



**CONVENTION ON
BIOLOGICAL
DIVERSITY**

Distr.
GENERAL

UNEP/CBD/SBSTTA/10/INF/25
5 February 2005

ENGLISH ONLY

**SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL
AND TECHNOLOGICAL ADVICE**

Tenth meeting

Bangkok, 7-11 February 2005

Item 6.2 of the provisional agenda*

**THE ROLE OF THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED
NATIONS IN RELATION TO BIODIVERSITY FOR FOOD AND NUTRITION**

Note submitted by the Food and Agriculture Organization of the United Nations

Note by the Executive Secretary

1. At the request of the Food and Agriculture Organization of the United Nations (FAO), the Executive Secretary is pleased to circulate herewith, for the information of participants in the tenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, note prepared by FAO on its role in relation to biodiversity for food and nutrition.
2. The document is being circulated in the language and form in which it was received by the Secretariat of the Convention.

* UNEP/CBD/SBSTTA/10/1.



FAO'S ROLE IN RELATION TO BIODIVERSITY FOR FOOD AND NUTRITION

Introduction

1. The Eight Conference of the Parties of the Convention on Biological Diversity (CBD) will consider "options for a new cross-cutting initiative on biodiversity for food and nutrition within the programme of work on agricultural biodiversity."¹ The new initiative will take into account ongoing work, to strengthen existing initiatives on food and nutrition, enhance synergies and fully integrate biodiversity concerns into their work. FAO has been invited to collaborate in bringing forward options for this initiative. This brief document provides some information on FAO's activities in this regard.
2. Achieving food security for all and ending malnutrition is at the heart of the FAO's efforts, FAO acknowledges the importance of biodiversity to food security and nutrition. This is why in 2004 FAO chose the theme "Biodiversity for Food Security" for World Food Day, which is observed every year in more than 150 countries. The Seventh Conference of the Parties to the CBD welcomed FAO's initiative to dedicate World Food Day 2004 to biodiversity for food security and encouraged Parties and other Governments and the Executive Secretary to the Convention to participate in it.²
3. Harnessing the power of biodiversity can indeed significantly and sustainably increase food production and enhance rich and diverse diets, if biodiversity for food and agriculture are properly addressed within the systematic approach needed in food and nutrition policy-making. The future establishment of the new cross-cutting initiative on biodiversity for food and nutrition, within the programme of work of agricultural biodiversity, represents, therefore, yet another opportunity to strengthen mutual cooperation between the CBD and FAO.
4. FAO has a long-standing work related to biodiversity for food and nutrition. Its major policies, programmes and activities on this field are reviewed by the inter-governmental Commission on Genetic Resources for Food and Agriculture. The CBD's new initiative should enhance synergy with the work of the Commission. The Commission oversees FAO cooperation with the Conference of the Parties to the CBD. At its Tenth Session, the Commission supported:

*"FAO's contribution to the establishment of a cross-cutting initiative on biodiversity for food and nutrition, within the CBD's existing Programme of Work on Agricultural Biological Diversity. It noted that this would involve cooperation with other organizations, such as IPGRI. The thematic study on the contribution of plant genetic resources to health and dietary diversity, within the process to prepare the second State of the World's Plant Genetic Resources for Food and Agriculture, would be an important element of this work".*³
5. As acknowledged by the SBBSTA's working document, the SCBD has held informal personal contacts with FAO in preparing the document for SBBSTA-10. FAO looks forward for the next round of preparation of options for this initiative, when more formal discussions with FAO and the CBD Secretariats, and with other organizations, are expected, prior to COP VIII. The present document

¹ See Decision VII/32 of the Conference of the Parties to the CBD.

² See Decision VII/3 of the Conference of the Parties to the CBD.

³ See paragraph 76, CGRFA-10/04/REP, "Report of the Tenth Regular Session of the Commission on Genetic Resources for Food and Agriculture"; Rome, 8 - 12 November 2004.

analyzes the challenges ahead in the efforts of the international community to end hunger and malnutrition, and gives further information of FAO's work and strategy in this area.

FAO's efforts to mainstream biodiversity for food and agriculture

6. FAO's mandate is to raise levels of nutrition, improve agricultural productivity, better the lives of rural populations and contribute to the growth of the world economy. Enhancing the sustainable use and safeguard of biodiversity has traditionally been a core element of FAO efforts to defeat hunger and malnutrition.

7. Over the years, FAO has developed or coordinated the major international initiatives on nutrition and food security, including the convening of global conferences, meetings and forums. In recent years these have included the International Conference on Nutrition, 1992; the World Food Summit, 1996; and the World Food Summit Five Years Later, 2002. In the field of nutrition the FAO provides assistance and support to Member Countries and cooperates with a range of international and regional organizations, in particular with the World Health Organization, and networks, working in the fields of nutritional assessment and requirements, food composition, community nutrition, urban nutrition and Nutrition Country Profiles. FAO has a wide range of publications in the area of nutrition, some periodical publications like the *Journal of Food Composition and Analysis* highlight the nutritional value of the biodiversity that feeds the world, including less known cultivars and species of crops, other plants, farm animals and fish.

8. FAO supports countries' efforts to mainstream biodiversity into the food and agriculture sector, including into nutrition planning. Biodiversity is a cross-cutting area in which almost all FAO Divisions has some involvement. The main mechanism for coordination of all FAO activities on biological diversity is the Inter-Departmental Working Group on Biological Diversity for Food and Agriculture (IDWG/BIOD).

9. Most of FAO's work to integrate biodiversity into the food and agriculture agendas has been done through its intergovernmental Commission on Genetic Resources for Food and Agriculture. The Commission was established in 1983 to oversee FAO's policies and programmes related to plant genetic resources, technical work in FAO on conservation and sustainable use of genetic resources for food and agriculture had started already in the early sixties. The Commission now deals with all biodiversity of relevance to food and agriculture. It has 166 Member Countries. It develops and monitors global instruments, such as the Global Strategy for the Management of Farm Animal Genetic Resources and the Global System on Plant Genetic Resources. It oversees FAO's cooperation with the Conference of the Parties of the Convention on Biological Diversity, and regularly receives reports from international organizations working in the field of biodiversity for food and agriculture.

A special focus on FAO's work to mainstream biodiversity in nutrition

10. The Commission on-going work is relevant in considering the establishment of the new CBD initiative on biodiversity for food and nutrition. Two major assessment processes are the following:

- **First Report on the State of the World's Farm Animal Genetic Resources:** the first-ever country-driven assessment on farm animal diversity will describe the current situation of animal genetic resources for food and agriculture, at the global level, and identify the gaps and needs for their conservation and sustainable utilization. The number of Country Reports already finalized is 165. One major objective of the Report is to analyze and report on the state of animal genetic resources, their status and trends, and on their contribution to food, including nutrition, agriculture, and rural development.
- **Second Report on the State of the World's Plant Genetic Resources for Food and Agriculture:** in 1998 FAO published the first comprehensive worldwide assessment of the status and use of plant genetic resources for food and agriculture. The Second Report is expected to be finalized by 2008, with the preparation expected to reach 160 of a similar

number of Country Reports than in the process for Farm Animal Genetic Resources. The Second Report will include a chapter addressing the contribution of plant genetic resources to food security, nutrition and sustainable agriculture. Moreover, at its Tenth Session, the Commission approved the preparation of a thematic background study on the contribution of plant genetic resources to health and dietary diversity. In supporting FAO's contribution to the establishment of the CBD's initiative on biodiversity for food and nutrition, the Commission noted that this thematic study would be an important element of this work.

9. The work of the Commission has been fundamental in integrating the conservation and sustainable use of biodiversity into the food and nutrition programmes and agendas. The Commission regularly reviews and advises FAO Governing Bodies on its policies, programmes and activities related to biodiversity and genetic resources for food and agriculture, including sectorial activities and cross-sectorial areas related to biodiversity for sustainable development, nutrition, biotechnology, biosecurity, organic agriculture, trade negotiations or ethics.⁴ The Commission regularly receives reports from a range of relevant international organizations, including intergovernmental organizations, the CGIAR, and IPGRI in particular, civil society organizations and the industry, on their activities in biodiversity for food and agriculture.⁵ The CBD's new initiative should therefore synergy with the work of the Commission. The Commission is in the process of establishing a Multi-Year Programme of Work to organize its future work, including strengthening mutual cooperation with the CBD.

11. The next paragraphs introduce FAO work being done in the area of biodiversity for improved nutrition, as it has particular importance for the future establishment of the initiative on biodiversity for food and nutrition, within the CBD's programme of work on agricultural biodiversity. Upon its creation, FAO was designated as the principal international agency for nutrition. Nutrition was specified as a fundamental focus, recognising the need to tackle together the production and the consumption side of the food chain in a systemic and coherent way.

12. As stated in the FAO's State of Food Insecurity in the World, more than 800 million people suffer from hunger; more than 2 billion people suffer from micronutrient deficiencies, often called "the hidden hunger"; and undernourishment and micronutrient deficiencies cause the deaths of more than 5 million children every year. Their diets supply inadequate amounts of vitamins and minerals such as vitamin A, iron, iodine, zinc, folate, selenium and vitamin C. Deficiencies usually occur when the habitual diet lacks sufficient quantities and diversity of the fruits, vegetables, dairy products, meat and fish that are the best sources of many micronutrients.

13. FAO recognizes the promise biodiversity holds for eliminating some of the causes of world hunger and malnutrition, and the range of activities described below demonstrate the organization's support to countries' efforts in enhancing biodiversity use to improve nutrition at different levels. The recognition of the value of biodiversity for improved nutrition is one component of the shifting paradigm in the approaches to tackle malnutrition. These new approaches stress that in order to be successful, strategies to ameliorate nutrition have to be systematic and multi-sectorial, needing to be integrated in a general framework.

14. Sustainable improvement in nutritional well-being is achieved through a combination of evidence-based and community-based actions to address local causes of malnutrition; improvements in national and sectorial policies and programmes; support to civil society institutions to enable poor households to acquire sufficient food and utilise it most effectively; and enhancement of education and public information for dietary improvement. Many of these actions have little value if pursued individually, and some may have no direct linkage to biodiversity.⁶ The risk is that the limited resources available

⁴ See for example documents to the Tenth Regular Session of the Commission: CGRFA-10/04/10.1; CGRFA-10/04/10.2; CGRFA-10/04/10.3.

⁵ See for example documents to the Tenth Regular Session of the Commission: CGRFA-10/04/11.1; CGRFA-10/04/11.2; CGRFA-10/04/11.3.

⁶ For example, there may be little gain in assessing biodiversity for improved nutrition if not complemented with measures to improve post-harvest preservation (losses of perishable fruits, vegetables and roots have been estimated to be about 50 percent of what is grown).

may be diverted to favor single measures that are not implemented through coherent and overall nutrition strategies. Little, then, will remain for addressing the underlying and basic causes of malnutrition.

15. FAO work in nutrition related to biodiversity is extensive, the following are just selected activities on ongoing activities.

16. *Assessment:* In the area of food composition, FAO operates the Global Secretariat for the International Network of Food Data Systems (INFOODS), assisting countries in developing nutrition information systems. FAO is developing dietary consumption methodologies to capture biodiversity as an important element in the measurement of dietary diversity. As the work progresses, it is becoming clearer that the existing biodiversity has the potential to eliminate many micronutrient deficiencies, and contribute to better nutrition generally. When more compositional data are available at the cultivar level, more incentive will exist to capture varietal level consumption data. These data can then be used in nutrition education, agriculture and health policy development, and community nutrition programmes.

16. The importance of identifying the cultivar-specific nutrient profiles of food plants and animals is recognized and promoted through the INFOODS Regional Data Centres. Uncultivated and lesser-known cultivars have always represented an important resource that may be exploited to contribute to nutritional adequacy of populations. Recent compositional research has provided data to confirm the micronutrient superiority of these cultivars over some of the more widely-utilized cultivars. The FAO/INFOODS official journal, *The Journal of Food Composition and Analysis (JFCA)*, publishes at least 100 scientific papers each year, one-quarter of which highlight the nutritional importance of lesser-known food plants and animal.

17. Building awareness: A series of posters has been prepared, celebrating the diversity in indigenous foods, and presenting nutrient data. Collaboration with FAO Fisheries Dept (FIRI) has involved a workshop and technical consultation on Aquatic Biodiversity and Nutrition. Cooperation within FAO has involved wild foods characterized as non-wood forest products, which guard against the failure of even the most advanced agricultural systems.

18. Collaboration within FAO has involved workshops, reports and technical consultations on aquatic animal diversity and nutrition, the importance of which relates to supplies of high quality protein, essential fatty acids, macro and trace elements, and vitamins in the diets of rural people. The loss of aquatic biodiversity in rice-based ecosystems leads to deficiencies of these nutrients, with the associated problems of poor cognitive development and higher prevalence of stunting in children, poorer pregnancy outcomes, and other nutrient-related morbidities and mortalities. More consumption and compositional data are required, and the value of these resources for nutrition needs to be recognized in nutrition planning.

19. *Integrating biodiversity in food and nutrition agendas:* The FAO's 20th Session of the International Rice Commission receive a paper on Nutritional contribution of rice and impact of biotechnology and biodiversity in rice-consuming countries which suggested important directions for food composition data generators and compilers. The Commission recommended that: (1) Existing biodiversity of rice varieties and their nutritional composition need to be explored before engaging in transgenics, (2) Nutrient content needs to be among the criteria in cultivar promotion, and (3) Cultivar-specific nutrient analysis and data dissemination should be systematically undertaken.

20. FAO is already supporting countries efforts to incorporate nutrition objectives into their agricultural and rural development programmes including their national strategies for agricultural biodiversity, one good example is ongoing work in Laos PDR.

Final Remarks

21. Enhancing the sustainable use and safeguard of biodiversity has traditionally been a core element of FAO efforts to defeat hunger and malnutrition. FAO is conducting major processes and innovative programmes to underpin the value of biodiversity for food and agriculture, including in agricultural

plants, farm animals, non-timber forest products and other terrestrial food resources, and aquatic food resources.

22. Over the years, FAO has developed or coordinated the major international initiatives on nutrition and food security, including the convening of global conferences, meetings and forums. In recent years these have included the International Conference on Nutrition, 1992; the World Food Summit, 1996; and the World Food Summit Five Years Later, 2002. In the field of nutrition the FAO provides assistance and support to Member Countries and cooperates with a range of international and regional organizations, and networks, working in the fields of nutritional assessment and requirements, food composition, community nutrition, urban nutrition and Nutrition Country Profiles. FAO has a wide range of publications in the area of food and nutrition, and some highlight the nutritional value of less known cultivars and species of crops and other plants, animals and fish.

23. The future establishment of the new cross-cutting initiative on biodiversity for food and nutrition, within the programme of work of agricultural biodiversity, represents, therefore, yet another opportunity to strengthen mutual cooperation between the CBD and FAO. FAO looks forward for the next round of preparation on options for this initiative prior to COP VIII, when more formal discussions between FAO and the CBD Secretariats, and with other organizations, are expected.
