

Biodiversity Monthly Newsletter

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Biodiversity Conservation, Sustainable Utilization, Access and Benefit Sharing



31 March 2012

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ABS Protocol Compliance Meeting discusses draft procedures and mechanisms

News received 28 March 2012: The Secretariat of the Convention on Biological Diversity (CBD) has circulated the report of the expert meeting on compliance with the Nagoya Protocol on access and benefit-sharing (ABS), held from 28 February – 1 March 2012, in Montreal, Canada.

Participating experts worked on the basis of a background note containing a synthesis of views and possible draft elements and options for cooperative procedures and institutional mechanisms to promote compliance with the Protocol and address cases of non-compliance under Article 30 of the Nagoya Protocol. With a view to learning from the experiences in other relevant international fora, presentations were given by representatives of other treaty secretariats, including the Cartagena Protocol on Biosafety, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR). Experts then worked towards reaching a common understanding on draft elements and options for procedures and mechanisms on compliance, including: their objectives, nature and underlying principles; institutional mechanisms, namely a compliance committee, and their functions; and procedures in relation to the compliance committee. The meeting's outcome will be forwarded to the second meeting of the Intergovernmental Committee for the Nagoya Protocol on ABS, to be held from 2-6 July 2012, in New Delhi, India.

Source: CBD

World Water Day 2012 “Water and Food Security”

22 March 2012 Today there are over seven billion people to feed on our planet. Great advances in food production have been achieved over the past three decades to feed the world's population. But while the global famine widely predicted in the 1960s and 1970s was successfully avoided due to the so-called “green revolution”, this progress came at significant environmental costs. Losses of natural areas, pollution of waterways, and the depletion of freshwater resources have had significant impacts on ecosystems and biodiversity.

Still there remain far too many people without sufficient food or even access to food of the necessary nutritional value. Most estimates suggest that a 70 per cent increase in food production will be required in order to feed what is expected to be a global population of nine billion people by 2050. This is a significant challenge: limited opportunities exist for expanding the area of land under cultivation without compromising other land uses, and agriculture is currently too dependent on external inputs and over-reliant on fossil fuels. But most importantly, water availability is now regarded as the key constraint to further gains in agricultural output. While we require only about two to four litres of water a day to drink, it takes between 2,000 and 5,000 litres of water to produce one person's daily food.

Agriculture already accounts for 70 per cent of water use and there is increasing competition with other uses, particularly for industry and the rapidly expanding urban populations. Recent assessments conclude that globally we are already reaching the limit of sustainable water use and that this limit has

already been exceeded in many areas, as witnessed by widespread depletion of river flows, continuing loss of wetlands, desertification and groundwater depletion on continental scales. Food security for future generations will now depend on building a successful partnership around the sustainable management of water.

The previous “green revolution” cannot be repeated in order to meet the challenge of achieving future food security. However, success is achievable by shifting the focus from simply intensification to sustainable intensification. Central to this will be water security to underpin food security. Biodiversity plays the central role in this. Genetic diversity held within existing farming systems and in nature is a key resource required to enable us to find the improved crop and livestock varieties needed in order to improve water-use efficiency.

Biodiversity is also important through its role in supporting ecosystem functions, and the services and benefits they deliver. With regard to water, these are significant: the quantity of water available at any time and place, and its quality, is greatly influenced by ecosystems. Rainfall is influenced by plant transpiration on regional scales. Forest vegetation maintains soil stability, thereby regulating erosion. Soil biodiversity plays the key role in enabling water to penetrate soil and be stored there, facilitating groundwater recharge, as well as nutrient cycling, to support sustainable crop production. Conservation agriculture is an approach that harnesses these benefits of biodiversity by reducing soil disturbance and chemical application, which maintains land cover and reduces water use, while delivering significant yet sustainable increases in production and farm profitability. The International Initiative on Soil Biodiversity under the Convention on Biological Diversity is playing a key role in further supporting such approaches.

Farming is already a risky business, particularly regarding water. Climate change is adding additional risks and will impact ecosystems, and therefore farming, largely through changing water availability. We therefore need to respond by managing our ecosystems better so that they can support improved water security for food production in the face of increasing scarcity of water and extremes in its availability. Our policies will need to recognize the important role of natural storage of water provided by healthy ecosystems. Water balances in soils, wetlands and groundwater, and their inter-relationships with surface water flows provided by wetlands and land cover such as forests are critical components of the water cycle. Better use of rain fed agriculture, widely regarded as having a significant role to play in increasing production without irrigation, essentially involves better use of soil biodiversity to sustain water availability for crops. Ecosystems provide “natural water infrastructure” which needs to be considered in parallel, and as complementary to, physical water infrastructure such as dams and other impoundments and irrigation approaches.

Such approaches lie at the heart of the Strategic Plan for Biodiversity 2011-2020, and it’s Aichi Biodiversity Targets, adopted at the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity, held in Nagoya, Japan, in October 2010. We have shifted beyond the dialogue of “trade-offs” between biodiversity, water and food production to the recognition that there are mutually supporting objectives at play, with significant win-win opportunities. Biodiversity is increasingly being viewed as a solution to problems. With full recognition of this, and with enhanced implementation of the Strategic Plan, backed by strong political will, we can realize the goal of achieving a food- and water-secure world by 2050. Through these actions, we can make our second farming revolution truly green.

Benefit sharing agreement on tef: facts and lessons discussed

18 March 2012 Adama: a two days consultative workshop was held in Teatas International Hotel, Adama to discuss a Report on the Access and Benefit Sharing Agreement on Tef Genetic Resources and benefits of ratifying the Nagoya Access and Benefit Sharing Protocol.

The report, produced by a team of lawyers, tells the story of the access and benefit sharing agreement on tef genetic resources, an agreement that was entered into in 2005 between the Ethiopian Institute of Biodiversity Conservation (IBC) and the Dutch company Health and Performance Food International (HPFI).

Even though the agreement was celebrated as one of the most promising of its time, implementation failed. Hence, the objective of the report is to provide an in-depth analysis of the agreement and to draw lessons of relevance to Ethiopia and other provider countries.

According to the report, when the ABS agreement on tef was negotiated, the main objective for Ethiopia was to benefit from the utilization of tef genetic resources, among other things, in the form of employment opportunities and value added related to tef products in Ethiopia, technology transfer, research cooperation and monetary benefits. It was expected that the company and their tef products would do well in Europe, and that there would be considerable benefits to share.

However, the outcomes of the agreement were not according to the agreed terms and the receiver/user failed to do so because of bankruptcy issues as complained by the company. Moreover, the company could not deliver the mentioned benefits and has also breached some of the most important terms of the agreement such as third party transfer, and the use and patenting of the indigenous knowledge such as the traditional knowledge on tef processing and utilization of Ethiopian peoples.

The most important reasons for such failures were agreed to be lack of information exchange mechanisms between both parties, lack of good faith from the company and lack of capacity of the provider and lack of internationally legally binding regimes.

Lack of internationally legally binding regime was one of the most important impediments to the success of the agreement as clearly established by the report. On this regard, the Nagoya Protocol marks a substantial step forward in the international regulation of ABS to genetic resources, and aims at creating greater legal certainty and transparency for providers and users of genetic resources.

To this end, the benefits of ratifying the protocol were discussed by the workshop participants. It was agreed that the Protocol has to be ratified before the end of the deadline, which is June 2012. Ethiopia has not yet signed or ratified the Protocol.

The workshop participants also recommended establishment of strong synergy and collaboration among concerned stakeholders to bring up the expected outcomes and for the betterment of future similar agreements.

Note to readers: *Eragrostis tef*, or 'tef', is an annual grass that grows well under difficult conditions. Even in a bad season it will produce grain. Its most likely direct wild progenitor is *Eragrostis pilosa*, a

weedy species very common in Ethiopia. Indeed, the crop is Ethiopian origin, and there it holds a particularly important position. Its predictability makes it invaluable to poor farmers and an appreciated cereal in areas with changeable conditions. In Ethiopia, tef is mainly used to make *injera*, a well-loved bread. Tef is highly nutritious, but its main value for modern consumption outside Ethiopia is believed to lie in its being gluten-free.

Frog thought extinct found in Africa

SAN FRANCISCO, March 27 (UPI) - A frog species not seen in 62 years has been rediscovered in a corner of the strife-torn African country of Burundi, scientists say.

The Bururi long-fingered frog, *Cardioglossa cyaneospila*, was last seen by scientists in 1949 and was feared to be extinct after decades of turmoil in the tiny East African nation, they said.

Herpetologists from the California Academy of Sciences and University of Texas at El Paso discovered a single specimen of the frog during a research expedition to Burundi in December 2011, a release from the San Francisco-based Academy reported Tuesday.

Previous knowledge of Burundi's wildlife came from scientific surveys conducted in the mid-20th century when the nation was under Belgian administration, researchers said, but its history since then has been one of political unrest, population growth and habitat loss.

Academy curator David Blackburn and Texas colleagues searched for the frog in habitats still relatively intact in the southwest part of the country.

Blackburn — suspecting *C. cyaneospila* would make a call similar to possible close relatives in Cameroon — found a single specimen on his fifth night in the forest.

“I thought I heard the call and walked toward it, then waited,” Blackburn said. “In a tremendous stroke of luck, I casually moved aside some grass and the frog was just sitting there on a log. I heard multiple calls over the next few nights, indicating a healthy population of the species, but I was only able to find this one specimen.”

The Bururi long-fingered frog is about 1.5 inches long, with a black and bluish-gray coloration, and males are notable for one extra-long finger on each foot, whose purpose is unknown.