

# Biodiversity Monthly Newsletter

*Institute of Biodiversity Conservation, Addis Ababa, Ethiopia: [www.abc.gov.et](http://www.abc.gov.et)*

Biodiversity Conservation, Sustainable Utilization, Access and Benefit Sharing



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## Ethiopia ratifies the Nagoya Protocol on Genetic Resources

**28 June 2012, Addis Ababa** – Ethiopia ratified the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity on 28 June 2012. The Institute of Biodiversity Conservation has been given the mandate to implement the Protocol and follow up its implementation.

After series of discussions with stakeholders and concerned officials as well as awareness creation campaigns, the Protocol was finally ratified. Ethiopia, being one of the centers of origin and diversity to various domesticated and wild relatives of crops, will benefit a lot from the Protocol. And the ratification is a victory for the biodiversity-rich communities who have been affected by bio-piracy due to lack of international legally binding regimes.

The Protocol significantly advances the Convention's third objective that is fair and equitable sharing of the benefits arising out of the utilization of genetic resources by providing a strong basis for greater legal certainty and transparency for both providers and users of genetic resources.

Specific obligations to support compliance with domestic legislations or regulatory requirements of the Party providing genetic resources and contractual obligations reflected in mutually agreed terms are a significant innovation of the Protocol. These compliance provisions as well as provisions establishing more predictable conditions for access to genetic resources will contribute to ensuring the sharing of benefits when genetic resources leave a Party providing genetic resources. In addition, the Protocol's provisions on access to traditional knowledge held by indigenous and local communities when it is associated with genetic resources will strengthen the ability of these communities to benefit from the use of their knowledge, innovations and practices.

By promoting the use of genetic resources and associated traditional knowledge, and by strengthening the opportunities for fair and equitable sharing of benefits from their use, the Protocol will create incentives to conserve biological diversity, sustainably use its components, and further enhance the contribution of biological diversity to sustainable development and human well-being.

It is remembered that after six years of negotiations, the Protocol was adopted at the tenth meeting of the Conference of the Parties on 29 October 2010, in Nagoya, Japan. Ethiopia ratified the Convention on Biological Diversity in 1994

## IBC signs ABS agreement on three plant species with private company

**14 June 2012 Addis Ababa** – The Institute of Biodiversity Conservation (IBC) and Docomo P.L.C signed an agreement on Access to and benefit sharing from the use of three different plants species for the purpose of manufacturing essential oils, cosmetics and herbal medicine in Ethiopia.

The company, which mainly has an investment in U.S.A and a subsidiary in different African countries, signed 10 year agreement with IBC to use three Ethiopia's plant genetic resource as a raw material for its products and to share the monetary and non-monetary benefits with Ethiopia based on the rules and regulations of the Access and Benefit Sharing (ABS) laws of Ethiopia and the Convention on Biological

Diversity (CBD). The monetary benefits include lump sum, royalty, upfront and license fees whereas the non-monetary benefits are knowledge and technology transfer and capacity building.

Previously IBC has entered into two ABS agreements on Tef and Vernonia. This third agreement is signed for three different plant species; namely *Dichrostachys cinerea*, *Osyris sp.* and *Withania somnifera*.

Dr. Gemedo Dale, Director General of IBC, on the Agreement signing ceremony explained that these three species are wild plants and have never been considered as valuable resources. But now, they have got a chance to become an enormous asset for Ethiopia's economy.

Dr. Gemedo said "Ethiopia earned more than 2 million birr just by signing this Agreement. This shows that there is no worthless genetic resource, every single genetic resource should be conserved and considered valuable as they have potential value in one way or the other."

Dr. Zeleke W/Tensay, Director of Genetic Resources Transfer & Regulation Directorate, noted that this ABS agreement exercise differs from the previous two agreements for various reasons. "IBC has learned a lot from the past experiences, and the factory which uses these genetic resources is going to be built in Ethiopia and the pre-negotiation processes went according to the proclamation and regulation of the country and involved detailed processes to come to this final stage."

The benefits will be shared between the company and the community/the government of Ethiopia. The benefits obtained from the use of these genetic resources are incentives to the community/government to conserve and sustainable utilize Ethiopia's biodiversity.

**Note to readers:** One of the objectives of the CBD is access to and benefits sharing from genetic resource. ABS is the key component and one means for the rest two objectives, conservation and sustainable utilization. Ethiopia has ratified the CBD in 1994 and given the mandates and duties to the Institute of Biodiversity Conservation (IBC).

## Ecologists Call for Preservation of Planet's Remaining Biological Diversity

**June 6, 2012**— Twenty years after the Earth Summit in Rio de Janeiro, 17 ecologists are calling for renewed international efforts to curb the loss of Earth's biological diversity. The loss is compromising nature's ability to provide goods and services essential for human well-being, the scientists say.

Over the past two decades, strong scientific evidence has emerged showing that decline of the world's biological diversity reduces the productivity and sustainability of ecosystems, according to an international team led by the University of Michigan's Bradley Cardinale.

It also decreases ecosystems' ability to provide society with goods and services like food, wood, fodder, fertile soils and protection from pests and disease.

“Water purity, food production and air quality are easy to take for granted, but all are largely provided by communities of organisms,” said George Gilchrist, program director in the National Science Foundation’s Division of Environmental Biology, which funded the research.

“This paper demonstrates that it is not simply the quantity of living things, but their species, genetic and trait biodiversity, that influences the delivery of many essential ‘ecosystem services.’”

Human actions are dismantling ecosystems, resulting in species extinctions at rates several orders of magnitude faster than observed in the fossil record. If the nations of the world make biodiversity an international priority, the scientists say, there’s still time to conserve much of the remaining variety of life—and possibly to restore much of what’s been lost.

“Much as consensus statements by doctors led to public warnings that tobacco use is harmful to your health, this is a consensus statement that loss of Earth’s wild species will be harmful to the world’s ecosystems and may harm society by reducing ecosystem services that are essential to human health and prosperity,” said Cardinale.

“We need to take biodiversity loss far more seriously—from individuals to international governing bodies—and take greater action to prevent further losses of species.”

An estimated nine million species of plants, animals, protists and fungi inhabit Earth, sharing it with some seven billion people. The call to action comes as international leaders prepare to gather in Rio de Janeiro on June 20-22 for the United Nations Conference on Sustainable Development, known as the Rio+20 Conference.

The upcoming conference marks the 20th anniversary of the 1992 Earth Summit in Rio, which resulted in 193 nations supporting the Convention on Biological Diversity’s goals of biodiversity conservation and the sustainable use of natural resources.

The 1992 Earth Summit caused an explosion of interest in understanding how biodiversity loss might affect the dynamics and functioning of ecosystems, as well as the supply of goods and services of value to society. In the Nature paper, the scientists review published studies on the topic and list six consensus statements, four emerging trends, and four “balance of evidence” statements.

The balance of evidence shows, for example, that genetic diversity increases the yield of commercial crops, enhances the production of wood in tree plantations, improves the production of fodder in grasslands, and increases the stability of yields in fisheries. Increased plant diversity results in greater resistance to invasion by exotic plants, inhibits plant pathogens such as fungal and viral infections, and increases above-ground carbon sequestration through enhanced biomass, and increases nutrient remineralization and soil organic matter.

“No one can agree on what exactly will happen when an ecosystem loses a species, but most of us agree that it’s not going to be good,” said Shahid Naeem of Columbia University, a co-author of the paper. “And we agree that if ecosystems lose most of their species, it will be a disaster.”

*Source: Science Daily*

## Logging in tropical forests: not all is lost

**June 8th, 2012** As tropical forests give way to cities, roads and soybean fields, what's left behind is a collage of forest remnants and 'secondary' forests that regrow after agricultural lands are abandoned. While protecting primary forests will always be essential for tropical conservation, these mosaic landscapes do retain a substantial proportion of forest species, even where forest products are extracted. Researching the impacts of timber harvesting on tropical forest plants and animals has kept ecologists busy over the past three decades. The question of just how much selectively logged forests contribute to global biodiversity conservation remains poorly analysed, and essentially, unanswered. But two recent meta-analyses of previously published research provide fresh evidence that selective logging, if carefully done, has relatively benign impacts.

In an article appearing in the journal *Conservation Letters*, Putz *et al.* (2012) found that, across a sample of 109 studies, the impacts of selective logging on the number of bird, mammal, insect and plant species were very modest overall. And good harvesting practices were not employed in most of the analysed cases, suggesting that their results are conservative. On the basis of 35 studies, the article by Gibson *et al.* (2011) in the journal *Nature* similarly reports that the impacts of selective logging on primary forest biodiversity are relatively small. Gibson and colleagues reinforced these conclusions by eliminating the 'drawer effect', i.e. the tendency to publish only when significant results are obtained.

There are some obvious flaws in the analyses: although meta-analyses are well-known statistical tools used to elucidate trends among a disparate set of studies with different experimental approaches and methods, the results are inevitably a caricature of reality. Studies from African forests are largely underrepresented in both articles. The number of trees harvested (the logging intensity) also varied considerably amongst published studies, as did logging techniques. And most of the published studies were of short duration, making it impossible for these meta-analyses to comment on long-term consequences.

Despite these shortcomings, both articles provide compelling evidence that selectively logged tropical forests across the globe are critical for conserving the full spectrum of biodiversity — from beetles to orangutans. The question is whether or not the long-term persistence of forests can be guaranteed solely on the basis of profits from timber, so that sustainable forest management is competitive compared with other market forces like agro-industrial expansion. The results of the article by Putz and colleagues (2012) seem to indicate 'not'; timber yields are expected to decrease over time because the 20–40 year logging intervals currently applied across the tropics cannot guarantee a constant supply of wood with attractive financial returns.

To help counter this trend, Putz *et al.* (2012) suggest a mixed strategy. One essential step is further promotion of sustainable timber harvesting practices, as these are directly linked to more forest carbon being retained, for which financial compensation might be available through REDD+ incentives. They also recommend increased recognition of locally based approaches to multiple-use forest management under clear land tenure arrangements. Other viable options include enhancing the financial benefits from forest certification, and making assurance of legality a prerequisite for international market access. The key to success is achieving the right balance across these approaches, so that climate, biodiversity

and people all benefit, and the multiple demands for tropical forest resources are satisfied. With nearly 400 million hectares of tropical forest officially designated for production purposes worldwide, one could say that there is plenty of room to play.

*Source: cifor.org*

## **Rio +20 outcome recognizes importance of biodiversity for sustainable development**

**22 June 2012- Rio de Janeiro** The nations of the world have recognized the crucial role of biodiversity in ensuring sustainable development in the outcome document of the Rio +20 conference and called for greater efforts to implement the Convention on Biological Diversity. The outcome document, entitled: “The Future we Want,” agreed by heads of state in Rio de Janeiro reiterated the international commitment to the achievement of the three objectives of the Convention on Biological Diversity, which was opened for signature at the 1992 “Earth Summit” held in Rio De Janeiro.

In keeping with this, governments affirmed the importance of implementing the Strategic Plan for Biodiversity 2011-2020, and its twenty Aichi targets, which were adopted by the Conference of the Parties to the Convention on Biological Diversity at their tenth meeting in Nagoya Japan in 2010.

Noting the adoption of a new legal instrument on access and benefit-sharing for genetic resources – the Nagoya Protocol, Parties to the Convention were invited to ratify or accede to the Protocol so as to ensure its entry into force at the earliest possible opportunity. Governments recognized the need for resources and therefore welcomed the strategy for resource mobilization in support of the achievement of the three objectives of the Convention on Biological Diversity, including the commitment to substantially increasing resources from all sources in support of biodiversity.

“This document shows that the world recognizes that biodiversity is a central intertwined component of sustainable development, and further that the Convention on Biological Diversity is the tool needed to ensure that it is protected and used sustainably for all in present and future generations” said Braulio Ferreira de Souza Dias, Executive Secretary for the Convention on Biological Diversity.

“I call upon governments to look at the commitments in this document and to use the opportunity of implementation of the Convention on Biological Diversity and its Protocols, including the Nagoya Protocol, to take the actions in support of the future we want. The agenda of sustainable development agreed by heads of states at the Rio+20 shall provide an enabling environment for an effective implementation of the objectives and targets of the CBD” he said.

The document also contained references to action in oceans, forests and dry and sub humid lands that support the programmes of work of the Convention on Biological Diversity.

*Source: CBD*