

March 1999



منظمة الأغذية
والزراعة
للأمم المتحدة

联合国
粮食及
农业组织

Food
and
Agriculture
Organization
of
the
United
Nations

Organisation
des
Nations
Unies
pour
l'alimentation
et
l'agriculture

Organización
de las
Naciones
Unidas
para la
Agricultura
y la
Alimentación

Item 8 of the Draft Provisional Agenda

COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Eighth Regular Session

Rome, 19 – 23 April 1999

**BACKGROUND DOCUMENTATION PROVIDED BY THE UNITED
NATIONS ENVIRONMENT PROGRAMME (UNEP) TO THE FAO
COMMISSION ON GENETIC RESOURCES FOR FOOD AND
AGRICULTURE**

This report is fully the responsibility of UNEP and is available in the language in which it has been submitted only.

**REPORT OF THE UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP) TO
THE FAO COMMISSION ON GENETIC RESOURCES FOR FOOD AND
AGRICULTURE ON ITS POLICIES, PROGRAMMES AND ACTIVITIES ON
AGRICULTURAL BIOLOGICAL DIVERSITY**

1. UNEP is working at the global, regional and national levels to support the implementation of the provisions of the Convention on Biological Diversity. In collaboration with governments, non-governmental organizations (NGOs) and its sister UN agencies, UNEP is promoting the protection and sustainable use of individual species and their genetic resources, as well as the conservation of their habitats and ecosystems. It is also striving to develop appropriate ways of maintaining maximum genetic diversity, placing special emphasis on species, habitats and ecosystems with established socio-economic value.

2. This has been facilitated by UNEP's integrated Work Programme for 1998-1999 built on (i) developing and promoting state-of-the-art of scientific assessments, (ii) formulating policy options for enhancing environmental management, (iii) leveraging knowledge for building consensus on critical environmental problems and issues, (iv) assisting Governments at the global, regional, sub-regional and national levels in formulation of environmental management strategies and (v) promoting more effective cooperation and coordination in the field of the environment with partners within and outside the UN system.

3. UNEP is the convenor-member of the Ecosystem Conservation Group (ECG), which was established in 1974 to promote thematic joint programming and advise member organizations on the development and implementation of biodiversity-related work programmes. Its other members are FAO, UNESCO, IUCN, WWF, UNDP, the World Bank and IPGRI. In view of the importance of the Ecosystem Conservation Group (ECG), the Executive Director of UNEP has taken the initiative to revive, revitalize and utilize the Group's expertise and experience to the greater good and benefit of all the biodiversity-related conventions and international processes. The revitalized Ecosystem Conservation Group has held two meetings in 1998, at the FAO Headquarters in Rome on 9 July 1998 and at the IUCN Headquarters in Gland, Switzerland on 16 November 1998. The third meeting will be held on 22-23 March 1999 to be followed by annual meetings thereafter. Under its aegis two issue papers are under preparation covering:

- (i) Biodiversity and Urban environment.
- (ii) Large ecosystem management with special reference to the marine and coastal environment.

Issue papers on other emerging issues will be prepared in due course.

4. Recognizing the need for safety in the use and application of biotechnology processes so that this technology can contribute to the improvement of agriculture, food production, health care and environmental protection, the UNEP International Technical Guidelines for Safety in Biotechnology were developed to be used as a guide for:

- (i) development of national capacities for risk assessment/risk management of the possible adverse impacts that Living Modified Organisms (LMOs) may cause to agriculture, human health and the environment;
- (ii) development of adequate human resources at all cadres and all levels in biotechnology; and

- (iii) establishment of modalities and mechanisms for supply and exchange of relevant biosafety information to facilitate Advance Informed Agreement(s) in respect of transboundary movement of LMOs.

5. In the area of biosafety, UNEP provides support to the work of the CBD, including the work of the Open-ended *Ad-Hoc* Working Group on Biosafety negotiating the Biosafety Protocol. UNEP will also provide support to the work of the Intergovernmental Committee on the Biosafety Protocol, or such body as may be established upon the adoption of the Protocol on Biosafety in Cartagena, Colombia in February 1999.

6. UNEP is currently undertaking programmes to promote the environmentally sound application of biotechnology. This includes the implementation of the Pilot Biosafety Enabling Activity Project encompassing a series of Regional Workshops on Biosafety for each of the following four regions: Central Eastern Europe, Africa, Asia/Pacific and Latin America and the Caribbean, which were held during October-December, 1998. UNEP also conducted an International Workshop to follow up on the UNEP International Technical Guidelines in Buenos Aires, Argentina 1996 and a second International Workshop is planned to take place in 1999 to review progress made in the implementation of the Guidelines.

7. In view of the need for adequate national and regional capacities for the implementation of the biosafety Guidelines and/or any other future instrument(s) on biosafety such as the Biosafety Protocol and considering the high costs envisaged in developing such capacities, it is suggested that programmes need to be formulated that would support the strengthening and/or, as appropriate, the development of: institutional capacities; adequate human resources; and mechanisms for supply and exchange of information - at national, sub-regional and regional levels - to facilitate the process of risk assessment and risk management related to the transboundary movement and/or the release of LMOs into the environment, while promoting safety in biotechnology research, development and applications, and hence the enhancement of agriculture, increased food and feed supply, enhancement of human health and environmental protection.

8. UNEP is the implementing agency, and IUCN the executing agency, for the "Global Biodiversity Forum (Phase II): Broadening Support for the Implementation of the Convention on Biological Diversity". Under this project the civil society will be assisted to continue making its contribution to the implementation of the Convention on Biological Diversity through a series of Global Biodiversity Forums. During COP-IV, the Tenth Global Biodiversity Forum was held between 1-3 May 1998 at Bratislava, Slovak Republic. This forum focused on the following themes of relevance to the Eighth Session of the FAO Commission on GRFA: (i) Sharing the Benefits Arising from the Utilization of Genetic Resources; and ii) Influence of Tenure and Access Rights on the Sustainability of Nature Resources Uses.

9. UNEP is collaborating with the World Intellectual Property Organization (WIPO) to study, among other issues, the impact of intellectual property rights systems and traditional knowledge on the conservation and sustainable use of biological diversity and the equitable sharing of benefits derived from its use. It is intended to carry out three on-site traditional knowledge documentation studies in this regard.

10. UNEP is collaborating with IPGRI on the implementation of a project entitled "Partnership in Capacity Building for Sustainable National Plant Genetic Resources Programme", under which it is hoped to achieve the following results: (i) raise awareness of, enhanced commitment to, and implementation of effective and adequately integrated plant genetic resources programmes in countries of Sub-Saharan Africa, capable of meeting national needs and participating in regional and international initiatives; (ii) enhanced scientific, technical and management capacity in human resources in countries in Sub-Saharan Africa directed towards national, regional and international activities in plant genetic resources conservation and use; and (iii) enhanced training capacity at technical and advanced levels in Sub-Saharan Africa to meet future needs for human resources development in plant genetic resources conservation and use.

11. UNEP is also collaborating with FAO on the implementation of an Information Dissemination and Training for Technology Transfer in Domestic Animal Genetic Resources project aimed at: (i) enhancing the dissemination and use of information on endangered animal genetic diversity and improved global, regional, and national programmes for conservation and sustainable use of livestock genetic diversity; (ii) increasing the number of entries in the global databank, and improving the accuracy of information per breed; and (iii) increasing the number of people trained and directly involved in animal genetic conservation activities.

12. UNEP funded a regional symposium on “Agrotechnologies Based on Biological Nitrogen Fixation for Desert Agriculture”, conducted by the Environmental Studies and Research Unit (ESRU), Faculty of Agriculture, Cairo University in El-Arish, Egypt between 4-6 April, 1998. The symposium discussed and exchanged information, research results and experiences related to the understanding of the genetic manipulation of plant - microbe and their interactions to support desert agriculture and productivity while moving away from the use of environmentally polluting chemical fertilizers. A UNEP funded regional training course on “Plant Taxonomy” addressing both the theoretical and practical aspects of plant taxonomy, including field work on plant taxonomy was also held at the Department of Botany, Cairo University, El-Arish, Egypt from 5-17 December 1998.

13. UNEP has over the past two decades been involved in the development and promotion of a network of nine regional Microbiological Resources Centres (MIRCENs). Currently, through the Beijing MIRCEN, UNEP is providing “Support for Training Workshops on Microbial Biofertilizers and Plant Molecular Biology and Biotechnology”. The project will result in: (i) increased knowledge on and application of micro-organisms of economic and environmental value; (ii) development of new inexpensive biotechnologies that are native to the region; and (iii) strengthening of research in applied environmental microbiology relevant to sound environmental management. UNEP is also collaborating with the Cairo MIRCEN on the implementation of a project entitled “Support to Cairo MIRCEN for Enhancing the Microbial Culture Collection Service and for Manpower Training and Research in Applied Environmental Biotechnology”. The project aims at: (i) strengthening of research in applied environmental microbiology relevant to the region, particularly in the fields of microbiology relevant insecticides, bioremediation and production of microbial biomass; and (ii) enhanced capability of professionals and technicians in applied environmental microbiology relevant to the region, particularly in the fields of microbial insecticides, biodegradation of organic chemicals, upgrading of agricultural wastes and production of biomass and bioremediation.

14. UNEP provided some financial support towards participation of researchers from developing countries at the meeting on tropical forest diversity and dynamics entitled “Forest Diversity and Dynamism: Results from the Global Network of Large-scale Demographic Plots,” held from 29 July to 1 August 1998, at the Smithsonian’s National Museum of Natural History, Washington, DC, USA. During the three-day conference, over 100 people from 25 countries attended, presenting over 50 papers on tropical forest dynamics, diversity, conservation and management. The exchange of information and opportunity to learn about projects conducted in rainforests around the world proved quite helpful to the researchers from developing countries in addressing issues related to rainforest diversity and its conservation.

15. During the 2000-2001 biennium, UNEP plans to undertake a number of activities in the area of conservation and sustainable use of genetic resources with a focus on the following:

- (i) Support to the development and application of methodologies for assessments of agricultural biodiversity, including the preparation of a state-of-the-art report on the status of agrogenetic resources and germplasm in key mountain areas.
- (ii) Identification and promotion of sustainable agricultural practices that enhance the ecological functions provided by biodiversity to agriculture.

-
- (iii) Assessment of national programmes and farmers' needs for the restoration of plant genetic diversity in agro-ecosystems in Africa.
 - (iv) Inventorization of priority forest genetic resources in Africa for the development of appropriate conservation strategies.
 - (v) Elucidation of the consequences, upon conservation and sustainable use of biodiversity resulting from the development and use of new technologies for the control of plant gene expression.
 - (vi) Capacity-building initiatives to address identified national, sub-regional and regional needs for conservation and sustainable use of plant genetic resources with emphasis on Western and Central Africa.
 - (vii) Support to national and regional programmes for halting genetic erosion and/or restoration of plant genetic diversity with emphasis in Africa.

16. UNEP will also undertake to promote the development of, and consensus building on policy, legal and economic instruments targetted at decision-makers at the national/sub-regional/regional levels. These instruments could be used for regulation of access to genetic resources, including arrangements for equitable sharing of benefits derived from the use of such resources.