

Uganda Factsheet on Biodiversity:

Over 80% of the population in Uganda depend on subsistence agriculture for their livelihoods. Biodiversity is estimated to contribute about \$1billion million in Uganda per year in monetary, non-monetary and informal sectors, and through provision of ecological services. In terms of energy, only about 8% of the population of Uganda (now estimated at about 33 million) have access to/use electricity, the rest of the population are dependent on firewood/biomass.

It is estimated that between 16-18 million tonnes of firewood are consumed annually as domestic firewood while another 4 million tonnes of charcoal are consumed annually. The annual production value of wetlands range between \$300-600 per ha while the purification and carbon sequestration is estimated at about US\$10,000 per ha. The contribution of wetlands in purification of water runs in millions. For example Nakivubo wetland in Kampala alone contributes about US\$1.7 million annually to the economy as tertiary wastewater treatment..

UGANDA'S OBLIGATION ON BIODIVERSITY AT THE INTERNATIONAL LEVEL

Uganda is a Party to the Convention on Biological Diversity (CBD) and the Cartagena Protocol on Biosafety. Uganda signed the CBD on 12th June 1992 and ratified it on 8th September 1993. As for the Cartagena protocol, Uganda signed the protocol on 24 May 2000 and ratified it on 24th November 2001. The CBD has three objectives: Conservation of biological diversity, sustainable use and equitable sharing of the benefits arising from the utilization of Genetic Resources.

The objective of the Cartagena Protocol on Biosafety is to ensure adequate levels of protection in the field of the safe transfer, handling and use of LMOs/GMOs resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health.

Uganda is also a Party to the following biodiversity related Conventions and agreements:

1. CITES - Uganda ratified the convention on 18th July 1991 and acceded to it on 16th October 1991).
2. Ramsar Convention on Wetlands - Uganda signed the Convention on 4th March 1988 and ratified it on 4th July 1988.
3. The Lusaka Agreement on Cooperative Enforcement Operations directed at Illegal Trade in Wild Fauna and Flora. Uganda signed it on 8th September 1994 and ratified it on 12th April 1996.
4. UNCCD - Uganda signed the agreement on 21st November 1994 and deposited the instrument for ratification on 25th June 1997.
5. UNFCCC - Uganda signed the Convention in June 1994 and ratified in

September 1997.

6. Convention on the Protection of the World Cultural and Natural Heritage - Uganda ratified it on 20th November 1987.

Uganda is obliged to implement the above Conventions and agreements.

THE LEGAL FRAME WORK ON BIODIVERSITY IN UGANDA

A. The Constitution of the Republic of Uganda (1995)

1. Objective XIII of the Constitution requires the State to protect important natural resources, including land, water, wetlands, minerals, oils, fauna, and flora on behalf of the people of Uganda.

2. Objective XXVII on Environment provides for the State, including local governments to promote the rational use of natural resources so as to safeguard and protect the biodiversity.

3. Article 39 provides for the right of every Ugandan to a clean and healthy environment.

4. Article 237(2)(b) requires Government or a local government to hold in trust for the people and protect natural lakes, rivers, wetlands, forest reserves, game reserves national parks and any land to be reserved for ecological and touristic purposes for the common good of all citizens.

5. Article 245 provides for Parliament to enact laws intended to protect the environment from abuse, pollution and degradation as well as for managing the environment for sustainable development and promoting environmental awareness.

B. National laws on environment and biodiversity

1. The National Environment Act Cap 153 (of 1995).

2. The Land Act Cap 227 (Of 1998) – Section 44(1) gives effect to Article 237 (2)(b) of the constitution.

3. The Uganda Wildlife Act Cap 200 (of 1996).

4. The Local Government Act 1997.

5. The Agricultural Seeds and Plant Act (1994).

6. The National Forestry and Tree Planting Act 2003.

7. Environment Impact Assessment Regulations, 1998.

8. Regulations on Access to Genetic Resources and Benefit Sharing 2005.

9. Regulations on Wetlands, Riverbanks, Lakeshores, Hilly and Mountainous areas (2000).

C. Policy framework & Action plans on biodiversity in Uganda

The National Environment Management Policy (1994) – provides for sustainable social-development. On biodiversity, the Policy objective is to conserve and manage Uganda's biodiversity in support of national socio-economic development.

1. The Decentralization Policy of 1997.
2. The Wildlife Policy of 1999.
3. The Forestry Policy of 2001.
4. The Fisheries Policy 2003.
5. The National Tourism Policy 2003.
6. The National Biotechnology and Biosafety Policy (2008).
7. The National Biodiversity Strategy and Action Plan (2002).
8. The National Forest Plan (2001).
9. The Wetlands Sector Strategic Plan (2001).
10. The National Development Plan.

D. The National Development Plan and the Environment

Objective 723 of NDP on the Environment is to restore degraded ecosystems (wetlands, forests, rangelands and catchments) through: Afforestation, re-forestation, tree planting, and enhancing private sector involvement.

Objective 724 of the NDP is to ensure sustainable management of environmental resources through:

- (a) Integration of environment concerns in the development initiatives.
- (b) Strengthening policy and legislative framework.
- (c) Developing national and international partnership for trans-boundary management of shared natural resources/ecosystems.
- (d) Promoting compliance to environmental laws, increasing public awareness.

Objective 725 of NDP on the Environment is to identify and address emerging environmental issues and opportunities through:

- (a) Developing a policy on e-waste.
- (b) Sustainable management of the Oil and Gas sector for example through development of a Strategic Environmental Assessment (SEA) and building capacity in managing the environmental challenges for the oil and gas sector.

On Climate Change, Objective 731 provides for the development of national capacity for coordination and implementation of climate change mitigation and adaption activities in Uganda through:

- (a) Strengthening the mandate and capacity of the Climate Change Unit in the Ministry of Water and Environment.
- (b) Putting in policy a national climate change policy.
- (c) Implementing the NAPA for Uganda.

Objective 733 of the NDP calls for a Low Carbon economic development path through promotion of initiatives for clean development and building the capacity of the private sector to participate in clean development initiatives

among others.

INSTITUTIONAL ARRANGEMENTS FOR BIODIVERSITY MANAGEMENT IN UGANDA

- (a) NEMA provides overall coordination (including implementation of the CBD) while the respective Government agencies are responsible for day to day implementation of activities on conservation and management of biodiversity.
- (b) The Technical Committee on Biodiversity Conservation.
- (c) Department of Fisheries resources – management of fisheries.
- (d) UWA – Wildlife Management (10 National Parks, 12 Wildlife Reserves).
- (e) NFA – Forest Management –Central Forest Reserves (506).
- (f) UNCST – Biosafety and Biotechnology, Implementation of ABS regulations.
- (g) NARO – Plant Genetic Resources, research on biodiversity.
- (h) Academia – Research, training of personnel.
- (i) Local governments - environment and natural management within their jurisdiction- e.g. Local forest reserves, wetlands etc.
- (j) The Private Sector and NGOs are also involved in biodiversity conservation.

IYB CELEBRATION IN UGANDA

- (a) This was coordinated by NEMA. A committee was put in place comprising of various stakeholders from Government Ministries, Government Agencies, NGOs, the private sector and the media.
- (b) IYB in Uganda was celebrated together with the World Environment Day on 5th June 2010 and was very successful. The Theme: Biodiversity for National Development. Conserve it.
- (c) Awareness materials were distributed. There were exhibitions.
- (d) The joint celebration of IYB and WED helped to raise the profile of biodiversity.
- (e) Documents for IYB events in Uganda was shared with the CBD Secretariat.

As follow up, NEMA through the Technical Committee on Biodiversity Conservation will develop a National Programme for the Decade of Biodiversity 2011-2020 declared by the UN General Assembly.

STATUS OF GLOBAL BIODIVERSITY

- (a) 40% of the bird population in the world are threat and are declining.
- (b) The Millennium Ecosystem Assessment concluded that 60% to 70% of ecosystem services are being degraded faster than they can recover.
- (c) The cost of failure to halt biodiversity loss on land alone in the last 10

years is estimated at US\$500 billion.

(d) About 50% of the known 52,000 medicinal plants in the world are threatened with extinction.

(e) Since 2000, 6 million hectares of primary forest have been lost each year.

(f) The annual losses as a result of deforestation and forest degradation is estimated at US\$ 2 trillion.

(g) About US\$45 billion is needed for mitigating deforestation and forests degradation.

STATUS OF BIODIVERSITY/ECOSYSTEMS IN UGANDA

Four ecosystem services are critically stressed in Uganda:

(a) Maintenance of biodiversity.

(b) Food and fiber provision.

(c) Water supply, purification and regulation.

(d) Fuel provision.

STATUS OF BIODIVERSITY IN UGANDA

(a) Uganda is estimated to be losing its forest cover at a rate of 80,000 ha per year – implying the ecosystem services associated with the forest are also lost.

(b) In 1890 forests and woodland covered approximately 45% of the total land area, and is now estimated at 20%. About 30% of the tropical high forest now degraded.

(c) Soil erosion and land degradation are becoming more pronounced in the country. Rivers are getting more silted. Recent estimates of costs of natural resource degradation in the country is put at 17% of the GDP of which 11% is constituted by soil degradation. The annual economic value of soil nutrient loss is estimated at US \$ 625m.

(d) Uganda is now estimated to be losing 80,000 ha of its forest cover annually. The biggest loss is in the private forests and forests on communal lands (which is 70% of the total forest cover in the country)

(e) Deforestation and rangeland degradation is estimated to costing Uganda US\$ 1.8 million and US\$ 400 million while lose of wildlife is estimated at US\$ 26 million annually.

CHALLENGES ON BIODIVERSITY CONSERVATION IN UGANDA

(a) Securing adequate financial resources for implementing biodiversity conservation activities.

(b) Balancing biodiversity conservation with poverty eradication and national development.

- (c) Restoring degraded ecosystems and species, halting destructive use of biodiversity.
- (d) Supporting community – based activities that enhance biodiversity conservation for example tree planting.
- (e) Management of invasive alien species.
- (f) Building adequate capacity for managing issues on climate change and biotechnology.
- (g) Strengthening awareness and enforcement.
- (h) Strengthening private sector involvement.
- (i) Information sharing and management.

OPPORTUNITIES FOR BIODIVERSITY CONSERVATION IN UGANDA

- (a) Policy, legal and institutional frameworks exist.
- (b) Global concern on halting biodiversity loss (CBD COP10) has put the deadline at 2020. Financial resources expected from Developed Countries and the GEF.
- (c) Funding opportunities under REDD+ under Climate Change and Payment for Ecosystem Services (PES) is expected to help local communities conserve biodiversity on their lands.
- (d) NDP has provisions on environment and climate change. This provides a framework for funding the environment sector.
- (e) Growing interest in biotechnology is providing a window for funding.
- (f) GEF through UNEP has provided funding for establishment of CHM.
- (g) Global concern on halting biodiversity loss (CBD COP10) has put the deadline at 2020. Financial resources expected from Developed Countries and the GEF.
- (h) Funding opportunities under REDD+ under Climate Change and Payment for Ecosystem Services (PES) is expected to help local communities conserve biodiversity on their lands.
- (i) The National Development Plan has provisions on environment and climate change. Government funding to the environment is therefore expected to continue and also to increase with time

FORESTS IN UGANDA.

Statistically, Uganda's forests cover was estimated at 3,556,000 hectares in 2011, which is 17 percent of the total land area of the country (UNDP/NEMA/UNEP, 2009). This is a reduction from the 4.9 million hectares in 1990 which is 24% of Uganda's total land

area (SPGS, 2007). Forests on private land constitute 64% of Uganda's forest cover which is a reduction from 70% in 1990. Inside protected areas, forests reduced from 1.47 million ha to 1.3 million ha; a difference of about 200,000 ha. The total (inside and outside protected areas) deforestation rate has gone up to 1.8% per year. For instance MAAIF has estimated that 70,000 hectares are lost every year and World Bank has indicated the degradation rates to be between 1-3% annually. At this rate all privately owned forests and woodlands could be converted within 62 years and with higher rates of deforestation, the conversion period would be 17 years (UNDP, 2005).