

March 2007



منظمة الأغذية  
والزراعة  
للأمم المتحدة

联合国  
粮食及  
农业组织

Food  
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Organisation  
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pour  
l'alimentation  
et  
l'agriculture

Organización  
de las  
Naciones  
Unidas  
para la  
Agricultura  
y la  
Alimentación

### Item 7.4 of the Draft Provisional Agenda

**COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE**

**Eleventh Regular Session**

Rome, 11-15 June 2007

## **REPORTS FROM INTERNATIONAL ORGANIZATIONS ON THEIR POLICIES, PROGRAMMES, AND ACTIVITIES ON AGRICULTURAL BIOLOGICAL DIVERSITY:**

### **(1) UNITED NATIONS AND OTHER INTER-GOVERNMENTAL ORGANIZATIONS**

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**I. INTRODUCTION**

1. The Commission on Genetic Resources for Food and Agriculture regularly receives reports from relevant international organizations, including FAO, on their policies, programmes and activities for the conservation and sustainable use of genetic resources for food and agriculture. The Commission considers such reports to be of value, as they contribute to facilitate cooperation in this area between FAO and other international organizations, and to develop appropriate mechanisms for cooperation and coordination.
2. FAO's own activities are reported in documents CGRFA-11/07/20.1, CGRFA-11/07/20.2 and CGRFA-11/07/20.3.
3. Reports from International Agricultural Research Centres of the Consultative Group on International Agricultural Research (CGIAR) are contained in document CGRFA-11/07/19.2 and reports from International Non-governmental Organizations can be found in document CGRFA-11/07/19.3.
4. This document presents reports on the activities undertaken by United Nations and other Inter-governmental Organizations in relation to genetic resources for food and agriculture. FAO has limited itself to compiling the reports as submitted. Each report is fully the responsibility of the organization submitting it.

**II. AFRICAN UNION (AU)**

5. Currently, there are considerable gaps in the inventory and genetic characterisation of African plants and livestock. A purpose built genetic characterisation database that can indicate trends in the population dynamics and also establish production parameters and trends of the different plant and animal species and ecologies would be an invaluable management tool for technicians and decision makers. In this context, the African Union (AU) is working on a number of initiatives with Member States, the Regional Economic Communities and stakeholders:

*Biotechnology and Bio-safety*

6. The AU has held several workshops on Biotechnology and Bio-safety and some of the recommendations are:

That the African Model Law on Biotechnology, the Model Law on Indigenous Knowledge and the rights of communities and breeders should provide frameworks for the development, handling and safe use of modern biotechnology. The workshops endorsed the request for assistance from international partners in the characterization of African biodiversity and gene mapping in accordance with the Convention on Biological Biodiversity (CBD) Art.19 and the International Treaty on Plant Genetic Resources for Food and Agriculture, Art. 6, to characterize and make inventories of their genetic resources so as to conserve and protect their genetic biodiversity as well as to protect the life styles of local and indigenous communities.

*African Seed and Biotechnology Programme*

7. Recognizing that the erosion of plant genetic resources (germplasm) for food and agriculture will negatively affect seed production, in particular the irreversible loss of genes, the

AU in collaboration with the FAO developed the *African Seed and Biotechnology Program* which will, among others, analyze the formal and informal seed systems in Africa, strengthen links between public, private and informal sectors and reinforce seed security systems throughout Africa.

#### *Animal Genetic Resources for Food and Agriculture*

8. The AU supports efforts to improve animal production in a sustainable way in order to meet the needs of African member states for animal products and services as well as ensure adequate supply to inter-African and external markets. In its work with the Member States, the AU is envisaging the following outputs:

- Characterization of indigenous livestock and their productive environment;
- Inventory of indigenous breeds and establishment of gene and data banks on recording basis;
- The supply of germplasm and the promotion of African genetic resources;
- Guidelines for protection and promotion of endangered breeds; and
- Guidelines and policies for harmonization, selection, regulation and transfer of new technologies.

### **III. CENTRE FOR AGRICULTURE AND BIOSCIENCES INTERNATIONAL (CABI)**

9. Microbial biodiversity is a greatly under-exploited genetic resource offering tremendous economic opportunity: fungi and bacteria have provided many of our most valuable pharmaceuticals and their metabolites have been used in many other industrial and environmental applications. CABI, an inter-governmental organization, is mandated to assist Member Countries to understand and make use of their microbial and arthropod diversity, to the particular benefit of the poor.

10. Over 90 percent of taxonomic expertise resides in developed countries, along with most of our information and collections, yet developing countries contain 95 percent of the world's biodiversity, much of which is undocumented. The ability of developing countries to conserve and exploit these resources is constrained by lack of:

- i. Capacity to identify, characterize and conserve microbiota
- ii. Resources to develop and retain knowledge of microbial biodiversity
- iii. Appropriate uptake pathways for exploitation of micro-organisms to benefit the poor

11. Practical solutions are available to address these constraints and develop local capacity. These include the transfer of information, skills, expertise and technologies from expert centres, including those of CABI, to developing country institutions. South-south solutions include technical co-operation networks whereby taxonomic resources of sub-regions are optimized. *BioNET-INTERNATIONAL* creates regional capabilities, 'pooling' taxonomic resources and CABI underpins BioNET's activities.

12. CABI actively assists countries to meet their CBD obligations through *in situ* and *ex situ* conservation systems. We maintain internationally-recognised collections of fungi, bacteria and nematodes. We provide training in microbial identification and collection curation, and assist countries to make sustainable and equitable use of microbial genetic resources. Working through the *CBD Global Taxonomic Initiative* and in partnership with the *OECD Biological Resources Centre Initiative*, CABI is a driver for skills development and knowledge transfer.

13. CABI highlights opportunities for the use of micro-organisms to manage agricultural and environmental pest problems. These include biodegradation of wastes, compost amendment with biological agents and the use of micro-organisms as biopesticides. CABI, with a range of partners, has successfully pioneered development of a fungal biopesticide for locust control ('Green Muscle'). Here, we addressed all technological steps from concept through to industrial-scale reality. These included innovative Intellectual Property Rights mechanisms, ensuring developing countries benefit directly from the development of commercial products and their application.

14. CABI welcomes the Commission implementing its full mandate and looks forward to playing a leading role, with the Commission's Member Countries, in addressing the sustainable and equitable use of these greatly neglected genetic resources.

#### **IV. TROPICAL AGRICULTURAL RESEARCH AND HIGHER EDUCATION CENTRE (CATIE)**

15. Since May 2004 CATIE's field and orthodox seed collections are placed under the auspices of FAO. On 16 October 2006, CATIE entered into a new Agreement with FAO as the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA).

16. CATIE actively supports the regional PGR network REMERFI through one staff member who is serving as *Pro Tempore* Secretary of the network. CATIE contributed to the development of a rational and effective conservation strategy for PGR in the Americas under the auspices of the Global Crop Diversity Trust (GCDDT). In May 2006, CATIE participated in an ITPGRFA Workshop in Guatemala City.

17. Member countries of PROMECAFE, IICA and CATIE signed an agreement to supply coffee farmers in Central America with outstanding new hybrid cultivars, which resulted from a joint PROMECAFE-CATIE-CIRAD (Centre de coopération internationale en recherche agronomique pour le développement) breeding programme, based on CATIE's international coffee germplasm collection.

18. Frosty pod rot (FPR) and Phytophthora-resistant high-yielding cacao genotypes, generated on-station by CATIE based on its international cacao collection, are being mass-propagated to initiate regional field trials in Central and South America. Strategic deployment of some of these materials to Africa and Asia is being discussed in the framework of CacaoNet to prepare farmers in those regions for the possible arrival of the highly damaging FPR.

19. CATIE has two of the largest collections of mahogany *Swietenia macrophylla* and Spanish Cedar (*Cedrela odorata*) world-wide. The mahogany collections contain accessions at family level (mother tree) from Central and South America, while the *Cedrela* collections are composed of 5 to 10 accessions per family with a total of 300 families, collected in Mesoamerica. To avoid problems with maintenance, new experiments are being established in collaboration with farmers, particularly adaptation experiments like Reciprocal Transplant Experiments where all the populations collected are planted at the sites where the seeds were collected.

20. CATIE offers international training courses at its Headquarters in Costa Rica to strengthen national capacity in the conservation and use of plant and forest genetic resources.

21. The cost of operating the CATIE genebank and providing germplasm is almost exclusively borne by core funding which has dramatically declined during the past 10 years. This has drastically limited the Centre's ability to operate the genebank according to international standards, and has given rise to backlogs in regeneration, characterization and documentation. Support is being sought from the GCDDT and other sources to address current constraints in

equipment, staff and operational funds to ensure the security, viability, health, genetic integrity and documentation of the germplasm, and to make it available to users.

## V. SECRETARIAT OF THE CONVENTION ON BIOLOGICAL DIVERSITY (CBD)

22. In March 2006, the Conference of the Parties to the CBD held its eighth meeting (COP 8)<sup>1</sup> and its third meeting serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (COP/MOP-3)<sup>2</sup>. This report provides an overview of the decisions of particular relevance to genetic resources for food and agriculture, as well as related activities of the CBD Secretariat.

23. The Conference of the Parties recognized the importance of cooperation with other conventions and international organizations and initiatives (Decision VIII/16) and welcomed the ongoing cooperation with FAO, particularly the Commission on Genetic Resources for Food and Agriculture (CGRFA), the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and the International Plant Protection Convention.

### *The 2010 Biodiversity Target and indicators*

24. In decision VIII/15, the Conference of the Parties agreed on global Target 10.1 for forest biodiversity, mountain biodiversity, dry and sub-humid lands and island biodiversity, that by 2010 all access to genetic resources be in line with the CBD and its relevant provisions and, as appropriate and wherever possible, with the ITPGRFA. FAO was recognized for coordinating the delivery of a number of indicators of relevance to genetic resources for food and agriculture, for assessing progress towards the 2010 Biodiversity Target.

25. In decision VIII/4, the Conference of the Parties requested the Ad Hoc Open-ended Working Group on Access and Benefit-sharing (ABS) to continue the elaboration and negotiation of the international regime on ABS. The Conference of the Parties established a Group of Technical Experts to explore possible options for the functioning of an internationally recognized certificate of origin with a view to achieving the objectives of Articles 15 and 8(j) of the Convention. The expert group met in Lima, Peru, in January 2007 and is to provide technical input to the Working Group on ABS at its fifth meeting. A representative of the Secretariat of the ITPGRFA participated as an observer in this meeting.

26. In decision VIII/23, the Conference of the Parties:

- adopted the framework for a cross-cutting *initiative on biodiversity for food and nutrition*;
- endorsed the framework for action of the *International Initiative for the Conservation and Sustainable Use of Soil Biodiversity*, which will be integrated into the programme of work on agricultural biodiversity at its ninth meeting;
- reaffirmed decision V/5, section III on genetic use restriction technologies (GURTS) and invited the governing body of the ITPGRFA to examine the potential impacts of GURTS with special consideration to the impacts on indigenous and local communities and associated traditional knowledge, smallholder farmers and breeders and Farmer's Rights; and
- welcomed the progress made by FAO in the preparation of the first report on the State of the World's Animal Genetic Resources.

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<sup>1</sup> <http://www.biodiv.org/decisions/default.asp?m=cop-08>.

<sup>2</sup> <http://www.biodiv.org/biosafety/cop-mop/search.aspx?menu=mop3>.

27. The Cartagena Protocol on Biosafety to the CBD, which entered into force in September 2003, currently has 139 Parties. It has held three meetings of the Conference of the Parties serving as the Meeting of the Parties to the Cartagena Protocol on Biosafety (COP-MOP). COP-MOP 3 made a major breakthrough regarding the issue of the detailed requirements for documentation accompanying shipments of living modified organisms intended for direct use as food or feed, or for processing (LMO-FFPs). The COP-MOP 3 ended with an agreement that clearly outlines the information required to be stated on documentation accompanying shipments of LMOs-FFP.

## **VI. THE INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)**

28. Through a Joint FAO/IAEA Programme, IAEA, assists Member States to integrate mutation techniques and related biotechnological methods in national plant breeding programmes. Mutation techniques have proven valuable in developing new varieties with improved yield and tolerance to abiotic and biotic stresses, as well as for genetic modifications of quality in food and industrial crops. They have become important tools for molecular genetics research in plants, for developing the high saturation linkage maps required for marker assisted selection and most recently for reverse genetics and genomics.

29. The Programme currently implements Coordinated Research Projects (CRPs) on the application of mutation techniques and relevant related biotechnologies and on the effects of mutagenic agents on the DNA sequence in plants, molecular tools for quality improvement in vegetatively propagated crops including banana, physical mapping technologies for the identification and characterization of mutated genes contributing to crop quality, pyramiding of mutated genes contributing to crop quality, identification and pyramiding of genes responsible for stress tolerance in crop plants. Future CRPs will focus on the development of integrated technology packages for enhancing the efficiency of induced mutagenesis of crop plants and the sustainable productivity and quality enhancement of mutant crop varieties as affected by soil quality.

30. To facilitate the transfer of well-established methods and protocols for germplasm enhancement and breeding developed under CRPs to developing countries, the Programme provides scientific and technical support to projects funded through the IAEA's Technical Cooperation Programme. These projects are mainly located in the Africa, Asia and Pacific Regions and provide expert services, equipment and training in germplasm enhancement through mutation techniques to sustain the genetic diversity of local varieties of major and neglected crops.

31. Other services include the maintenance of an FAO/IAEA Mutant Variety Database, which features more than 2,600 officially released varieties of 175 species of crops, ornamentals and decorative plants, and a radiation service for plant material by the Plant Breeding Unit at the request of breeders and plant scientists of Member States. A Mutant Germplasm Repository, including a Database and a cost-free Genotyping Service for Member States, is pilot tested at Seibersdorf and Vienna. This repository eventually is to work as a registry for potentially valuable mutated germplasm from Member States and is bound to facilitate germplasm exchange. The organization and maintenance of mutant genetic resource databases and the mutant repository should enable Member States to gain access to information as well as to the resources.

32. The Programme will develop and diversify its activities in the area of generation of mutants in major and under-utilized food and industrial crops, thus creating resources for breeding and for genomics and reverse genetics. Secondly, ties with CG centres will be strengthened. The Joint FAO/IAEA Programme is a founding member of the Global Musa Genomics Consortium of the Banana and Plantain Section of Bioversity International.

## **VII. INTERNATIONAL CENTRE FOR INSECT PHYSIOLOGY AND ECOLOGY (ICIPE)**

33. The International Centre of Insect Physiology and Ecology (now referred to as *Icipe* - African Insect Science for Food and Health) mission is to help alleviate poverty, ensure food security and improve the overall health status of peoples of the tropics by developing and extending management tools and strategies for harmful and useful arthropods, while preserving the natural resource base through research and capacity building. Some of the research directly leads to the development of management tools and strategies, whereas other aspects of the research indirectly feed into this process by enhancing knowledge on harmful and useful insects.

34. Within its current strategic framework, *Icipe*'s work is structured under the operative *4H-Paradigm* of improving Human, Animal, Plant and Environmental Health. Under these themes, *icipe* is working to make major contributions to development as follows:

- **Human Health:** Contribute to the reduction of malaria and other vector-borne diseases by developing tools and strategies that control the vectors and break the cycle of transmission, and which can be integrated with disease management efforts;
- **Plant Health:** Contribute to improved sustainable food security and environmental health through the development of integrated pest management (IPM) in field and horticultural crops and storage pests;
- **Animal Health:** Increase livestock productivity through development of integrated strategies and tools for livestock vector control, thus leading to greater availability of meat and milk, hides and draft power; and
- **Environmental health:** Conservation and sustainable utilisation of the agricultural production base and important natural ecosystems by encouraging and utilizing arthropod diversity; cataloguing and sharing biodiversity data and discovering endemic wealth by bioprospecting for useful natural products.

35. Capacity strengthening is undertaken across all these research thrusts so as to build the much-needed human expertise for research leadership and policy advocacy, as well as skill empowerment through networking with African institutions such as universities.

36. *Icipe* conducts research and training activities that deal with inventory, conservation and utilisation of biodiversity. Considerable microbial and other genetic resource collections are being maintained and further developed at the Centre. These collections are currently managed in accordance with *Icipe*'s Intellectual Property Policy, which seeks to promote maximum access for research and development while also protecting the interests of *Icipe*'s primary constituency: tropical developing countries, especially in Africa.

## **VIII. THE INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT (IFAD)**

37. IFAD grant-financed programmes continue to support the enhancement of poor farmers' use of their own plant genetic resources assets - with the mobilization of the associated local knowledge - through a strategy which combines research-based capacity building activities, involving all the actors of the agricultural knowledge information system; farmer-to-farmer communication and exchange mechanisms; and a production-to-consumption approach, including processing and marketing development.

38. In the area of capacity building and science-based/local knowledge exchanges, the instrumentalities tested together with IARCs, FAO and NARS partners, such as the Farmer Field or Biodiversity Fora, have confirmed their relevance in improving the analysis, understanding and management by the concerned producers of different crop species, including comparisons between land races and modern varieties. On-going trends in the Sahel show that practices learnt



in the context of the Fora as well as germplasm acquired at the Seed Fairs are increasingly applied in the fields, with positive effects on the resilience of smallholders' farming systems. Moreover, a spontaneous dynamic of self-replication of the Farmer Field Fora is recorded, together with the emergence of embryonic forms of farmers' associations around them, devoted to the safeguard of plant genetic diversity and linked to community seed banks. Sensitization of local and national policy makers has been a strong feature of the programme in Mali.

39. Under a recently evaluated world-wide programme on Neglected and Under Utilized Species, including communities of Central and West Asia, North Africa and Latin America, beneficial results were produced ranging from the identification and conservation of varieties with potential to increase yields in marginal areas – that are being adopted by smallholders and stimulate the interest of both seed producers and the agri-food industry - to increased availability of quality seeds and grain fit for processing. This brings about impacts such as increased value-added initiatives among the poor and the growth of small food processing plants, facilitated by the use of micro-credit and the forging of forward and backward linkages between markets and technology.

40. In Southern Asia and in the Pacific, informal seed systems to propagate farmers' local coconut varieties and conserve them on-farm have been set-up through community-managed coconut seedling nurseries, while farmers have been trained on various income-generating technologies relying on a variety of high value products derived from the nuts. Also in this case, microcredit and revolving fund systems are being established for the Community Based Organisations.

## **IX. INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE (IICA)**

41. IICA supports the conservation and sustainable utilization of biodiversity and plant genetic resources to contribute to the reduction of poverty, the competitiveness of agriculture through the diversification of agriculture and to food security and rural welfare.

42. IICA is committed to “strengthen the hemispheric cooperation among countries in technological innovation and links with the agricultural research international systems”. The Institute collaborates with major Plant Genetic Resources Networks in the Americas, including NORGEN, PROCINORTE, REMERFI, REDARFIT, PROCIANDINO, TROPIGEN, PROCITROPICOS, REGENSUR, PROCISUR and PROMECAFE. In joint co-operation with CIRAD and CATIE, IICA works on the production of hybrids and graft rootstock and on molecular characterization of coffee genetic resources and has engaged into a new project on Denomination of Origin. The Regional Director of Bioversity International for LAC visited IICA and participated in the Executive Committee of the Forum of the Americas on Agricultural Research and Technological Development (FORAGRO) in Montevideo to share new ideas for cooperation in the Region for the conservation and utilization of PGR.

43. IICA acts as the Technical Secretariat of the FORAGRO. One of the forum's main themes for priority actions at the hemispheric level is agricultural biodiversity and genetic resources. In this context, a study on the state of the art of PGR perspective was carried out by PROCITROPICOS and EMBRAPA.

44. The Plant Genetic Resources Networks of the Americas is currently reviewing the strategy for the Conservation of PGR as prepared by the Global Crop Diversity Trust to identify the priorities to be supported by *the Global initiative*.

45. The Institute is implementing an Inter-American Program on Biotechnology and Biosafety that links genetic resources conservation and utilization mechanisms. The program is currently developing Regional Strategies on Agrobiotechnology in the hemisphere, in line with the mandates of the Inter-American Board of Agriculture (The Ministers of Agriculture of IICA member states). Particular attention is given to biosafety regulatory issues that are of specific concern to biosafety related international agreements. IICA continues to serve as the technical forum on the Biosafety Protocol of Cartagena.

46. REMERFI, CATIE, IICA and CIAT started a joint project on Conservation and Sustainable Use of Neotropical Native Crops and Wild relatives of Crops Plant Genetic Resources of the Central American Region supported by GEF and the World Bank. A similar initiative is being prepared by IICA under PROCITROPICOS and its network TROPIGEN for the Amazon Basin. Under IICA's MTP framework actions will be carried out for the systematization and dissemination of experiences on rural business for the valuation of agrobiodiversity among other goods and services.

## **X. THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY PLANT GENETIC RESOURCES CENTER (SADC-PGRC)**

47. The mission of the Southern African Development Community is to "promote sustainable and equitable economic growth and socio-economic development through efficient productive systems, deeper co-operation and integration, good governance, and durable peace and security, so that the region emerges as a competitive and effective player in international relations and the world economy".

### *The SADC Plant Genetic Resources Centre*

48. In 1989, SADC established a regional programme and network of plant genetic resources co-ordinated by the SADC Plant Genetic Resources Centre (SPGRC) based in Lusaka, Zambia. The SPGRC and the network programme were established with the mandate of conserving the region's PGRs.

### *Programmes*

49. The SPGRC coordinates a network of National Plant Genetic Resources Centres (NPGRCs) which are responsible of maintaining active collections of germplasm of PGR. Some NPGRCs also maintain field genebanks for the conservation of vegetatively propagated crops such as cassava, sweet potato, bananas and plantains.

The SPGRC holds a base collection of germplasm from Member States, where more than one-third of the total germplasm accessions collected across the NPGRCs has been deposited. The centre also has an agreement for safe duplicate storage of germplasm outside the region.

The SPGRC provides technical backstopping and supports the development of regional capacity by sponsoring short training courses and granting MSc and PhD scholarships.

Steps are being taken to mainstream HIV/AIDS concerns in PGR programmes, since the wide occurrence of HIV/AIDS is one of the biggest threats to crop diversity in SADC, next to droughts and floods.

### *Activities*

50. SPGRC manages the Regional Central Accession Data Base and coordinates the inventory, collection, characterization, evaluation, rejuvenation, multiplication and documentation of genetic resources in the region. It has developed a Documentation and Information System (SDIS), which has been installed at all the NPGRCs. Efforts are underway to upgrade SDIS into a web-based system to enhance its real-time updating and accessibility.

The SPGRC coordinates Regional Crop Working Groups (RCWGs) of scientists who focus on collection issues for specific or groups of crops.

Plans are underway to establish a biotechnology laboratory at SPGRC to increase capacity for chemical and molecular characterisation of germplasm and complement current information on genetic resources, including capacity to detect presence of GMOs in the collections.

SPGRC is represented in the SADC Advisory Committee on Biotechnology and Biosafety and in the steering committee of the SADC Seed Security Network (SSSN).

SPGRC also works in partnership with various international, regional and national organizations in many areas of PGR conservation. A Memorandum of Understanding is currently being prepared to formalize cooperation between SPGRC and Bioversity International.

The Institution also represents SADC at regional and international forums on the conservation and use of PGR, including CGRFA meetings.

### *Policy Issues*

51. All SADC member states except Botswana, Mozambique and South Africa have signed the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). The Democratic Republic of Congo, Malawi, Mauritius, Namibia and Tanzania have ratified or acceded to the Treaty.

In light of the ending of the 20year project in 2009, SPGRC is revising its policy framework and finalizing the development of a Long-Term Sustainability Strategic Plan. In general, there exist conducive agricultural policies in the region and political will and commitment from Member States to develop the agricultural industry, which provides an opportunity for SPGRC's long-term sustainability.

## **XI. UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD)**

52. Organic agriculture offers a wide range of economic, environmental, social, health and cultural benefits, including promoting agro-biodiversity. UNCTAD is currently engaged in promoting these objectives in a number of ways.

53. Organic agriculture was a main theme of the UNCTAD Trade and Environment Review 2006, available online at [www.unctad.org/trade\\_env](http://www.unctad.org/trade_env).

54. Since 2001, FAO, IFOAM and UNCTAD have been seeking to help remove technical barriers to trade in organic agriculture products through the work of the joint International Task Force on Harmonization and Equivalence in Organic Agriculture.<sup>3</sup>

55. Given its potential benefits, organic agriculture was also selected by UNEP and UNCTAD as a priority issue to be addressed in the framework of the UNEP-UNCTAD Capacity Building Taskforce on Trade, Environment and Development (CBTF).<sup>4</sup>

56. The CBTF East Africa organic project was launched in 2005, benefiting Kenya, Uganda and the United Republic of Tanzania. The project comprises a number of background studies on key issues such as best practices for organic policy, national integrated assessments of the impact of "going organic" on a range of environmental, economic and social factors, and regional cooperation including development of an East Africa Organic Standard (EAOS). Since 2006, Burundi and Rwanda have joined regional activities. The European Union, the Swedish International Development Cooperation Agency and the Government of Norway have provided financial support.

57. Building partnerships is a key feature of this project. At the international level, CBTF has joined forces with IFOAM to support project activities. At national level, regular multi-stakeholder meetings and public-private sector dialogue are creating synergies and dynamism in the sector. At regional level, public-private sector dialogue is reinforced and ideas exchanged on the best way to move forward.

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<sup>3</sup> Please see [www.unctad.org/trade\\_env/ITF-organic/welcome1.asp](http://www.unctad.org/trade_env/ITF-organic/welcome1.asp) for further details on the activities of the Task Force.

<sup>4</sup> For further details, please see the CBTF website at [www.unep-unctad.org/cbtf](http://www.unep-unctad.org/cbtf).

58. The EAOS text has been finalized and is on its way to becoming an official East African Community Standard. The EAOS will be the second regional organic standard in the world after the European Union's and the first ever to have been developed in cooperation between the organic movements and the National Standards Bodies. The standard will boost organic trade and market development in the region and define a common vision of organic agriculture in East Africa. The EAOS includes specific text encouraging use of local varieties of plants and animals in organic production systems.

59. Since its launch in 1996, the UNCTAD BioTrade Initiative has been promoting sustainable biotrade in support of the objectives of the CBD. The Initiative has developed a unique portfolio of regional and country programmes. Since 2003 the BioTrade Initiative has also hosted the BioTrade Facilitation Programme (BTFP) which focuses on enhancing sustainable bio-resources management, product development, value adding processing and marketing. The BioTrade Initiative supports BioTrade national programmes in Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Peru, Uganda, Venezuela and Vietnam as well as regional programmes in the Amazon and Andean regions. In collaboration with its partners, workshops have been conducted in implementing biotrade activities at the national and regional levels.

## **XII. UNITED NATIONS DEVELOPMENT PROGRAMME - GLOBAL ENVIRONMENTAL FACILITY (UNDP - GEF)**

60. The Global Environment Facility (GEF) has been implementing a program on agricultural biodiversity based on the objective to promote:

- a) the positive impacts and mitigate the negative impacts of agricultural systems and practices on biological diversity in agro-ecosystems and their interface with other ecosystems;
- b) the conservation and sustainable use of genetic resources of actual and potential value for food and agriculture; and
- c) the fair and equitable sharing of benefits arising out of the use of genetic of resources.

61. These objectives contribute to the objectives of the Convention on Biological Diversity in the area of agricultural biological diversity as well as the objectives of the Convention to Combat Desertification. The GEF activities in agricultural biodiversity pay special attention to addressing issues related to land degradation including rehabilitation of degraded areas. The GEF works in partnership with institutions that have extensive experience on agricultural biodiversity, building on existing strengths and comparative advantages thus ensuring complementarity. Because agricultural biodiversity affects rural farming communities, which are among the world's poorest, GEF support aims to provide significant means for alleviating poverty while increasing productivity of biological and land resources.

62. The activities on GEF agricultural biodiversity program aim at sustaining the functions of biological diversity in agricultural ecosystems in order to maintain or enhance the goods and services provided by such biological diversity, including both those which support agricultural production, and wider services such as provision of clean water, control of erosion, and moderation of climatic effects. In this way, the impact of agriculture on the environment can be integrated into the planning and management of the wider ecosystem. GEF project activities are also focused on maintaining goods and services which are positive externalities and on overcoming barriers to realize the benefits derived from such goods and services, including such activities as capacity building, better valuation of biodiversity-derived benefits and access to information, these activities are sought both within and adjacent to conservation areas and in the wider agricultural landscape giving attention to areas that are particularly important for their agricultural biodiversity and/or threat of genetic erosion or other forms of biodiversity loss.

63. Since the program was established in 2001, GEF has supported total of 18 projects that are essentially focused on agricultural biodiversity, and about 40 projects that includes related

components or elements. The focus of these projects include: demonstrating and applying techniques to sustainably manage biodiversity important to agriculture including wild relatives of domesticated plants and animals; designation of protected areas that contain important pools of wild relatives of crops and breeds; and creating new incentives and enabling environments to conserve biodiversity important to agriculture.

### **XIII. UNEP – WORLD CONSERVATION MONITORING CENTRE (UNEP – WCMC)**

64. UNEP-WCMC promotes an understanding of the importance of biodiversity to humanity including plants and animals, fishery and forestry genetic resources and other components of agrobiodiversity. The Centre supports the work of biodiversity-related conventions, particularly through the provision of services to the relevant secretariats, carries out assessments at the global level and provides public information services.

65. UNEP-WCMC is supporting the implementation of the GEF funded project “*In situ Conservation of Crop Wild Relatives Through Enhanced Information Management and Field Application*”, managed by Bioversity International. The project will help ensure the safe and effective conservation of crop wild relatives and their increased availability for crop improvement in Armenia, Bolivia, Madagascar, Sri Lanka and Uzbekistan, and develop an international information system to support crop wild relatives’ conservation throughout the world.

66. UNEP-WCMC is providing support through provision of technical expertise and protected areas data; and by participating in the development of the associated international information system for the genetic resources of crop wild relatives. The international information management system will allow dispersed information, held by individual countries, international agencies and other institutions, to be brought together and used to support conservation decision-making at global level.

67. Of relevance to the conservation and sustainable use of forest genetic resources are the regional workshops being implemented by UNEP-WCMC to identify timber trees in international trade that may be of conservation concern and to propose species-specific strategies to promote their sustainable use. The role of management measures such as certification, voluntary partner agreements established under the FLEGT (Forest Law Enforcement, Governance and Trade) process and listing in the appendices to CITES will all be considered. The first workshop was held in Mesoamerica in 2005 and the second, for South East Asia will be held in 2007. These will be followed at a later date by workshops in South America, and Central and West Africa. For further information see <http://www.unep-wcmc.org/forest/timber>.

68. UNEP-WCMC also works at the forefront of biodiversity assessment and indicator initiatives and played a central role in the Millennium Ecosystem Assessment (MA), published in 2005. The MA focussed on the consequences of ecosystem change for human well-being and examined the response options for improving ecosystem management while contributing to poverty alleviation.

69. Assessment processes play a vital role in increasing our understanding of the status and trends in biodiversity, the causes of changes in biodiversity and of the links between it and human well-being.

### **XIV. UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)**

70. UNESCO recognizes the importance of genetic resources conservation for food and agriculture as an essential component of biological but also cultural diversity conservation and as a fundamental condition for ensuring sustainable food and agricultural systems. Within its Natural Sciences Sector, the Division of Ecological and Earth Sciences (EES) is carrying out different activities related to the conservation of agricultural biodiversity and its sustainable use.

71. In July 2006, the Advisory Committee of the Man and Biosphere (MAB) Programme under EES felt that, while it would be too ambitious for the MAB Programme to embark upon a comprehensive valuation of the genetic resources of biosphere reserves, the latter did have a clear role in their conservation and sustainable use, and therefore relevant information in this respect should be collected and disseminated. The Committee thus encouraged cooperation with competent institutions that work in this area with a view to further exploring the possible contribution of the MAB Programme to their efforts. The Committee recommended that future work of the MAB Programme in this area be developed gradually, and concentrate on the scientific and technical aspects of this topic, avoiding duplication with other on-going efforts.

72. During the last year, UNESCO has been developing a PDF B proposal jointly with Bioversity International on the conservation and sustainable use of agricultural biodiversity in biosphere reserves. This project seeks to link agricultural biodiversity management with the long-term conservation strategies of UNESCO Man and Biosphere (MAB) reserves network. We expect this project to be implemented in eight biosphere reserves in six different countries, namely Morocco, Guinea-Bissau, Benin, Thailand, Bolivia and Cuba. We hope this project will be submitted to UNEP/GEF during 2007.

73. As a transectoral initiative between UNESCO's Culture Sector and Natural Sciences Sector, the Organization is working on redefining the selection criteria of the UNESCO City of Gastronomy with a specific focus on the conservation and use of agricultural biodiversity. This activity is still in the design phase and will hopefully be implemented by mid-2007. The objective is to use the existent framework and classification of the UNESCO Creative Cities Network and more specifically UNESCO's City of Gastronomy initiative to promote a more integrated vision of gastronomy and food systems. We believe that gastronomy lies at the crossroads of agriculture and the environment, nutrition and health, biological and cultural diversity. The gastronomy sector not only has the potential to forge local development, but also has an important role to play in promoting sustainable food systems and the conservation of biological and cultural diversity. In that respect, the UNESCO City of Gastronomy initiative has a great potential in conserving the agricultural biodiversity that is inherently embedded in gastronomy, especially in light of the excessive industrialization and standardization in this sector.

## **XV. UNITED NATIONS UNIVERSITY (UNU)**

74. The Biodiplomacy Initiative of United Nations University Institute of Advanced Studies (UNU-IAS) is focused on policy-relevant research issues concerning the use of biological resources and sharing the benefits of such use. Under this programme, research is undertaken into the global dialogue on the use of genetic resources and distribution of their benefits, the use of traditional knowledge and practices, the role of intellectual property rights, biological prospecting in Antarctica and the high seas, the regulation of biotechnology and bioethics. The initiative also has a practical training programme that complements this research. These activities are carried out with a large number of partners, including the Commission and the Secretariat of the International Treaty.

75. With increasing attention on the implementation of the ITPGRFA, the UNU-IAS Biodiplomacy programme focuses on one of the key areas of the Treaty, i.e. its Farmers' Rights provisions, linking their implementation to the four benefit-sharing components of the Treaty, namely, exchange of information; access to and transfer of technology, including seeds; capacity building; and sharing of monetary and other benefits of commercialization. Currently, UNU-IAS is addressing the issue of definitions and legal provisions of Farmers' Rights, building capacities at different levels to realize the rights, assessing further implementation options of the Standard Material Transfer Agreement (SMTA) of the Treaty, assessing the impact of IPRs protection on the diverse components of the expected benefit-sharing flows, suggesting some lessons learnt for further development of CBD's International Regime on ABS, including developing a financing regime for the International Regime on ABS.

76. UNU is exploring the possibility of establishing a new UNU Centre that will focus on traditional knowledge. Key aims of the proposed centre would be to become a focal point for promoting research, training and capacity building on issues regarding the retention, maintenance and promotion of traditional knowledge. Once the institute becomes operational, it will address, among others, issues related to the implementation of the ITPGRFA and to farmers' rights.

## **XVI. INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS (UPOV)**

77. The International Union for the Protection of New Varieties of Plants (UPOV) is an intergovernmental organization, established by the International Convention for the Protection of New Varieties of Plants or "UPOV Convention". UPOV's Mission is to provide and promote an effective system of plant variety protection to encourage the development of new varieties of plants, for the benefit of society.

78. Since the Tenth Session of the CGRFA, a further seven States and one international organization (the European Community) have become members of UPOV.

79. As of February 7, 2007, UPOV had 63 members, including developed and developing countries. Furthermore, 19 States and one intergovernmental organization (the African Intellectual Property Organization) have initiated the procedure for becoming members of the Union and 45 other States have contacted the Office of the Union with a view to developing legislation in line with the UPOV Convention.

80. The increasing number of applications for plant variety protection under the UPOV system indicates enhanced breeding activities and the increasing number of varieties which have become available to farmers and growers. In 2005, UPOV members received 12,665 applications for protection of new plant varieties, 8,473 titles of protection were granted and 66,772 titles of protection were in force by the end of 2005.

81. Under the UPOV Convention, protected varieties are not subject to any restriction with regard to their use for research and breeding purposes. UPOV's activities are focused on the development of a legislative basis for plant variety protection in conjunction with technical support which is necessary according to the UPOV Convention for effective implementation of the UPOV system of plant variety protection.

82. UPOV's activities have been undertaken in the regions of Asia and the Pacific, Latin America and the Caribbean region, Africa and countries in transition to a market economy. UPOV also provides a Distance Learning Course: *Introduction to the UPOV System of Plant Variety Protection* (see <http://www.upov.int/exilabout/traixaing.html>).

83. UPOV published a report on the impact of plant variety protection which involved a study in five member countries (Argentina, China, Kenya, Poland and the Republic of Korea). The report indicated that the introduction of the UPOV system of plant variety protection and membership of the UPOV Convention provide an effective incentive for plant breeding in many different situations and result in the development of new, improved varieties of benefit for farmers, growers and consumers.

## **XVII. THE WORLD BANK**

84. Between 1988 and the end of FY06 the World Bank approved biodiversity investments totalling more than US\$5 billion (including co-financing and GEF investments as well as IBRD/IDA) apportioned over approximately 500 projects. A substantial amount of this investment has been dedicated to protected areas, but there is increasing focus on mainstreaming biodiversity into forestry, coastal-zone management and agriculture.

85. The World Bank's agrobiodiversity efforts are being supported by analytical work including the International Assessment of Agricultural Science and Technology for Development

(IAASTD). One of the areas to be assessed is the impact and trade-offs between agriculture, poverty reduction, human health and the environment, including biodiversity. The World Bank also supports the maintenance and management of germplasm collections in the CGIAR centres.

86. Many of the World Bank's agrobiodiversity-related projects are either fully or partially financed by GEF funding. In the co-financing arrangements the World Bank lending focuses on agricultural productivity and rural livelihoods, while the GEF input supports the environmental and conservation aspects of the projects. The balance between the two elements varies from region to region.

87. In the Africa region the emphasis is on support to improving farmer and community livelihoods and incomes by focusing on water resources development (coastal and freshwater), biodiversity conservation in fisheries, forests, and achieving sustainable land management. In Europe and Central Asia the focus is more towards sustainable environmental rehabilitation, and management of forest lands and associated rangelands. In Latin America the project focus is on biodiversity conservation and sustainable use of freshwater systems in the Amazon. In the East Asia Pacific Region the focus is on achieving sustainable water resources management and improving agro-ecological environmental management to improve farmer's livelihoods. Lastly, in the South Asia region, the projects focus mainly on land and watershed management to improve the productive potential of natural resources and incomes of the rural poor.

### **XVIII. THE WORLD ORGANIZATION FOR ANIMAL HEALTH (OIE)**

88. The World Organisation for Animal Health (OIE) develops international standards, guidelines and recommendations to control or eradicate animal diseases and pathogens, including zoonotic disease agents.

89. Within the Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) of the World Trade Organization (WTO), the recommendations for animal health outlined in the Terrestrial Animal Health Code, the Aquatic Animal Health Code, the Manual of Diagnostic Test and Vaccines for Terrestrial Animals and in the Diagnostic Manual for Aquatic Animal Diseases are recognized as reference standards that have the objective of safeguarding international trade in animals and animal products and controlling animal diseases and zoonoses worldwide while avoiding unjustified sanitary barriers. Within this framework, the OIE does not have a direct responsibility for the conservation and sustainable use of genetic resources but it can play an important role in safeguarding animal genetic resources through preventing disease transmission, particularly to isolated populations that are naïve to disease agents found in different parts of the world.

90. OIE has introduced standards supporting the preservation of rare breeds in the event of serious disease epizootics, by promoting the use of vaccination and other new technologies, and through the application of the principles of regionalisation and compartmentalisation. As a result of these developments, it is now possible to preserve collections of rare and valued ruminants by using vaccination and adapted surveillance testing in the event of a foot and mouth disease outbreak. The OIE has prioritised the development of technical and scientific guidance to help Member Countries manage serious poultry diseases (avian influenza and Newcastle disease) through the use of new technologies and the compartmentalisation principle.

91. The OIE Permanent Working Group on Wildlife Diseases informs and advises the OIE on health problems relating to wild animals in the wild and in captivity. The Group assesses disease events and related developments that can significantly affect the conservation and utilisation of wildlife populations and proposes appropriate measures to help safeguard wild and domestic animal populations.

92. The ad-hoc Group on Biotechnology, one of the expert groups of the OIE Biological Standards Commission, is currently working on vaccines and animal health and welfare aspects of animal cloning technology. This Group is instrumental in organising the *International Symposium on Animal Genomics for Animal Health* planned to take place in October 2007 at OIE headquarters



in Paris. For details see:

[http://www.oie.int/download/ANNOUNCEMENT\\_MEETING/Paris%20Symposium.pdf](http://www.oie.int/download/ANNOUNCEMENT_MEETING/Paris%20Symposium.pdf).

93. The OIE continues to collaborate with the Secretariat of the CBD and the WTO (and the International Plant Protection Convention) on identifying gaps in the international framework for the management of Invasive Alien Species. An official cooperation agreement between the OIE and the CBD will be subject of further consideration in 2007.