Research and Higher Learning Centre (CATIE), have also been brought into the Multilateral System, through agreements signed with FAO on behalf of the Governing Body of the Treaty, on 16 October 2006. Other international institutions holding *ex situ* collections are also doing so.

Governments have opted to use a private contract to manage this pooled public good. For this purpose, they agreed, at the first meeting of the Governing Body, the terms of a Standard Material Transfer Agreement, that is, a standard contract between an institution or person providing resources from the Multilateral System and the person accepting them.

The recipient may not take out intellectual property rights over the genetic resources and their parts and components, in the form received from the multilateral system. If he conserves these, he must make them available to the Multilateral System. But the Standard Material Transfer Agreement recognizes the legitimate rights of developers to hold material under development under trade secrets, and even to license or sell it to other breeders. However, in transferring materials under development, the recipient must also bind subsequent recipients by the terms of the Standard Material Transfer Agreement. This creates a chain of rights and obligations, through a chain of Standard Material Transfer Agreements.

The Standard Material Transfer Agreement provides – as a contractual obligation – for the sharing of benefits, when at the end of the development cycle a product – seed or planting material – is commercialized on the open market. This is the only point in the development cycle when benefit-sharing is due. However, while in a normal contract benefits are transferred from the recipient to the provider, in the case of the Standard Material Transfer Agreement, the benefits flow back not to the person who first provides the raw material, but to the Multilateral System itself. Because countries, in the exercise of their sovereignty, and in recognition of their interdependence and the importance of ensuring food security – place materials into a common pool, there is also no country of origin maintaining a proprietary right over these resources.

The Treaty is neutral as to intellectual property rights. But, in making provision for benefit-sharing, it does distinguish between situations where the product is freely available to others for research and breeding, and where it is not. Where it is *not freely available*, there is a mandatory payment of 1.1% (less 30%, to allow for sales costs) of the sales of a product that incorporates genetic material from the Multilateral System. Voluntary contributions are foreseen, when the product *is available* to others for research and breeding. These funds will

be used as part of the Treaty's Funding Strategy. Moreover, recipients must make available all non-confidential information that results from research and development carried out on the Material. During our negotiations, developing countries stressed that it would be a real benefit to them, in that it would show them the usefulness of the very resources they were making available to the Multilateral System. This all represents multilateral benefit-sharing.

There is an alternative method of payment, by which a company can opt to contract for access to all the material of a particular crop in the Multilateral System, and in exchange pay 0.5% of all sales of all its product of this crop, whether or not they incorporate material from the multilateral system.

We have here the unusual situation of payment to an international body administering a global pooled good, as the result of a contract under private law. Two major challenges have been addressed: how to ensure uniformity of practice across jurisdictions and legal systems, and how, if necessary, to vindicate the rights of the Governing Body through the Standard Material Transfer Agreement.

To achieve uniformity of practice, the Standard Material Transfer Agreement requires a recipient to agree to binding international arbitration. This is part of the contract, and an obligation. The provision is important, amongst other reasons, because a Standard Material Transfer Agreement can be made between a provider in a member country and a natural or legal person in a state that is not a member of the Treaty.

The question of who will vindicate the contract also requires special provisions. The provider – who may be a research institution, a gene bank, or even a breeder or company that has put material in the Multilateral System – has no material interest in the contract, as none of the benefits flow to him. In reality, the beneficiary – who is not a party to the contract – is the Governing Body of the Treaty, acting for its members as a whole. The Standard Material Transfer Agreement therefore specifically recognizes that the Multilateral System has a “third party beneficial interest” in the contract, and gives a person in law — the FAO — the power to act for the third party beneficiary, to initiate any legal action necessary, and to represent the Multilateral System in dispute settlement. These are new concepts that may serve the international community well in coming years, in dealing with the management of global public goods.

The most important benefit of the whole system is access itself. The standardization of the contract means that those who want to use the plant genetic resources in the system need not negotiate access and use agreements on a case-by-case basis. This cuts out the legal and other transaction costs that bilateral negotiations involve. In this, the Standard Material Transfer Agreement and the Multilateral System are designed to overcome the market failure that results from the high costs of individual negotiation. This makes it possible for farmers and plant breeders, in both the public and private sectors, in all countries, to have access to the widest possible range of the plant genetic resources that are crucial for world food security. Only if plant genetic resources can be freely and easily used will they contribute effectively to the overall growth of the agricultural economy, and ensure food security. This will benefit consumers, by providing a stream of improved and varied agricultural products. And it will

benefit the seed and biotechnology industries, by providing a clear, agreed international framework, within which to plan their investments.

The Treaty was negotiated over many years, and representatives of the plant breeding industry took part in many government delegations. The International Seed Federation followed the process throughout, and on a number of occasions contributed ideas that were crucial in finding a way forward.

To make the Multilateral System work, Governments will need to demonstrate considerable political will. As they have chosen to manage a global good under a private contract, they will have to ensure that the contract works, across countries and legal systems. The seed industry will need to give its full support to the Treaty, from which it benefits. The Treaty provides breeders with a framework that responds to the unique features and special problems of agricultural biodiversity, in harmony with the CBD. There is no alternative in perspective that can be as favourable.

It is in the interests of UPOV to support the Treaty, as the Treaty puts into place the instruments through which it will be implemented. Industry representative bodies can also play a key role, in encouraging their members to observe the spirit and the letter of the Treaty. A broad coalition of interests within the agricultural sector can be developed that will allow the sector to make and implement its own policies.

That is one side of the bargain. The other major challenge will be visibly to mobilize real benefits for developing countries, through the Funding Strategy, to share information, to transfer technologies, and to build capacities to use plant genetic resources for food security, in exchange for their willingness to share their plant genetic resources.

Here again, the Treaty is innovative. As part of its Funding Strategy, the Treaty has already seen the establishment of the Global Crop Diversity Trust, as a new international institution that seeks to establish an endowment fund of \$ 260 million, so that the income can be used to put the long-term conservation of the key *ex situ* collections of plant genetic resources for food and agriculture – including those of developing countries themselves – on a secure long-term basis, and to build the necessary human and institutional capacities. The Trust is a public-private partnership, and has already received generous support from the private sector. This again is an innovation in managing a global good. It is an example of investing now in humanity's future.

The world cannot afford not to have a coherent global framework for agricultural biodiversity. It is the key to health and economic development. It is also a moral obligation. We will be hard pressed to meet the challenges of global warming, and to feed our ever-growing population: to do so, we must maintain and use what we have inherited from 10,000 years of

farming throughout the world. We cannot hope to succeed with piecemeal solutions. With the Treaty, we have a model for how such questions can be addressed in a flexible and forward-looking way.

I thank you for this opportunity to present the Treaty to the UPOV Council.

[Appendix follows]

APPENDIX

MEMBERSHIP OF
THE INTERNATIONAL TREATY IN PLANT GENETIC RESOURCES
FOR FOOD AND AGRICULTURE
and of
THE INTERNATIONAL UNION FOR THE PROTECTION
OF NEW VARIETIES OF PLANTS
(at 13 October 2006)

There are 106 members of the Treaty, and 62 members of UPOV. They have 37 members in common; 69 members of the Treaty are not members of the UPOV; 25 members of UPOV are not members of the Treaty.

	IT	UPOV
Albania		√
Algeria	√	
Angola	√	
Argentina		√
Australia	√	√
Austria	√	√
Azerbaijan		√
Bangladesh	√	
Belarus		√
Belgium		√
Benin	√	
Bhutan	√	
Bolivia		√
Brazil	√	√
Bulgaria	√	√
Burundi	√	
Cambodia	√	
Cameroon	√	
Canada	√	√
Central African Republic	√	
Chad	√	
Chile		√
China		√
Colombia		√
Congo, Republic of	√	
Cook Islands	√	
Côte d'Ivoire	√	
Cuba	√	
Croatia		√
Cyprus	√	
Czech Republic	√	√
Democratic People's Republic of Korea	√	
Democratic Republic of the Congo	√	
Denmark	√	√
Djibouti	√	

	IT	UPOV
Ecuador	√	√
Egypt	√	
El Salvador	√	
Eritrea	√	
Estonia	√	√
Ethiopia	√	
European Community	√	√
Finland	√	√
France	√	√
Ghana	√	
Germany	√	√
Greece	√	
Guatemala	√	
Guinea	√	
Guinea-Bissau	√	
Honduras	√	
Hungary	√	√
Iceland		√
India	√	
Indonesia	√	
Iran, Islamic Republic of	√	
Ireland	√	√
Israel		√
Italy	√	√
Jamaica	√	
Japan		√
Jordan	√	√
Kenya	√	√
Kiribati	√	
Kuwait	√	
Kyrgyzstan		√
Lao	√	
Latvia	√	√
Lebanon	√	
Lesotho	√	
Liberia	√	
Libyan Arab Jamahiriya	√	

C/40/17
Appendix, page 2

	IT	UPOV
Lithuania	√	√
Luxembourg	√	
Madagascar	√	
Malawi	√	
Malaysia	√	
Maldives	√	
Mali	√	
Mauritania	√	
Mauritius	√	
Mexico		√
Morocco	√	√
Myanmar	√	
Namibia	√	
Netherlands	√	√
New Zealand		√
Nicaragua	√	√
Niger	√	
Norway	√	√
Oman	√	
Pakistan	√	
Panama	√	√
Paraguay	√	√
Peru	√	
Philippines	√	
Poland	√	√
Portugal	√	√
Republic of Korea		√
Republic of Moldova		√
Romania	√	√
Russian Federation		√
Saint Lucia	√	
Samoa	√	
Sao Tome and Principe	√	
Saudi Arabia	√	
Seychelles	√	
Sierra Leone	√	
Singapore		√
Slovakia		√
Slovenia	√	√
South Africa		√
Spain	√	√
Sudan	√	
Sweden	√	√
Switzerland	√	√
Syrian Arab Republic	√	
Trinidad and Tobago	√	√
Tunisia	√	√
Uganda	√	
Ukraine		√

	IT	UPOV
United Arab Emirates	√	
United Kingdom	√	√
United Republic of Tanzania	√	
United States of America		√
Uruguay	√	√
Uzbekistan		√
Venezuela	√	
Yemen	√	
Zambia	√	
Zimbabwe	√	

[End of Appendix to Annex and of document]

