

Celebrating the International Day of Biodiversity (IDB-2011)
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Background

Biological resources are vital to humanity's socio-economic development, health, nutrition and livelihoods. As a result; there is a growing recognition that biological diversity is a global asset of enormous value to the present and future generations. At the same time, the threats from anthropogenic and natural causes to species and ecosystems have never been as devastating as they are today. Species extinction caused by human interventions continues at an alarming rate. This impoverishes us all and weakens the ability of the living systems on which we depend to resist growing threats such as climate change, disease outbreak, drought, floods and other natural calamities.

In an effort to address this global crisis, the United Nations Environment Program (UNEP) convened the Ad Hoc Working Group of Experts on Biological Diversity in November 1988 to explore the need for an international convention on biological diversity. The Ad Hoc working group later became the Intergovernmental Negotiating Committee and its work culminated on 22 May 1992 with the Nairobi Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity (CBD). The Convention was opened for signature on 5 June 1992 at the United Nations Conference on Environment and Development (the Rio "Earth Summit").

The Convention entered into force on 29 December 1993. The first session of the Conference of the Parties (COP), the highest decision making body of the Treaty, was organized from 28 November–9 December 1994 in the Bahamas. Hitherto 10 COP meetings were held, the fifth in Nairobi in 2000 and the most recent (COP 10) in October 2010 in Nagoya, Japan.

The Convention, which is inspired by the world community's growing commitment to sustainable development and the environment, is a major step forward in the sustainable management of biological diversity at all levels including local, national and global. The International Day of Biodiversity is a unique opportunity to increase awareness and understanding of the vital role that biodiversity plays in sustaining life on earth and in global socio-economic development.



¹ ASARECA denotes Association for Strengthening Agricultural Research in Eastern and Central Africa. Its member countries include Burundi, DR Congo, Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, Sudan Tanzania, and Uganda.

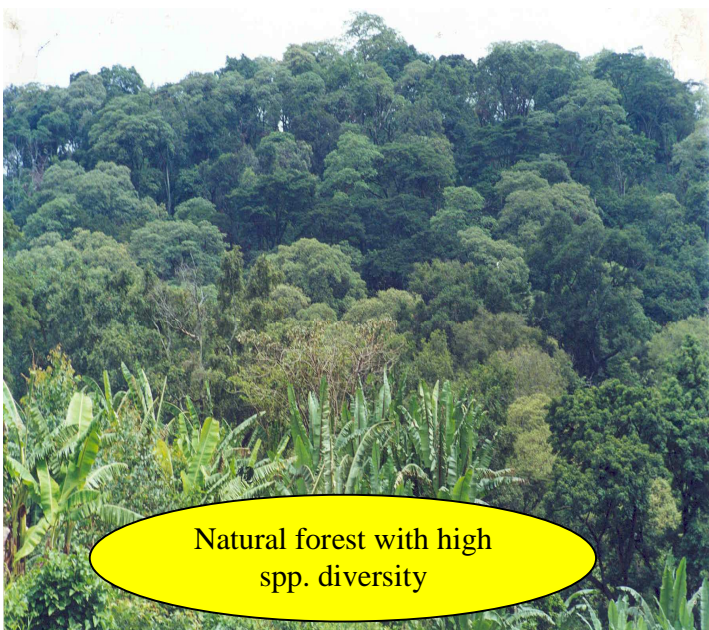
Objectives of CBD

The objectives of CBD are the conservation of biological diversity, the sustainable use of components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding. (CBD, 1992)

International Day of Biodiversity (IDB)

In recognition of the importance of biodiversity at the global level, the UN General Assembly in 2000 adopted 22nd May as the international Day of Biodiversity (IDB). Since then, the global community celebrates the day by targeting globally important themes such as marine and coastal biodiversity, agricultural biodiversity, mountain ecosystems, inland water ecosystems, etc., with a view to enhancing global awareness and sensitizing the global community on the importance of biodiversity conservation and sustainable utilization.

Realizing the strategic importance of this day to the attainment of ASARECA's ultimate objective to Improve Livelihoods, ASARECA member countries celebrate the Worlds Biodiversity Day by organizing various forums including national discourse, workshops, public discussions and exhibitions, among other activities. The activities highlight the role of biodiversity in ensuring that people have sustainable access to adequate and nutritive food to lead active and healthy lives and sustain ecosystem goods and services and promote socio-economic development.



The theme of this year's celebrations is Forest Biodiversity. Forests are biologically diverse systems, representing some of the richest biological areas on the planet. Forest biological diversity is a broad term referring to all the life forms found within forested areas and the ecological roles they perform. As such, it encompasses not just trees but the multitude of plants, animals and micro-organisms that inhabit forest areas and their associated genetic diversity.

Forests offer a variety of habitats for plants, animals and micro-organisms and provide ecosystem goods and services. However, forest biodiversity is increasingly threatened by deforestation, fragmentation, climate change, urbanization and other factors. The integrity of forest genetic resources is also threatened by a number of human activities including

changes in land use, inappropriate forest harvesting techniques, pollution and uncontrolled and undocumented movement of forest germplasm for plantation establishment contributing to the loss of locally adapted populations. There is no country in Eastern Africa that is not affected by massive deforestation and forest degradation and human activities.

The failure to act urgently to alter historical patterns of forest destruction has rendered the loss of thousands of hectares of forests at the global level inevitable. Eastern and Central Africa is not an exception. The Food and Agriculture Organization of the United Nations (FAO) recent estimates show that about 13 million hectares of the world's forests are lost due to deforestation each year. The annual net loss of forest area between 2000 and 2005 was 7.3 million hectares (equivalent to the net loss of 0.18 percent of the world's forests). According to the World Wide Fund for Nature/World Wildlife Fund and the International Institute for Applied Systems Analysis (IIASA) in their Living Forests report, 232 million hectares of forest could be lost by 2050 globally. A growing global population demanding more food, fibre, and fuel, coupled with historical patterns in misgoverned forest resources, will lead to massive destruction of forests, loss of species and biodiversity, unless timely action is taken, the report predicts.

CBD and forest biodiversity

The CBD addresses forests directly through the expanded program of work on forest biological diversity (annex to decision VI/22), adopted in 2002 by the Conference of the Parties at its sixth meeting. The forest work program constitutes a broad set of goals, objectives and activities aimed at the conservation of forest biodiversity and, the sustainable use of its components, and the fair and equitable use of the benefits arising from the utilization of forest genetic resources. The program of work on forest biodiversity consists of three components namely:

- (i) Conservation, sustainable use, and benefit-sharing
- (ii) Institutional and socio-economic enabling environment
- (iii) Knowledge, assessment, and monitoring.

CBD, as part of the efforts to enhance biodiversity conservation and use and to combat its degradation, agreed on a work plan and set targets at the beginning of the last decade (see 2010 Biodiversity Target on CBD website).

Goals and targets of the work plan

In April 2002, the Parties to the Convention committed themselves to achieve by a significant reduction of the current rate of biodiversity loss at the global, regional and national levels by 2010 as a contribution to poverty alleviation and to sustain life on our planet. This target was subsequently endorsed by the World Summit on Sustainable Development and the United Nations General Assembly and was incorporated as a new target under the Millennium Development Goals.

In assessing progress towards the 2010 targets, the Global Biodiversity Outlook (GBO) is the main publication of the Convention on Biological Diversity. Global Biodiversity Outlook assesses the status and trends of biodiversity and the key drivers of biodiversity loss. It also shows how the world moves towards sustaining biodiversity. The information contained in GBO comes from national reports and the information contained in these reports measures progress towards the achievements of the global Biodiversity Targets.

Looking at the reports, ASARECA member countries have taken important measures to achieve the 2010 Targets depending on the indicators considered (see <http://www.cdb.int/countries>). On the other hand, one can easily notice shortfalls in attaining the major milestones especially in terms of ecosystem and habitat conservation, promoting sustainable use, ensuring fair and equitable sharing of benefits, addressing threats to biodiversity, among others. In this context, ASARECA assists its member countries in developing capacities to manage plant genetic resources (PGRs) and undertaking research on biodiversity and the ecosystem services it provides to increase options for optimizing agricultural production and improving livelihood.

Through a project, the Eastern Africa Plant Genetic Resources, ASARECA supports both *in situ* and *ex situ* conservation of agro-biodiversity and capacity building for sustainable management of plant genetic resources (PGRs) in eight of its member countries in eastern Africa.

Challenges

In spite of the national and regional efforts, there are a number of challenges in the context of biodiversity management and use. The major ones include:

- Achieving socio-economic development vision while preserving ecological integrity
- Maintaining the delicate balance between biodiversity conservation and human development including agricultural expansion
- Lack of adequate information on biological diversity of plant, animal species and microbes and their nature of interaction
- Inadequate allocation of budgetary revenue by governments towards conservation and management of the entire biodiversity
- Burgeoning population growth and the pressure on the limited natural resources leading to over exploitation of part of the forest biodiversity
- Limited technologies for sustainable utilization and value addition
- Biodiversity governance and inadequate institutional frameworks

Moving forward

Biological diversity or 'biodiversity' including forest biodiversity is key to maintaining ecosystem goods and services. It contributes to climate change mitigation through carbon sequestration, nutrient recycling, water purification, etc. It plays a significant role in sustainable livelihood and healthcare delivery system of the rural community. Its rich variety of plants is the biological foundation for agricultural development including source of genes for adaptation to climate change and new product development through bio-prospecting. Forest biodiversity provides protection against calamities and environmental shocks.

With plants, animals and their environments intact, a range of essential natural processes is preserved. Wild animals, insects, fungi and micro-organisms decompose organic matter, transferring nutrients to the soil. Bees, butterflies, birds and bats pollinate fruit trees. Forests prevent flooding, landslides and reduce soil erosion. The conservation and sustainable management of forest biodiversity is therefore vital to sustaining life on earth.

Conserving forest biodiversity requires efforts on many fronts including measures to preserve the environment, better education, increased research and government support and investment. Having supportive policies at national as well as regional level in place is key to sustainable management and use of biodiversity.

At the international level, after a long wait of some six years, on 30 October 2010, the Access and Benefit Sharing (ABS) protocol for genetic resources was finally adopted in Nagoya, Japan. The Nagoya Protocol is a global instrument for access and fair and equitable sharing of the benefits arising out of the utilization of genetic resources. The Protocol captures important provisions including access, compliance, scope, benefit sharing, traditional knowledge transfer of technology and global multilateral benefit sharing mechanism among others.



Agricultural expansion at the expense of forests

Despite the fact that the biodiversity targets are part of the MDGs, less emphasis seems to be placed on them. According the Millennium Ecosystem Assessment report, agriculture is expanding at the expense

of biodiversity conservation. Regional efforts have so far been insufficient to reach the Millennium Development Goal, especially in the context of ecological and biodiversity conservation. Biodiversity is a key ally in fighting malnutrition, hunger, diseases and environmental degradation. The protection of biodiversity is something we cannot afford to ignore. Therefore, institutional strengthening, capacity building, embedding biodiversity issues into economic development, unleashing the power of markets through bio-prospecting, igniting the talent of policy makers to become champions of conservation and sustainability, are paramount to fostering forest biodiversity sustainable management in ECA region. This calls for intensification of collective efforts towards the management, conservation and sustainable development of all types of forests.

To make better use of existing potentials and to minimize negative impacts of genetic loss, there is a need to raise awareness on the need for sound management of forest genetic resources. As the natural distribution of many forest species crosses political borders, this highlights the need for national, regional and international collaboration. Trans-boundary forests are common in the region and joint planning and collaborative work is imperative for sustainable utilization of forest resources.

Developing comprehensive information system on components of forest biodiversity is indispensable for sustainable management of forest biodiversity. In the field of forest genetic resources, FAO has undertaken a major task in terms of sharing and transfer of information, know-how and technologies, through a wide-range of tools and mechanisms, in close collaboration with national and international partners.

This has created an extensive information system which includes national and regional reports on the status of forest genetic resources at species and inter-specific levels for forest tree species. It contributes to global knowledge and assessment of forest tree biological diversity, and provides basic data needed for the implementation of the work program on forests of FAO, and its member countries. In spite of this endeavor, strengthening and effective utilization of the information system and assisting countries to exploit the data is needed with a view to enhancing sustainable management of forest biodiversity.

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