**GOVERNMENT OF UGANDA**

**NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)**

**GUIDELINES AND ACTION PLAN FOR FINANCING BIODIVERSITY CONSERVATION IN UGANDA**

**REVISED DRAFT REPORT**

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# FOREWORD

Since signing and ratifying the United Nations Convention on Biological Diversity, Uganda was actively pursued objectives of biodiversity convention. The country has a biodiversity coordination unit for national lead institutions and a National biodiversity conservation forum. Additionally, the country has focal points for the CBD, the Cartagena protocol, protected areas management, and national clearing house mechanism for information sharing (CHM) among others.

Even at the earliest time when the country started on the National Biodiversity Strategy and Action Plan (NBSAP), in the late 1990s, there has been an acute of awareness of the need to raise more resources for biodiversity conservation. The major source of funding for biodiversity conservation through the 1990s and 2000s was the US$ 3.5 million annual allocation from the government as well as additional contributions from revenues generated by national conservation agencies and external donor support. Innovative mechanisms such as fiscal reforms, payments for ecosystem services and green markets were used minimally without a coherent long-term strategy. As a result stakeholders in biodiversity conservation have always reported a shortfall in resources available. The inadequate resources for biodiversity conservation have allowed degradation of some ecosystem services to overtake sustainable use for forestry, agro-ecosystems, and in some national parks and wildlife reserves. Moreover, it proves difficult to conserve a resource whose productivity and contribution to livelihoods and society is diminishing

Uganda’s biodiversity, despite the resource constraints, has continued to contribute to the country’s economic development. Tourism, for example, earned the country $1.7 billion in national income higher than the value added by cash crops. Between 2005 and 2011, organic agriculture exports increased from $6.2 million to $36.6 million. These tangible benefits in the recognizable contributions of biodiversity conservation need to be augmented with a sustainable resource mobilization strategy to scale-up successful initiatives, enhance the productivity of ecosystems and to generate and publicise information of these gains so that more stakeholders recognize need to participate in biodiversity conservation efforts.

The cop decision X/3 on national resource mobilization strategies has also empowered country partners to establish a focal point, guidance and action plans for biodiversity conservation. Therefore Government of Uganda, through the Ministry of Water and Environment and the National Environment Management Authority welcomes and supports efforts to mobilize adequate resources to fund biodiversity conservation activities in the country. These guidelines and action plans will encourage the Government and stakeholders to utilize opportunities available within international and national regulatory and institutional frameworks to achieve optimal resource mobilization for biodiversity conservation in the country.

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Prof. Ephraim Kamuntu

Minister for Water and Environment

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The National Planning Authority

Uganda National Council for Science and Technology

National Agricultural Research Organisation and the affiliate Research Institutes

The National Forestry Authority

Uganda Wildlife Authority

Uganda Export Promotion Board

Uganda Bureau of Statistics

Climate Change Unit

Natural Chemotherapeutic Research Institute

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World Wide Fund for the Conservation of Nature (WWF)

International Gorilla Conservation Programme (IGCP)

Care Uganda

Nature Harness Initiatives (NAHI)

Katoomba Group

Chimpanzee Sanctuary and Wildlife Conservation Centre

ENR Africa Associates

……………………………………………………………..

Tom Okia Okurut, PhD.

Executive Director

National Environment Management Authority

# ACRONYMS

|  |  |
| --- | --- |
| CBD | Convention for Biological Diversity |
| CCU | Climate Change Unit |
| COP | Conference of Parties |
| CSO | Civil Society Organisation |
| DLGs | District Local Governments |
| DWRM | Directorate of Water Resources Management |
| FIEFOC | Farmer Income Enhancement and Forest Conservation Project |
| GEF | Global Environment Facility |
| HIPC | Highly Indebted Poor Countries |
| IUCN | World Conservation Union/International Union for the Conservation of Nature |
| MAAIF | Ministry of Agriculture Animal Industry and Fisheries |
| MFPED | Ministry of Finance Planning and Economic Development |
| MoLG | Ministry of Local Government |
| MTI | Ministry of Trade and Industry |
| MTWA | Ministry of Tourism, Wildlife and Antiquities |
| MWE | Ministry of Water and Environment |
| NAFIRRI | National Fisheries Resources Research Institute |
| NAFORRI | National Forestry Resources Research Institute |
| NARO | National Agricultural Research Organisation |
| NBSAP | National Biodiversity Strategy and Action Plans |
| NEMA | National Environment Management Authority |
| NFA | National Forestry Authority |
| OECD | Organisation for Economic Cooperation and Development |
| PAF | Poverty Action Fund |
| PMA | Plan for Modernisation of Agriculture |
| UBOS | Uganda Bureau of Statistics |
| UEPB | Uganda Export Promotions Board |
| UNCST | Uganda National Council of Science and Technology |
| UNDP | United Nations Development Programme |
| UNESCO | United Nations Education, Scientific and Cultural Organisation |
| UNFCCC | United Nations Framework Convention on Climate Change |
| UWA | Uganda Wildlife Authority |
| UWEC | Uganda Wildlife Education Centre |
| CBD | United Nations Convention on Biological Diversity |
| CCBA | Climate Community and Biodiversity Alliance |
| VCS | Verified Carbon Standard |
| SPR | Sector Performance report |
| BMCT | Bwindi Mgahinga Conservation Trust |
| BMCA | Bwindi-Mgahinga Conservation Area |
| LTEF | Long Term Expenditure Framework |
| MTEF | Medium Term Expenditure Framework |
| CAADP | Comprehensive Africa Agricultural Programme |
| CSWCT | Chimpanzee Sanctuary and Wildlife Conservation Trust |
| GV TES | Greater Virunga Transboundary Executive Secretariat |
| IGCP | International Gorilla Conservation programme |

# EXECUTIVE SUMMARY

These guidelines and action plans for financing biodiversity conservation in Uganda aim at establishing appropriate guidance to enable mobilization and proper use of financial resources in line with the United Nations Convention on Biological Diversity (CBD). The guidelines and actions plan will address the significant financial barriers to effective implementation of the National Biodiversity strategy and Action plans and other national biodiversity conservation plans and programmes in the country. In Uganda’s national development plan (NDP), biodiversity is characterised as one of the components of the environment sector. As an enabling component of the NDP, biodiversity conservation enhances the performance of primary and secondary sectors such as agriculture, forestry, tourism and industry.

These guidelines and action plans are divided into two sections. The first section describes the background information, highlights status of biodiversity conservation systems in the country, the status of financing for biodiversity conservation and strategy for financial resources mobilization. The second delineates the guidelines and action plans for financing biodiversity conservation in Uganda.

The guidelines delineate Uganda’s strategy for resources mobilization towards biodiversity conservation. The strategy for resource mobilization prioritises environmental fiscal reforms, government support, carbon finance and green markets and donor support. Additionally, payments for ecosystem services and biodiversity offsets are also included. The timeline for implementing these guidelines and action plans is 2014 and 2020. The list of action plans for financing biodiversity conservation in Uganda comprises the following:

1. Operationalize national biodiversity resource mobilisation focal point & governance framework
2. Biodiversity Conservation Coordination 2014 - 2024
3. Management of biodiversity in protected areas
4. National Biotrade Programme
5. implement regulations on access to genetic resources and benefit sharing
6. Information sharing mechanisms - CHM
7. Implementation of National Invasive Species Strategy and Action Plan
8. Involve local communities in biodiversity management
9. Integrate of indigenous knowledge & practices in biodiversity conservation
10. Promote public awareness on biodiversity
11. Progress made in the area of Biotechnology and Biosafety
12. Thematic programme of work on Inland Water Biodiversity
13. Programme of work on Agro-biodiversity
14. Mountain Biodiversity management
15. Biodiversity and Climate Change
16. Impact assessment for Biodiversity Conservation

**SECTION 1**

1. INTRODUCTION

2. STATUS OF BIODIVERSITY CONSERVATION SYSTEMS

3. STATUS OF FINANCING FOR BIODIVERSITY CONSERVATION

4. STRATEGIES FOR RESOURCE MOBILISATION

# 1. INTRODUCTION

The guidelines and action plan for financing biodiversity conservation in Uganda were developed by stakeholders to the National Biodiversity Strategy and Action Plan (NBSAP). The activity was coordinated by the National Environment Management Authority (NEMA), with financial support from Global Environment Facility (GEF). These guidelines and action plans provide a platform for all stakeholders to mobilize, and appropriately use, financial resources for biodiversity conservation in Uganda.The guidelines and action plans are divided into two sections. The first section comprises of the introduction, status of biodiversity conservation in Uganda, status of financing for biodiversity conservation, resource mobilization strategies for biodiversity conservation. The second section is composed of the guidelines and action plans for financing biodiversity conservation in Uganda.

## 1.1 National context and importance of biodiversity conservation

Uganda signed the Convention on Biological Diversity (CBD) on 12th June 1992 and ratified the convention on the 8th September 1993, as an expression of full commitment by the government to promote international and national cooperation in the sustainable management and use of biological resources. On the 24th May 2000 and 30th November 2001, the country signed and ratified, respectively, the Cartagena Protocol on Bio-safety to maximise the benefits of biotechnology and safeguard potential negative impacts from the use of genetically modified organisms.

Biodiversity can be defined as the variability among living things from all sources including, inter alia, terrestrial and aquatic ecosystems, and the ecological complexes of which they are part; this includes diversity within species, between species and ecosystems. Uganda has over 7.5% of mammals species, 10.2% of bird species (of 33 International Bird Areas - IBAs), and 6.8% of butterflies species that are globally recognized (Ogwal 2011)

The National Biodiversity Strategy and Action Plan (NBSAP) is Uganda’s medium term integrated strategy for biodiversity conservation and sustainable use. The five strategic objectives of the country’s NBSAP are: (i) to develop and strengthen institutional coordination, measures and frameworks for biodiversity management; (ii) to facilitate research, information management and information exchange on biodiversity; (iii) to reduce and manage negative impacts of various activities on biodiversity; (iv) to promote sustainable use and fair sharing of costs and benefits of biodiversity conservation; and (v) to enhance awareness on biodiversity issues among the various stakeholders.

On the other hand, the Aichi targets are 20 ambitious goals that make up the CBD’s strategic plan for biodiversity between 2011 and 2020 (CBD 2010). The Aichi targets were adopted at the conference of parties in Nagoya, Japan, in 2010. They cover five strategic goals of: (i) addressing the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society; (ii) reducing the direct pressures on biodiversity and promote sustainable use; (iii) improving the status of biodiversity by safeguarding ecosystems, species and genetic diversity; (iv) enhance benefits to all from biodiversity and ecosystem services; and (v) enhance implementation through participatory planning, knowledge management and capacity building (See Annex I).

These guidelines and action plan adopt the CBD standard definition for biodiversity. Biodiversity is a fundamental element of the earth’s life support system and is the basis for all ecosystem services and thus plays a fundamental role in maintaining and enhancing the world’s population as it supports many basic natural services for humans for example fresh water, fertile soils and clean air.

The major biodiversity conservation areas (and hotspots) include: Mgahinga Gorilla National Park and Bwindi Impenetrable National Park for the mountain gorillas and other regionally and globally important species; Rwenzori Mountain National Park for bay duiker among others; Sango bay wetlands and forest ecosystem and important tree species of global significance; Dry mountains of Karamoja for regionally and globally important plant species; Lake Victoria for cichlid and Nile perch species and Papyrus swamps of Lake Edward, George and Bunyonyi have the endemic papyrus species (NEMA 2002).

Biodiversity forms the foundation for human wellbeing and economic development. Over 80 percent of the population in Uganda depends on subsistence agriculture for their livelihoods. Biodiversity is estimated to contribute about US $1billion in Uganda per year in monetary, non-monetary and informal sectors, and through provision of ecological services (Emerton and Muramira 1999; UNESCO 2011).

## 1.2 Motivation for developing these guidelines and action plan

The main motivation for developing guidelines and action plans for financing biodiversity conservation is to address the significant financial barriers to effective implementation of biodiversity conservation strategies, actions and activities in the country (NEMA 2002, 2009). By implementing these guidelines, the country also fulfills its obligations under Decision x/3 of the CBD conference of parties on “developing a strategy for financial resource mobilization”.

These guidelines and action plans also address the main obstacles highlighted in the review of Uganda’s fifth NBSAP report (GoU/NEMA 2014) are: (i) inadequate financial resources for implementation of planned activities and programmes; (ii) inadequate human and infrastructure capacity in relevant fields of biodiversity conservation; (iii) lack of a central node/clearing house mechanism to facilitate financing for biodiversity conservation; (iv) inadequate enforcement and compliance to environmental legislations; (v) insufficient information on economic value of biodiversity in the country; and (vi) inadequate managerial and technical capacity at Local Government levels for implementation of NBSAP.

The financial guidelines for biodiversity conservation while seeking to address the key gaps identified in the NBSAP explicitly focus on two key constraints. The first addresses programmes and activities implemented by and among institutions involved in biodiversity conservation, while the second focuses on the adequacy of financial resources for implementing the planned activities.

Budgetary allocations for Uganda’s central government occur at the sector level. The primary sectors and/or sub-sectors are: the Environment and Natural Resources Sub-sector and its agencies National Forestry Authority (NFA), National Environment Management Authority (NEMA) and Climate Change Unit (CCU); Tourism and Wildlife sub-sector in the Ministry of Tourism, Wildlife and Antiquities (MTWA) and agencies; Uganda Wildlife Authority (UWA) and Uganda Wildlife Education Centre (UWEC); and agriculture sector in the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and agencies such as National Agricultural Research Organization (NARO) and National Genetic Research Centre and Data Bank (NGRC&DB). All other sectors of government were categorized as indirect.

Donor financing: The Global Environmental Facility has over the years provided Uganda with considerable financial support for Biodiversity projects (See Annex II). Out of the $3.9 million allocated under GEF 4, between 2006 and 2010, $2.4 million was utilized. Under GEF 5, $10.89 million was the indicative allocation for biodiversity conservation activities in Uganda.

Economic instruments: NEMA, NFA, UWA and other government agencies implement a set of financial instruments such as the Wetland Permits, Environment Impact Assessment Certification fees, Effluent Discharge permits, grazing permits in forest reserves, fishing permits and registration for boats, and National Park entry fees. However, only a few of these instruments are directly linked to the effort of biodiversity conservation. The funds are either kept in the consolidated fund (Central Government) or Institutional Funds and distributed in general priority ranking often limited for biodiversity conservation activities.

Decision x/3 strategy for resource mobilization in support of the achievement of the Convention's provides for: (i) concrete activities and initiatives including measurable targets and/or indicators to achieve the strategic goals contained in the strategy for resource mobilization and on indicators to monitor the implementation of the Strategy; and (ii) review of implementation of the Convention’s strategy for resource mobilization (see Annex III).

Goal 4 of the CBD Strategy for Resource Mobilization seeks to “Explore new and innovative financial mechanism at all levels with a view to increasing funding to support the three objectives of the Convention” with six strategic objectives (OECD 2013): (i) to promote, where applicable, schemes for payments for ecosystem services, consistent and in harmony with the Convention and other relevant international obligations; (ii) to consider biodiversity offset mechanisms where relevant and appropriate while ensuring that they are not used to undermine unique components of biodiversity; (iii) to explore opportunities presented by environmental fiscal reforms including innovative taxation models and fiscal incentives for achieving the three objectives of the CBD; (iv) to explore opportunities presented by promising innovative financial mechanisms such as markets for green products, business-biodiversity partnerships and new forms of charity; (v) to integrate biodiversity and its associated ecosystem services in the development of new and innovative sources of international development finance, taking into account conservation costs; and (vi) to encourage the Parties to the United Nations Framework Convention on Climate Change and the Kyoto Protocol to take into account biodiversity when developing any funding mechanisms for climate change.

**1.3 Methodology**

### **1.3.1 Research Design**

The study was developed to achieve design of guidelines and action plans for biodiversity conservation financing in Uganda. It relies on expert judgment, and was implemented alongside develop of the country’s fifth NBSAP report. The guidelines and action plans applied institutional review and expenditure reviews with the NBSAP as the main policy guide for actors engaged in biodiversity conservation in Uganda. The financing gap for biodiversity conservation was developed from the expenditure review, for 2005/6 – 2011/12, and with current status of financing focusing on 2012/13 due to availability of reports and data.

A review of current resource mobilization strategies was considered alongside the expenditure review, while the guidelines outline the proposed resource mobilization strategies to bridge the gap of resources required. The financing strategy was costed through action planning stage, where sixteen action plans largely developed from the NBSAP report were outlined. The NBSAP process had already applied a pressure – stature and root cause analysis and prioritised biodiversity conservation issues in the country.

Costing was undertaken using output based budgeting where the target to be achieved is bridge the financing gap for biodiversity conservation in Uganda, through implementing Decision X/3, while also implement current obligations of Uganda’s Biodiversity conservation stakeholders. Therefore activities for achieving proposed targets were costed based on current prices (complete budgeting) and additional inputs required for achieving targets and the time frame 2014 – 2020.

### **1.3.2 Data types and sources**

For expenditure review data required was budgeting allocations as well as annual expenditures for primary biodiversity conservation sectors and agencies. Those considered were environment and natural resources sub-sector, the agricultural sector, and tourism, wildlife and antiquities sub-sector, government research activities as special ENR sub-sector as well as activities by NGOs linked to primary sectors were also considered. Data for institutional analysis comprised of set up of sectors and agencies involved in biodiversity conservation, roles and responsibilities. The institutional data also considered elements of how financial resources are acquired either on-budget or off-budget. Policy analysis data considered covered the breadth of biodiversity conservation priorities in the fourth and fifth NBSAP reports.

Data was largely collected through literature review with checks on website of different institutions. There was data collected from libraries and NBSAP stakeholders’ offices such as UWA, NEMA, NFA and Ministry of finance. Some data was obtained through key informant interviews with staff of NEMA, UWA, Ecotrust as well as feedback from stakeholders involved in the development of the fifth NBSAP report.

### **1.3.3 Analytical Approaches**

Institutional review and expenditure review benefited from consensus developed at the feedback sessions with stakeholders in the development of the fifth NBSAP report. The NBSAP stakeholders agreed on primary sectors and sub-sectors to be included in the institutional and expenditure review as those listed in the NBSAP report. All sectors and sub-sectors that are primary the biodiversity conservation finance were considered wholly in the expenditure review; while non-primary sectors and sub-sectors were not considered in the expenditure review. Whereas non-primary sectors undertake biodiversity conservation activities they will be attributed appropriately under the primary sectors instead of being spread out. For example if the Ministry of Works and Transport undertook infrastructure developments and mitigation interventions involving forestry and/or wetland restoration, the actions should be attributed to the primary sector because the full cost of degradation and mitigation action will be better accounted for there than in the Ministry of Works and Transport. Therefore institutional expenditure review carries the actions in biodiversity conservation in totality, even though they attributed to the core sectors that are responsible for coordinating all biodiversity conservation by institutional obligation.

Expenditure revenues were undertaken by assessing performance of the output based budgeting and cash budgeting approaches employed by government as well as complete budget assessment for off-budget resources such as non-tax revenue (NTR) and grants among others. Costing was through complete activity costing for additional actions needed to achieve the proposed targets. The targets are bridging the gap in financing for biodiversity conservation, implementing NBSAPs, and achieving institutional obligation of biodiversity conservation stakeholders, according to national and international obligations, including Decision X/3.

# 2. STATUS OF BIODIVERSITY CONSERVATION SYSTEMS

This section consists of a brief description of how biodiversity conservation takes place in Uganda. The description is based on the developments in the first four National Biodiversity Strategy and Action Plan (NBSAP) reporting processes up to the current reporting period. The section also introduces values that have been used for estimating contribution of biodiversity to livelihoods in Uganda.

## 2.1 Status of biodiversity conservation systems

**Biodiversity conservation in Uganda generally occur at ecosystem level** aggregating protected areas of forests and wildlife (includes savannas), fisheries, wetlands, and biodiversity on private land such as agro-ecosystems, savannas and grasslands. However, institutional arrangements also exist for biodiversity at species level and at genetic level even though, given much of the information at these at species and genetic levels is unavailable, the dominant management system is at the ecosystem level.

### **Table 1: General groupings of biodiversity**

|  |  |  |
| --- | --- | --- |
| **Biodiversity by ecosystem** | **Species level** | **Genetic level** |
| MountainsForestsGrasslands and savannahWetlandsFreshwater resourcesOutside protected areasAgro-ecosystems | BirdsFishReptilesAmphibiansHigher plantsLower plantsMicro-organismsAgricultural biodiversity | Crops: sorghum, finger millet, yams, cowpeas, castor, passion fruit, jack fruit, wild straw berries, wild berries, highland paw pawsGrasses-lemonsForage legumes, lab-lab, dolichosLocal vegetables – amaranthaPlants with pesticide properties – neem tree and castor |

Source: NEMA 2009

**Biodiversity at ecosystem level***:* The categorization considered in Uganda’s NBSAPs report comprises the following ecosystems (Table 1): mountains; forests; grasslands (and savannas); wetlands; fresh water (aquatic); Protected Areas (PAs); biodiversity outside PAs; and agro-ecosystems (NEMA 2009).

### **Table 2: Description of biodiversity at ecosystem level**

| **Ecosystem**  | Description of biodiversity | Threats to biodiversity |
| --- | --- | --- |
| Mountains –  | All mountains in Uganda rising above 2800 metres are accorded a protected area status, either as National parks or as forest reserves. The most prominent mountains are Rwenzori Massif which rises to an altitude of 5120 metres, the 3rd highest in Africa. Others are Mts Elgon, Moroto, Napak. | Human encroachment on the lower slopes for cultivation and livestock grazingUncontrolled exploitation of natural resources e.g. deforestation for wood fuelPollution from improper disposal by touristsClimate change and habitat changeSeasonal fires |
| Forests –  | Uganda has forests in protected areas managed by NFA (central forest reserves), UWA (national parks and game reserves), Local Governments (local forest reserves) and forests on private land. Forest land cover has been declining at a rate of 1.8% per annum, with the highest losses occurring in well stocked Tropical High Forest (2%) and woodlands (2%). Whereas softwood plantations have been increasing at a rate of 1% per year, they represent the smallest fraction (less than 1%) of total forest cover in the country. | Overharvesting due to poor planning, weak enforcement of laws and inappropriate forest harvest and processingInvasive species such as *lantana camara* in Eastern Uganda and senne species in Budongo forest reserves (mid-west)Encroachment of protected areas and local forest reserves andIndirect drivers like high population growth and demand for timber and especially fuel wood. |
| Grasslands/and savannas*Strategic Management Partners* | Grasslands or savannas cover more than 50 % of the land area of Uganda and are dominated in different locations by species as diverse as grasses, palms or acacias. The remaining pockets of natural savannas and grasslands cover approximately three million hectares and are primarily found in various protected areas  | Much of this habitat has been converted to human use for agriculture and grazing.  |
| Wetlands. | Wetlands cover about 15 percent (31,406 km2) of Uganda’s total land area.With 11 sites designated as Wetlands of International Importance, regionally and globally important for migratory bird species and biodiversity (Ramsar, 2006). Most wetlands lie outside protected areas. | Unsustainable resource harvestingHabitat loss through agricultural conversion, industrial development and burning andInadequate enforcement of legislation, regulations and compliance on wetland use |
| Fresh water (aquatic) ecosystem  | Of the total area in Uganda, approximately 15.3% is open water. Open water is a category that includes major lakes such as Lake Victoria, Lake Kyoga, Lake Albert, Lake Edward and Lake George and over 160 smaller lakes, various stretches of the Nile River and rivers, streams and water bodies. Lake Victoria alone more than 600 species of cichlid fish have been found, with 102 species. | Introduction of exotic species, including the Nile perch and other fish species, and invasion of aquatic systems by water hyacinth, agricultural runoff, clearing of the forest in key catchments. Overexploitation and improper exploitation of fisheries resources due to inadequate control of activities and harvesting methods;Degradation of habitat through pollution and conversion;  |
| Biodiversity in Protected Areas | Protected Areas (covering approximately 16.3% of Uganda’s total land area) include Central Forest Reserves (under National Forestry Authority), Local Forest Reserves (Local Governments), National Parks and Wildlife Reserves (Uganda Wild Life Authority). Approximately 47% of Protected Areas (PAs) are forestland & 37% grasslands. | * Loss of habitat is most serious negative factor
* Illegal grazing in National Parks by local communities neighbouring the parks reduces the grazing capacity of National Parks.
* Increasing economic activities e.g. development of oil and gas industry an increased human population of workers to operate and maintain oil and gas and infrastructure pressure on PAs.
 |
| Biodiversity outside PAs | A few areas outside the PA system with considerable populations of mammals have been identified in several rangelands in Uganda e.g. former Ankole Ranching Scheme, other areas in districts are Kiboga & Luwero. Species of woody plants include restricted range species e.g. *Rytgyinia sp.* in Iganga District. Aquatic biodiversity mostly outside PA system. | The greatest danger to these species is the lack of a comprehensive management programme* Also, regulation is often poor as there is high risk of conflict between communities, local governments and UWA, which is mandated to manage all wildlife
 |
| Agro-ecosystems | The main land-related environmental issues facing Uganda today is land degradation. Although some parts of Uganda remain relatively under-cultivated and not experiencing significant degradation problems, e.g. Gulu, Lira, Apac, Katakwi and Kitgum districts, the rest face serious land degradation problems. The main causes of land degradation are: high population growth rates; poor methods of cultivation, deforestation, bush burning, and overgrazing. These factors have had a negative impact on food production. | **Soil erosion** The principal manifestation of land degradation in Uganda is soil erosion, caused by surface runoff or wind. Soil erosion accounts for over 80% of the total cost of environmental degradation.Overgrazing by traditional herders (pastoralists) is also contributing to land degradation. **Bush burning** As a result of custom, culture or social habits, Ugandans living in predominantly rangeland areas engage in annual bushfires. **Agrochemicals** cause of land degradation due to pollution. To date, Uganda’s agriculture is generally low-input low-yield technology. |

Source: NEMA 2009

**Biodiversity at Species Level:** In Uganda, knowledge of the species present is confined to the more known taxa such as birds, mammals, butterflies, higher plants, reptiles, amphibians and fish (Table 2), this is because of their relative conspicuousness and their economic importance. Little is known about the less conspicuous and lower. Nonetheless important forms of life such as belowground biodiversity are often described.

### **Table 3: Recorded flora and fauna spps in Uganda**

|  |  |  |  |
| --- | --- | --- | --- |
| **Taxon** | Total number of spps  | % of global spps | No. of globally threatened spps |
| Amphibians | 86 | 1.7 | 10 |
| Birds | 1,012 | 10.2 | 15 |
| Butterflies | 1,242 | 6.8 | - |
| Dragon flies | 249 | 4.6 | - |
| Ferns | 389 | 3.2 | - |
| Fish | 501 | 2.0 | 49 |
| Flowering plants | 4,500 | 1.1 | 40 |
| Fungi (poly pore) | 173 | 16 | - |
| Liverworts | 275 | 46 | - |
| Mammals | 345 | 7.5 | 25 |
| Molluscs | 257 | 0.6 | 10 |
| Mosses | 445 | 3.5 | - |
| Reptiles | 142 | 1.9 | 1 |
| Termites | 93 | 3.4 | - |
| Other invertebrates | - | - | 17 |

Source: NEMA 2009

**Biodiversity at Genetic Level:** Plant genetic resources (PGR) in Uganda range from little known indigenous wild fruits and vegetables, pastures and forages, medicinal plants, indigenous staples like millet and sorghum to introduced crops such as maize, tobacco, coffee, cotton and beans. This PGR is distributed across the diverse ecological zones of Uganda.

**In terms of domestic livestock**, the indigenous breeds of cattle are the main source of beef in the country and form almost 95% of the total cattle population. There are concerns that adopting exotics and/or cross-breeding indigenous breeds could lead to displacement of indigenous species by the introduced breeds. Genetic characterization of populations in Uganda for both wild and domestic species is at a relatively rudimentary stage although there are reasonable advances in some taxa such as the tilapines. There is therefore little information regarding genetic diversity in Uganda. More information on various aspects of biodiversity at the genetic level can be found throughout this report especially under agro-biodiversity and in Appendix IV A (Progress towards targets of the Global Strategy for Plant Conservation).

## 2.2 Status of information on the valuation of biodiversity

The Uganda biodiversity assessment conducted by IUCN (Emerton & Muramira 1999) estimated that quantifiable economic benefit of Uganda’s biodiversity was at least $ 770 million/year. The economic cost of biodiversity conservation was estimated at $ 350 million/year. The economic cost was largely attributed to opportunity cost (80%), and other economic losses (19%) associated with biodiversity conservation. Management costs were estimated at only 1% per year at the time.

**Wetlands:** The cost to the economy of encroachment into wetlands was estimated at US$1.2 million per year (Moyini et al.2004). The loss of wetlands leads to the loss of traditional grazing land, loss of water storage capacity (groundwater), the loss of biodiversity, and pollution of water bodies (Moyini et al.2004). A recent assessment of the total economic contribution of wetlands in three agro-ecological zones in Uganda produced updated results on the per hectare net benefit of wetlands. For the three agro-ecological zones of southwestern farmlands, Lake Victoria crescent and the Kyoga plains, the net economic benefits of wetlands were valued at $11,358, $10,388 and $10,948 per hectare per year, respectively (Kakuru et al. 2013).

**Forestry:**Forest accounting for biodiversity conservation services takes into account both stocks and flows of biodiversity from Uganda’s forestry resources. For Uganda total, there were 1,259 species of trees and shrubs, 1,011 species of birds, 75 species of rodents (small mammals), 1,245 species of butterflies, 115 species of hawk moth (large moths) and 96 species of silk moths (Forest department 1996). The total annual contribution of forest biodiversity to the national economy was estimated at $154.8 million (Masiga et al. 2013).

**The economic value of these biodiversity** based on gross economic output attributable to biological resource use in the fisheries, forestry, tourism, agriculture and energy sectors was estimated at $546.6 million/ year and indirect value associated with ecosystem services and functions to be over $200 million annually, which for a least developed country like Uganda, cannot be underestimated.

# 3. BUDGETING, EXPENDITURE REVIEW AND STATUS OF FINANCING

## 3.1 National budget cycle

Public institutions budget for biodiversity conservation as part of their obligations to implement the national development plan (NDP), Medium Term Expenditure Framework (MTEF) and annual work plans. The country has a three-fold national budget framework, medium-term and short-term or annual budgeting. The long-term budgeting frameworks cover the Vision 2040 and NDP which cover a 27 year and five year time period respectively. The five-year NDP is a more regular budgeting long-term framework. The MTEF and/or national budget framework papers (BFPs) are the medium term budgets submitted by sectors to the Ministry of Finance Planning and Economic Development (MFPED). Similarly, agencies and ministries submit to MFPED detailed spending planned in annual budgets (Figure 1). Since the 2007/08 Financial Year, the government adopted and implements a budgeting structure based on vote functions. A vote function represents a set of services or outputs which a spending institution is responsible for (GoU 2010). The reform was augmented with implementation of output-based budgeting (OBB), a form of performance budgeting. Output based budgeting was introduced to switch focus from activity budgeting to output focus (GoU 2010).

### **Figure 1: Framework for linking policies and strategies to budgeting in Uganda**

**National**

ANNUAL BUDGET

MTEF +NATIONAL BFP

NDP

Short Term/ Annual

Medium Term

Long Term

**Sector**

Sector Strategic Plans

Detailed Spending Agency Budgets

Sector BFP

Source: Williamson, 2011

Whereas a performance based approach is used in budgeting for sectors and agencies. Budget execution is often based on a cash budgeting system. A cash budgeting system means budget limits evolve within the year budget releases primarily based upon the revenue collected rather than using cash flow profile associated with approved estimates. The approved budget becomes a guide rather than an authority. Consequently, multiple in year budget revisions are need and these may be different from the allocations stated in the annual budget. The expenditure is often based on the resource envelope. The resource envelope is equal to the available public revenue less expected mandatory payments such as external and domestic debt obligations (Williamson 2011).

The annual national budget cycle (Figure 2) runs from October of one year to June of the next year. The budgeting cycle starts with a national budget workshop in which indicative sector ceilings are revealed to different sectors as well as the budget and sector working group (SWG) guidelines. These workshops communicate government’s plans for linking resources available with accomplishment of the medium term and long-term strategic frameworks through annual plans. In the second phase of the planning local governments, agencies and sectors develop BFP using OBB guidelines and these are adopted at both local government level, central government and the parliament. The annual budget allocations are done by MFPED together with sectors and consideration is made of public expenditure reviews submitted annual by sectors and the MTEF, the final budget approved by the cabinet of government ministers is then submitted to parliament in June.

### **Figure 2: Summarised annual national budgeting cycle**

Submission of Indicative Plan/MTEF

Budget Speech

**Parliament**

**MFPED**

June 15

May 15

**Cabinet**

Cabinet Approval of BFP/MTEF

Final budget Approval

April 1

National Budget workshop

* Indicative Sector Ceiling
* Budget & SWG Guidelines

Compilation of National BFP and updated MTEF

Finalisation of Budget allocations/MTEF

Inter-ministerial consultations

**PER**

**Line Ministries/ spending agencies/ SWGS/Donors**

Preparation of detailed Budget Estimates

Preparation of Sector BFP and Revised MTEF allocations within the ceiling

Apr-June

Jan-Mar

Oct-Dec

Source: Williamson 2011

## 3.2 Expenditure review for biodiversity conservation investments

The expenditure review conducted for these guidelines was an iterative process that considered the proposed outputs, strategies, planned activities and status of implementation of the NBSAP and actual expenditure incurred at the different levels of biodiversity implementation. Uganda’s NBSAPs shows that biodiversity conservation activities predominantly occur at ecosystem level. Therefore, the major functions occur in the management of mountains, forests, grasslands and savannah, wetlands, freshwater resources and agro-ecosystems. The highest concentration of this biodiversity is found in protected areas; that is 16.3% of the country’s total land area. Therefore the initial focus of the expenditure review was on identifying the regulatory and institutional primal and secondary responsibility for managing biodiversity at ecosystem level. The second step is to identify the all available resources allocated to all biodiversity conservation related activities. These resources include off-budget and on-budget resources including government revenue, overseas development assistance (ODA), own revenues, donations or other grants (where possible specify source), social responsibility programmes etc.

## 3.2.1 Traditional financing mechanisms: central government and on-budget donor support

Traditional financing for biodiversity conservation revolves around the use of government expenditure and overseas development assistance (ODA) for biodiversity conservation. Early assessments conducted in the late 1990s (Emerton 1999) estimated that the government spent about US$3.27 million/year on public sector activities related to biodiversity conservation. Even though this amount of funds was reasonably high at the time, it was insufficient to address all of biodiversity conservation concerns.

Since the 2005/06 financial year, the budgetary allocation for biodiversity conservation related investments at the national level have increased. Investments in tourism and wildlife management, environment management and agriculture have increased from $20 to $27.7 million, $65 to $82 million and $59 to $139 million for tourism and wildlife, water and environment and agriculture respectively (MFPED 2012). The investments shown in Figure 3 show both government and donor support in the on-budget resources reported in BFPs, and MTEF.

### **Figure 3: Public biodiversity conservation-related investments, including donor support**



Source: MFPED 2014

Central government support for biodiversity conservation-related activities increased between 2005/6 to 2009/2010 for all the primary categories of agriculture, environment and tourism and wildlife management. Between 2009/10 and 2011/12 a reasonable decline can be observed in Figure 4. Whereas the decline for environment and tourism and wildlife ended after one financial year the decline for agriculture continued for the two years in the analysis. The 2009/2010 financial year expenditure was influenced with consolidating central government resources for elections held at the beginning of 2011. Therefore, it is possible that the decline represented re-allocation of some of the available resources. However, the continued decline for agriculture could have been linked to government’s reduced confidence in the largest programme under the sector, the National Agricultural Advisory Services (NAADS).

### **Figure 4: Central government biodiversity conservation-related investment, excluding donor support**



Source: adapted from MFPED 2014

A component of public sector investment to biodiversity conservation is through on-budget project support through donor projects. The budget support from donors is shown, in Figure 5, to have decreased from $11.2 to $4.7 million for tourism and wildlife, unstable with large fluctuations for the environment and natural resources sub-sector and to have increased at first and then stabilized for the agricultural sector investments.

### **Figure 5: Donor project support to biodiversity conservation-related investments**



Source: adapted from MFPED 2014

Donor support: Between 2006 and 2010, Aid allocated to multi-sector cross cutting activities such as environmental management was only 4.2% (US$266.4 million) (Development Initiative 2012). This is an average of $53.4 million/ year to environment related sectors. However, it is clear that these calculations include allocations to the water sub-sector and that the allocations to biodiversity conservation activities were not clearly articulated. Since 2006, overseas development assistance (ODA) has supported watershed management, tree planting, protected area management, tourism and climate change activities related to biodiversity conservation among others (see Annex IV).

Despite the higher allocation to the agricultural sector, for the core biodiversity conservation investments, a much higher investment is envisaged for the agricultural sector. For instance, the final Budget Call Circular provided an MTEF of $154 million to the agriculture sector in FY 2013/14; out of the National MTEF of $5.2 billion representing only 3% allocation to the Agriculture sector. The allocation is well short of the Maputo/ Comprehensive Africa Agriculture Development Program (CAADP) declaration of at least a 10% allocation of the National Budget to the Agriculture sector (MAAIF 2013).

The Ministry of Tourism, Wildlife and Antiquities (MoTWA) is assisted by; the Uganda Tourism Board (UTB), the Uganda Wildlife Authority (UWA), the Uganda Wildlife Education Centre (UWEC), the Uganda Wildlife Training Institute (UWTI), and the Hotel and Tourism Training Institute (HTTI). Public sector expenditure, according to the MTEF, on Tourism Trade and Industry Sector is projected at $20.48 about 0.4% of the national budget. With regards to funding, MTWH was only allocated 0.13% of the government’s total FY 2011/12 budget, the government invested only US$4.5 million (UNDP 2012), even though this was expected to increase to only $6.66 million in 2013/14 (MFPED 2013). Despite the low investment from central government, national income from Tourism Wildlife and Antiquities increased from $564million in 2009 to $662million in 2010 reflecting a 14% increase (MFPED 2013).

### **3.2.2 Traditional financing mechanisms Conservation Trusts**

Bwindi Mgahinga Conservation Trust (BMCT) was established in 1994 under the Uganda Trustees Act. The vision of BMCT is to conserve the biodiversity of Mgahinga Gorilla National Park (MGNP) and Bwindi Impenetrable National Park (BINP) in harmony with development needs of the surrounding communities.

Primary funding is from the BMCT endowment fund (26%) that was initially set up under the Global Environment Facility through the World Bank in 1994 and other donors who wish to support projects of their own interest that help in the promotion of BMCT Vision and Mission. Currently our donors include D. Swarovski and company (56%) fund the Sustainable Water Management for Nature and People project, CARE International (12%) funding the Batwa Livelihoods Project, the African Orphans Foundation funding some Batwa girl orphans’ education and Greater Virunga Transboundary Executive Secretariat (GV-TES) funding an Agro-Forestry project, as well as the International Gorilla Conservation Programme (IGCP) – 03%.

BMCT is run as an endowment implemented through PES and integrated Development and Conservation Programmes. The trust funds programmes and projects that: ensure linkages exist between the project funded and conservation of biodiversity of Bwindi Mgahinga Conservation Area (BMCA), programmes that reduce social pressure on natural resources through a variety of mechanisms and support social and economic development programmes that have direct links to the protection of the biodiversity of

The Bwindi Mgahinga Conservation Trust (MBCT), original $4.0 million Trust Funds invested offshore grew to $6.6 million by 2008. There has been direct financial support to communities (for income generating programs and activities) amounting to 1.8 billion shillings/year (approx. $720,000) to date from the Bwindi-Mgahinga Conservation Trust (BMCT) Endowment Fund. This money has funded programs that have improved livelihoods of communities living near the Bwindi and Mgahinga national parks.

**Chimpanzee Sanctuary and Wildlife Conservation Trust (CSWCT)** mission is to promote the understanding, appreciation, and conservation of the chimpanzees, their habitats in particular, and wildlife in general. **CSWCT** was established as a combined national and international initiative and a globally recognized collaborative conservation effort, geared towards developing and implementing a long-term strategy for conservation of chimpanzees and their habitat, with the immediate purpose of establishing a chimpanzee sanctuary on Ngamba Island in Lake Victoria, and such other places in Uganda as the trustees may acquire. The annual expenses for biodiversity conservation activities have increased from about $435,000 in 2010 to $730,000 and $710,000 in 2011 and 2012, respectively.

**National Conservation Funds[[1]](#footnote-1)**

**Environment Fund**: Section 88 of the National Environment Act (NEA) Cap 153 establishes the Fund to be administered by the NEMA Board and accordingly any decisions regarding expenditures from the Fund are taken by the Board. The NEF has already been established by an Act of Parliament for purposes of defraying the expenditures of NEMA and the Act specifies the sources of the funds and its administration by the Board. The sources of the fund shall consist of (a) disbursements from the Government; (b) all fees charged under this Act; (c) any fees prescribed for any service offered by the authority; (d) any fines collected as a result of the breach of the provisions of this Act or any statutory instrument made under this Act; (e) gifts, donations and other voluntary contributions to the fund made from any source.

Section 90 of the NEA Cap 153 also stated that the board shall perform its functions in accordance with sound financial principles and shall ensure, as far as possible, that its revenue is sufficient to meet expenditure properly charged to revenue. The board may invest money from the fund in conformity with good commercial practice. The environment Fund is estimate stand at about UGX 2.5 billion with annual inflows of about UGX 1 billion or $400,000. The performance of the environment fund is limited by inability to access revenue generated from the environment tax on motor vehicles. This revenue is collected by Uganda Revenue Authority and sent to the National Treasury Consolidated Fund.

**Tree Fund**: Section 40 of the National Forestry and Tree Planting Act establishes the Forest Fund to promote tree planting and growing at local and national level and to support tree planting and growing efforts of non-commercial nature which are of benefit to the public. The Tree Fund received one billion Uganda shillings per year, which is considered very little to support the planting of forests in the Country. The Natural Resources Committee of Parliament while reviewing the sector’s ministerial policy statement 2013/14 recommended that government increases the funding to the Tree Fund to enable NFA distribute seedlings to communities for tree planting. Annual contribution from central government to the tree fund is UGX 1 billion equivalent to about $400,000/year (Parliament of Uganda 2012).

**Off-budget grants**: The ENR-Sector performance report (MWE 2012) reported that off budget resources available to environment and natural resources civil society organisations (ENR CSOs) was UGX6.66 billion or $2.92 million in 2009/10; UGX9.21 billion or $3.43 in 2010/11; UGX7.479 billion in 2011/12, about $2.8 million, and UGX 15.5 billion in 2012/2013, approximately $6.3 million. Prior to 2009/10, off-budget resources for the ENR sub-sector were unknown (MWE 2009; 2010; 2011; 2012; 2013).

**Corporate Social Responsibility (CSR)**: NGOs and government agencies regularly get corporate social responsibility from companies such as mobile phone companies - MTN Uganda and Airtel, Banks such as Standard Chartered, Standard Bank Uganda and Barclays Bank for corporate social responsibility aimed at biodiversity conservation related activities. However, there are no current mechanisms for pooling all this information together and isolating biodiversity conservation activities from other activities especially welfare activities undertaken as CSR. Implementation of financing guidelines is an opportunity to appropriately establish and allocate available funds.

## 3.3 Innovative financing mechanisms

In Uganda there has been an effort to patronize the six strategic objectives proposed Goal 4 of the CBD Strategy for Resource Mobilization (OECD 2013). However, the status of operation is considered generally inadequate (Speck 2010). The six strategic objectives for resource mobilisation are; schemes for payments for ecosystem services, biodiversity offset mechanisms, environmental fiscal reforms, markets for green products, international development finance and climate change finance for biodiversity conservation.

**Payments for ecosystem services:** An updated inventory on Uganda’s payments for ecosystem services (PES) projects highlighted 18 running projects and over 20 promising projects (Ruhweza et al. 2008). Nearly all the PES projects were for carbon emissions reductions and biodiversity conservation. Uganda’s experience with these types of PES projects dates back to the early 1990s. However, the foothold for PES schemes is still limited to small projects. In recent times there has been an effort to scale-up PES options for biodiversity conservation by “developing an experimental methodology for testing the effectiveness of PES to enhance biodiversity conservation in productive landscapes in Uganda”. The initiative stakeholders include the Government of Uganda through the National Environment Management Authority (NEMA) and the Global Environment Facility (GEF) through the United Nations Environment Program (UNEP). The Chimpanzee Sanctuary & Wildlife Conservation Trust (CSWCT) is the Project Management Unit (PMU) and other project partners including (Nature Harness Initiative (NAHI), Hydromax, International Institute for Environment and Development (IIED), Katoomba Group, Innovations for Poverty Action (IPA) and international scientists from Stanford University and the World Bank.

Current estimates suggest that PES investments outside the other agencies highlighted above, but including CSOs such as Environment conservation trust (ECOTRUST), Nature Harness Initiatives, Coca cola, Uganda Breweries Ltd, and private sector initiatives estimate annual flows at about $0.5 million/ year based on key informant discussions (Kaggwa, R. Environment Economist NEMA and Nantongo, P. Executive Director Ecotrust pers. Comm. 2014).

**Biodiversity offset mechanisms:** In July 2007, the Government of Uganda entered into an indemnity agreement with the International Development Association (IDA) of the World Bank to support a portion of the financing of the Bujagali Hydropower Project by the IDA/World Bank. Agreement among other things, the Government of Uganda designated Kalagala Falls as a biodiversity offset, including the preservation of the Mabira central forest reserve and the Nile Bank central forest reserve (World Bank 2007). The biodiversity offset set a precedent for international multilateral financing and support towards biodiversity conservation. Therefore the biodiversity offset was also designed as part of international development finance.

Currently, the MWE is implementing the preliminary components of the Kalagala Offset Sustainable Management Plan (KSMP) in the districts of Jinja, Kayunga and Buikwe. These include sensitisation of communities on best practices of conserving river banks and carried out a number of field visits. The KSMP shows that principle funding for the scheme is supposed to come from the Government of Uganda through the ministry and District Local Governments. Other support may be sourced from Development Partners and Global Biodiversity conservation financing mechanisms. The comprehensive Financing Strategy to be developed during the course of implementation of KSMP is yet to be developed. Other proposed sources of funding are: (a) revenues generated from Payment for Environment Services by Uganda Electricity Transmission Company Limited (UETCL); (b) private Sector: through their investments into Ecotourism investments and Corporate Social Responsibility and other resources; (c) Global Environment/biodiversity conservation mechanisms including Clean Development Mechanism (CDM), Reduced Emissions from Deforestation and forest Degradation (REDD) and other carbon funds; and (d) Bujagali Energy Limited (BEL) on aspects of Ecotourism, Environment Management, and Community development Programme (Burnside International et al. 2010).

**Environmental fiscal reforms**

Fiscal policy has also been used in the management of the environment. The environmental levy is charged used vehicles, environmental tax on polythene bags and plastic containers and goods while exemptions from import duty on garbage trucks. Current taxes in support of sustainable environmental management are: a 10% environmental levy on used motor vehicle spare parts; an excise duty of 120% on polythene and plastic bags of more than 30 microns; and the environmental levy on used cars that are 8 years and above to 20%. The enabling legal and policy framework for the implementation of environmental fiscal reform (EFR), National Environment Act Cap 153, allows NEMA, in consultation with the Ministry of Finance, Planning and Economic Development, to recommend EFR measures.

Another set of EFR measures are for Sustainable Fisheries User Levy. These levies are collected from the fish landing site by Beach Management Units, District Fisheries Staff through to the national level by the Directorate of Fisheries Resources (DFR) and Uganda Revenue Authority (URA). The levies include fishing vessel license, fishing permits, fish monger license, specific fish license, artisanal fish processing license, fish movement permits, fish health certificates, industrial fish processing license. By 2009, approximately $2.46 million was generated annually from the fisheries user levy (Lin-Heng et al. 2009).

**National Forestry Authority**: NFA’s budget excluding taxes and arrears has generally remained unchanged. However the government has taken over the wage bill of NFA allocating UGX 3.6 billion this financial year although the nonwage budget has been cut. NFA has set a target of UGX 12.199 billion/year, or approximately $5 million/year for NTR. This should boost its operations during the financial year

**Uganda Wildlife Authority:** UWA is mandated to ensure sustainable management of wildlife resources and supervise activities related to wildlife protected area management in Uganda. The organization is responsible for the management of 10 National Parks, 12 Wildlife Reserves and provides guidance for the management of 5 Community Wildlife Areas and 13 Wildlife Sanctuaries. In addition UWA is responsible for the management of wildlife outside Protected Areas. Own revenues received by Uganda Wildlife Authority from recreational Services include revenues; including Chimpanzee viewing, Mt Gorilla tracking, Hiking and Biking, Picnicking, Bat viewing, Nature walks, Lodging and accommodation, aggregated nature walks, Birding, Butterfly viewing, Chimpanzee tracking and Primate walks.

Since 2004/05, non-tax revenues for UWA have grown at an average rate of 12% and the growth has been consistent with the exception of revenue dips in 2005/06, 2007/08 and 2010/11 (Figure 6). The causes of revenue declines have varied from insecurity to structural changes or investments at the highest income earning national parks, Bwindi, Queen Elizabeth and Murchison Falls National Parks. The high NTR has enabled UWA to support conservation of biodiversity in protected areas even though government support has often not exceeded 5% (MFPED 2010).

### **Figure 6: Non-tax revenues generated by Uganda Wildlife Authority and percentage rate of growth**



Source: adapted from UWA 2014

**National Forestry Authority:**

Between 2005 and 2010, government subventions to the NFA ranged between 0.2 and 1.0% of the revenues generated by the agency (Figure 7). The most consistent source of revenue was non-tax revenue (NTR), which continually to increase from 44% in 2005 to a peak of 87% in 2009 before declining to just under 50% in 2010 as donor support increased. Donor support for the agency was as high as 55% in 2005 decline up to 12% in 2009 before rising again to 48% in 2010 (MWE 2010; 2012). The changes in forestry governance at the national level could have played a strong part in engagement with development partners.

### **Figure 7: NFA generated revenues including donor support, NTR and government subvention**



Source: adapted from MWE 2010; 2012

**Local revenues**: The principal sources of revenue collected at local government level are local service tax, local government (hotel) tax, property taxes, user fees and others. An error of commission leads to poor attribution of specific sources of revenues. Analyses conducted by the Local Government Finance Commission (MoLG 2011) showed that local revenue collected by local governments increased from Ushs 118.7 billion/year to Ushs 142.8 billion/ year. Although, this was a remarkable improvement of 20% in one financial year, it falls way short of the target Ushs 334.6 billion/year that can be collected. For natural resources depended Districts like Nakasongola District, more than three-quarters of the local revenue is generated from licenses and fees on environment and natural resources such as charcoal, fisheries, timber and sand among others.

**Markets for green products**

In 2012/13 financial year exports contributed 13.4% of the country’s GDP. Total export earnings, between April 2011 and March 2012, were estimated at US$2,602.5 million (MFPED 2013). Coffee exports were highest at US$466.9 million. Formal non-coffee export earnings were estimated at US$1,768.8 million, and they include electricity, cotton, tea, fish, hides and skins, beans, flowers, oil re-exports and cobalt as well as gold, tobacco, simsim and maize. Whereas biodiversity contributes to the status of green exports, deliberate biodiversity conservation efforts associated with the production systems are limited. In the mid-1990s, several non-traditional marketing channels emerged for coffee, including organic, fair trade and shade-grown. All were aimed at improving the stability of incomes received by farmers, even though only 0.21 per cent of Uganda’s coffee was exported as organic and less that 0.5% as sustainable coffee (including fair trade, organic and shade coffee). The premiums earned by farmers ranged between 22 and 35% (Masiga and Ruhweza 2007).

There has been considerable progress in organic agricultural production in over, over the last decade. Currently 226,954 ha of farmland in Uganda are under certified organic agricultural management (NOGAMU 2010). Ugandan organic export sub-sector registered a double-digit growth in exports from $3.7 million in 2003/4 to $36.9 million in 2009/10 (Namuwoza and Tushemerirwe 2011). Organic farming and drying of pineapple is well worth the extra effort because of the income benefits for the household and savings for further investment. Organic farming facilitates more social cohesion among farmer groups and also in the village. Hindrances to the organic sector are the unavailability of cheap substitute for coffee husk for fertilisation and excess labour required for clearing weeds. Fruit drying is a key to economic empowerment of women and a strategy for utilising cheap fruits during harvesting season in this region. The major constraint for increasing the production of organic dried fruits is at the processing level, and the limited capacity for investments in drying facilities. The greatest bottleneck for organic producers lies in getting a consistent and reliable buyer for organic fruits with a premium price. Release of these constraints is very likely to significantly improve both the quality and quantity of organic fruits from Uganda. Furthermore, a premium price and opening of outlets for organic products in the local and the regional markets could potentially increase the production of organic fruits.

**International development finance:**

International multilateral and bilateral support has been described in the discussions on traditional finance. Whereas more innovations in international finance targeting poverty and nature for debt swaps, the magnitude of develop finance and structure of public finance governance in Uganda has ensured that such finance is either managed by central government through on-budget support as part of the MTEF and/or as donor support off budget generally to CSO, which has also been described above as part of grants in traditional finance.

**Climate change finance for biodiversity conservation**

There is limited climate change finance for biodiversity conservation in Uganda although a number of initiatives integrate biodiversity conservation activities. The Trees for Global Benefits Programme under the Environmental Conservation Trust (ECOTRUST) manages a Plan Vivo standard for carbon farmers in western and eastern Uganda. The farmers undertake afforestation and reforestation activities aimed at restoring or replenishing indigenous trees within the community in turn farmers earn payments on their verified emissions reductions. Similar voluntary carbon projects with elements of biodiversity conservation are managed by the Uganda Wildlife Authority (UWA) with Forests Absorbing Carbon dioxide Emissions (FACE) Foundation in Mt. Elgon and Kibale National Parks and the Nile Basin Reforestation CDM between the National Forestry Authority (UWA) and the World Bank Bio Carbon Fund.

## 3.4 Impacts of financing for biodiversity conservation

The impacts of biodiversity finance have been described in Table 5 below. The table outlines the categories of biodiversity finance, states examples of sectors, programmes and/or projects that have been financed and the good and negative impacts experienced as result of the financing mechanisms.

A summary of positive impacts of previous and current financing for biodiversity conservation include:

1. building of institutional capacity for biodiversity conservation at national level
2. growth sustainable revenue generation in key institutional such as UWA and NFA, and strong potential at local government level and NEMA to fund biodiversity conservation based institutional capacity and regulatory reforms
3. strong effort to conserve at least 18% land cover under protected areas
4. sustainable utilization of most central forest reserves etc.
5. community benefits and collaborative forestry management that benefit livelihoods and innovative niche income streams for sustainable agriculture

Negative impacts of previous and current financing for biodiversity conservation include:

1. Pressure to generate revenue streams and maintain livelihoods increasing pressure on forestry resources and biodiversity on agricultural lands. Much of this has been forestry reserve owners
2. Competitive government policies that are not harmonized create subsidies for example rice production at the expense of wetlands and forest areas whereas biodiversity projects encourage increased productivity. Trade-off for degraded/lost biodiversity especially in the agricultural sector is high.
3. Sustainability of financing from donors, where strong capacity is developed e.g. local environment committees; but financing is diverted to consolidated funds and other socio-economic programme, health, education.
4. Even where financing has been introduced for example mitigation actions for project developers, institutional mismatch of power means resources are not available to the appropriately trained environmental staff and inadequate mitigation effort occurs.

### **Table 4: Case studies of positive and negative impacts of financing for biodiversity conservation**

| **Types of finance** | **Examples**  | **Positive impacts** | **Negative impacts**  |
| --- | --- | --- | --- |
| **Traditional**  |  |  |  |
| Central government | On budget support to environment agencies under MWE | Biodiversity conservation coordination has benefited considerably from wage and non-wage support to agencies such as NEMA. Whereas additional project support from GEF has gone towards developing NBSAP reports the day to day conservation activities at national and local government level are generally obtained from central government transfers. | The resource envelope remains small therefore a small human resource is engaged in biodiversity conservation. As a result considerable biodiversity loss occurs from wetland, forest and mountain degradation.A lot of government support has focused on productivity enhancement which forms a negative subsidy on biodiversity. For example enhancement of rice production for paddy and upland rice while one leads to reclamation of wetlands, the other has encouraged deforestation as farmers seek newer more fertile lands for rice production. A good solution would be policy harmonization, but environment management may take second place to food and livelihoods security.  |
| Donor support | Donor support to research agencies e.g. Protected Areas Management and Sustainable Use (PAMSU)project, Environmental Management and Capacity Building (EMCBP) Project  | The infrastructure support to UWA and NEMA for the projects as well as capacity building built a strong foundation of human resource on environment management at both national and sub-national level. In the case of PAMSU, the infrastructure and human resource development ensured that UWA now has capacity to generate over 65% of the revenue required to sustain the organization, indeed if current revenue growth is maintained the organization will be self-sustaining by 2018. For NEMA, capacity building led to development of a strong environment regulatory framework that current supports wetlands management, pollution in water resources and a strong environmental impact back borne. | Whereas a strong foundation was built for environmental management and coordination, there was an insufficient effort in creating a platform for sustainable resource generation. As a result a lot of the institutional structures for environment management and coordination have been lost, particularly at the sub-national level.In the case of UWA infrastructure and human resource capacity has built a strong base for income generation. However, there could be a case of reduced responsibility from central government and therefore potential for conflict over land use for protected areas as well as support to communities contributing to protected areas management. |
| Conservation trusts | Bwindi Mgahinga Conservation Trust (BMCT) | BMCT has demonstrated the capacity of using an endowment to benefit from international financial markets as well as growing the resources available for biodiversity conservation activities. | A limited focus of the trust has reduced its visibility and could impact on the resources that a raised in the long-term. The need for conservation of Mt. Gorillas in Bwindi and Mgahinga national parks has extended beyond the country’s borders and has a large international platform. |
| **Innovative** |  |  |  |
| PES | Chimpanzee sanctuary; | Rescuing of endangered chimpanzees from war ravaged areas, creating a home and using ecotourism as well as grants and PES funds to manage the sanctuary has been an innovative mechanisms that raise the profile of sanctuaries, conservation and ecotourism, through combining non-use values and use values and creating a wider segment of stakeholders both nationally and internationally. | Limited focus of the concept has meant that other endangered species are all managed by UWA on its own. The success of one PES has precluded the development of a regulatory framework on biodiversity conservation for other endangered species, “because the endangered chimpanzees have been dealt with”. |
| Offsets | Kalagala offset | The potential to contribute to the conservation of an important central forest reserve and livelihoods dependent on Mabira Central Forest Reserve (CFR). As a pioneer biodiversity offset project in the country it also provides a good chance to learn where else private sector and other partners could be involved in biodiversity offsets. Indeed, UWA and NFA have acknowledged offsets as one of the EIA options for developers | The slow pace of implementation of the sustainable management plan of the offset has reduced possibility of success and securing possible financing from government, developers and multilateral funding agencies. Offsets are now seen by developers as complicated and alternatives are considered instead of biodiversity offsets. |
| EFR (NTR) | Uganda Wildlife Authority;  | Uganda Wildlife authority has succeeded in growing its non-tax revenue by an average of 12% per annum for more than 12 years. In so doing it has reduced its dependence on central government and donor support for its recurrent and capital development budgets. | For UWA revenues increase also have recurrent and capital costs. By 2009/2010, revenues covered 80% of recurrent expenditures and 70% of the total budget. With donor support covering 28% and government subvention. But as UWA spends more on its recurrent and capital budgets, less revenue if left for community benefit sharing from biodiversity conservation, in the long-term this could reduce community participation in conservation. Improve direct community benefits through ecotourism, use PES support from donors & public finance to support community conservation. |
|  | National Forestry Authority and | The NFA generated revenues that cover between 40 to 60% of its financial requirements. The revenues are through sale of forest products and commercial forestry in plantations. | More than 70% of the forested area in the country is on private land. The pressure for forest conservation is high on private land but so is the pressure for commercial forestry for wood fuel and construction. Private sector has received encouragement from the commercial success of UWA to also exploit the commercial aspects of forestry on private land and with limited regulation of forests on private land the country lost more than 50% of the forest cover and the biodiversity in it between 1990 and 2005. Although other pressures such as agriculture contributed to the loss. |
|  | NEMA and economic instruments, and local governments | NEMA has implemented fiscal reforms for wetland management, pollution control and environment taxes on old and polluting motor vehicles. These forms of financing have boosted revenues for NEMA and government.Similarly, local governments generate local revenue from activities of forestry products trade, fisheries and other aspects of biodiversity. | For NEMA, whereas an Environment Fund exists and a number of instruments to provide financing, the largest of these instruments, the environment fund is controlled at the central government level and all proceeds go to the consolidated fund of the government treasury. Similarly, data on local government revenues are poorly collated and recorded therefore a commensurate allocation for biodiversity conservation is rarely made.In both cases a poor precedent has been set, which will encourage extraction with limited effort to conserve and build resilience of ecosystems. If this persists, as is the case observed at local government level, the ecosystem services are degraded and ecosystem resilience is lost. |
| Markets for green products | Organic agriculture exports | Organic agriculture in Uganda has been growing and Uganda is the leading organic exporter in Sub-Saharan Africa. Incomes are generated for low income households and ecosystems are sustainably managed. | The improper balance in presentation of the prospects of organic agriculture have limited the prospects a policy and regulatory framework. Organic agriculture has to contend with the need for food security, high incomes and production in degraded areas as well as the commercial agriculture industry. The need to present a viable perspective of organic agriculture versus alternatives such as conventional and conservation agriculture. |
| Climate change | Carbon finance through CDM afforestation and voluntary projects | Greenhouse gas mitigation actions through the clean development mechanism and voluntary carbon projects such as Trees for Global Benefits Plan Vivo project has provided an opportunity to conservation natural forests in Albertine rift for over 10 years and in now in eastern Uganda. Innovations for financing are emerging that allow for bundling of bundling of biodiversity conservation and carbon sequestration so that a market for biodiversity conservation services is acknowledged in agro-forestry and reforestation activities in agricultural landscapes.  | The limited funding current available and strict management arrangements mean that whereas farmers understand the benefits of the carbon project only a small number participate. For example the Trees for Global Benefits Programme was unable to recruit more than 3000 famers in the Albertine rift. An emerging solution is bundling PES and also merging adaptation and mitigation actions through creation of a wider value chain of benefits to attract land owners to engage in long-term projects for carbon and biodiversity conservation, among others. |

## 3.5 Gaps in biodiversity conservation financing

The financing gap for biodiversity conservation related investments in Uganda is estimated at $455 million/year; i.e. current financing is $216 million while $671 million is required. The largest financing gaps is in the agriculture sector at $366 million/year, in line with the country’s commitments under CAADP, while other gaps cover the other primary sub-sectors of environment and natural resources, and tourism, wildlife and antiquities as well as research (Table 7).

### **Table 5: Estimated financing gap for biodiversity conservation-related investments ($/year)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sectors/sub-sectors** | **Agencies** | **Current financing Amount $/year** | **Gap in financing** | **Desired financing Amount $/year** |
| Environment and Natural Resources | NEMA | Current on budget and off-budget resources have been estimated at$29.15 million/ year (MWE 2013). | The financing gap is then $36.15 million/year | The first ever ENR Sector Investment Plan (ENR SIP) was done in 2007 for the period 2007/08 to 2017–18. The total budget for the 10-year period was $653 million. This is equivalent to $ 65.3 million (MWE 2008) |
| NFA |
| CCU |
| departments of Environmental Support Services (DESS) |
| FSSD |
| Wetlands Department |
| Directorate of Meteorology (DOM) |
| Agricultural Sector | The Ministry and Directorates of crop resources, animal resources | **Agriculture sector** - the final Budget Call Circular provided an MTEF of $154 million to the agriculture sector in FY 2013/14; Including invest in research under NARO | Financing gap for the sector is $366 million/year  | Out of the National MTEF of $5.2 billion representing only 3% allocation to the Agriculture sector. At least $520 million/ year is the sustainable investment proposed for the sector |
| [Plan For Modernisation of Agriculture Secretariat (PMA)](http://www.agriculture.go.ug/index-page-bodies-id-119.htm) |
| [Control of Trypanosomiasis in Uganda (COCTU)](http://www.agriculture.go.ug/index-page-bodies-id-104.htm) |
| [Dairy Development Authority (DDA)](http://www.agriculture.go.ug/index-page-bodies-id-46.htm) |
| [National Genetic Resource Centre and Databank (NAGRC&DB)](http://www.agriculture.go.ug/index-page-bodies-id-45.htm) |
| [Cotton Development Organisation (CDO)](http://www.agriculture.go.ug/index-page-bodies-id-44.htm) |
| [Uganda Coffee Development Authority (UCDA)](http://www.agriculture.go.ug/index-page-bodies-id-43.htm) |
| [National Agricultural Research Organisation (NARO)](http://www.agriculture.go.ug/index-page-bodies-id-42.htm) |
| [National Agricultural Advisory Services (NAADS)](http://www.agriculture.go.ug/index-page-bodies-id-41.htm) |
| Tourism, Wildlife and Antiquities | Tourism Services | Approximately $32.68 million with about $ 20.4 million for UWA.  | Financing gap is about is $52.32 million/year | Currently the tourism, wildlife and antiquities sub-sector contribute about $1.7 billion as national income. It has been that a re-investment of at least 5% would support sustainable ecosystem management i.e. $85 million/year |
| Uganda Wildlife Authority |
| Uganda Wildlife Education Centre |
| Uganda Tourism Board |
| Ngamba Island Chimpanzee sanctuary |
| Uganda Wildlife Training Institute |
| Hotel & Tourism Training Institute |
| Others  | Uganda National Council of Science and Technology and Universities | Current investment estimated as $0.04 million, excluding NARO | The financing gap is about $0.36 million/year | Approx. $0.4 million based on Science Technology and Information Report (UNCST 2012) |
| **Total**  |  | **215.77** | **454.93** | **670.70** |

Source: adapted from MWE 2012; 2013; MAAIF 2013; UNCST 2012; UWA 2014; World Bank 2012a (CEA); MTWA 2013; World Bank 2012b (tourism)

# 4. CRITICAL ISSUES AND PROSPECTS FOR BIODIVERSITY FINANCING

This section evaluates the prospects and critical issues for the potential mechanisms for financing biodiversity conservation in Uganda. Traditional and innovative financing mechanisms are disaggregated and ranked individually based on national and international trends and emerging knowledge. The section shows that the environmental fiscal reforms offer the most promise, while biodiversity offsets are may not be patronized by many development agents because they are focused on residual significant, adverse impacts that cannot be avoided, minimised and/or rehabilitated or restored. Some measures such as PES need to be vigorously promoted even though they are unlikely to contribute a large fraction of the budget for managing ecosystems.

## 4.1 Critical factors for success of financing mechanisms

A successful financing mechanism for biodiversity conservation has to aggregate several critical factors but not rely on a single factor, as described below.

***Quantity of resources mobilized***: Since the objective is mobilizing resources, the quantity of resources mobilized is important; however, resources cannot be mobilized at the expense of environmental effectiveness. Therefore, if an environmental tax is charged for environment and natural resource use that degrades an ecosystem, it must be designed to create an adequate disincentive to change behavior. This is because when degradation stops then the instrument is not needed, and when it resumes the instrument is re-instated.

***Environmental Effectiveness***: It is imperative that the instrument is able to achieve the environmental objective within the specified time span and that the degree of certainty can be expected. If for example, there is a risk of degradation of a forest reserve due to effects of leakage or political instability, a biodiversity offset can be created alongside a long-term infrastructure development to minimize the possibilities of such a loss occurring or create alternatives in case a risk occurs.

***Cost Effectiveness***: When stakeholders have an option to choose between different instruments and mechanisms they will have to consider the cost of implementing some measures as alternatives and the expected rewards. A cost effective options is almost always preferable

***Flexibility***: in terms of policy implementation is imperative that the regulator or implementer has the flexibility to make adjustments due to changes in technology, market conditions and state of the ecosystem.

***Dynamic Efficiency***: The element of dynamic efficiency is important in transitions over a long period of time. An institution needs to establish whether an instrument fits within future trends or changes in societal needs. For example, cleaner and economically more efficient technologies are an emerging need, which would improve the prospects of an instrument.

***Equity****:* The instruments selected have to provide a basis for a fair weighting of responsibilities and/or obligations among the stakeholders involved. Whether the benefits are representative of the contributions made and where an effort has been made to cater for the stakeholders who lose out.

***Predictability***: An instrument should offer option for predicting future outcome. For example, fishing licenses should lead to optimal fishing effort on the lake and sustainable fish stocks. If the instrument offers limited chances for prediction then it may be less suited for a sector or an ecosystem.

***Acceptability***: An instrument must be understandable to the public, acceptable to the industry, and politically saleable. Therefore in addition to regulatory reviews, an assessment of public and political perception is needed and appropriate compromised made for the success of financing mechanisms.

***Governance***: The identified instrument must provide for proper use and accountability for the resources mobilized. This will encourage more stakeholders to be compliant.

## 4.2 Rating of Finance mechanisms

* 1. **Environmental fiscal reforms**

Environmental fiscal reforms including taxes and charges on natural resource use, pollution, resource rents or reform of subsidies harmful to the environment represents the most promising instruments for mobilizing resources for biodiversity conservation. Many environment and natural resources laws and regulations already allow for implementation of EFRs. For example, the National Environment Act cap 153 and/or the accompanying regulations allow for use of EFRs on waste water discharge, wetland use, solid waste management, importation of old vehicles, noise pollution. Supporting laws from the health sector and water sub-sector would extend these regulations to actions that affect public health. However, many of the EFR instruments are either operating sub-optimally and/or absent. Similar resource mobilisation opportunities exist under the Uganda Wildlife Act cap 200 and the National Forestry and Tree Planting Act (2003). Similar instruments are applicable in fisheries management, bush burning among others.

Where EFRs have been applied such as in wildlife management and forestry management more than 50% of the annual budget used by the institutions is mobilized from EFR instruments. Gate collections in the case of wildlife management are used to create equity among communities that contribute to wildlife conservation activities. Moreover, these instruments are administered with strong cost-effectiveness, dynamic efficiency, flexibility, predictability and acceptability.

Environment fiscal reforms are also crucially important since Uganda is burgeoning natural resources based economy. The economic potential from oil and gas, mining, forestry, agriculture, fisheries has to be countered balanced with resources for biodiversity conservation and other aspects of environment management.

The current weaknesses of EFRs are in allocation of resources away from biodiversity conservation activities, as in the case of the environment levy, the high potential for abuse and misuse of resources mobilized as is the case for fisheries resource levies and low institutional capacity to put in place appropriate governance measures. A strategy for resource mobilisation including establishing governance mechanisms and information flow with appropriate allocations to biodiversity conservation will be needed.

* 1. **Government support**

The traditional government support continues to be a major component of biodiversity conservation financing in Uganda. The critical finance needed for biodiversity conservation are in areas such as agriculture, water resources as well as environment management, wildlife management and other core biodiversity functions. Government funding is also critical to paying for civil servants engaged in biodiversity conservation activities and legislators engaged in passing legislation on biodiversity conservation.

The critical issues for government are the fluctuating and unpredictable financing patterns that interfere with planned actions within sectors and sub-sectors. For example sector funding for agriculture stands at 3.8% for agriculture of the total national budget, well below the 10% allocation agreed under CAADP. Crucially, the funding is only $162.4 million one third of the possible $428.4 million. For an agricultural sector that seeks to make farming systems of rural poor farmers more sustainable the incentives are reduced and alternative land used, including those that could cause biodiversity loss could result. The situation for the environment and natural resources sub-sector is not very different, only 66% of the proposed allocation by government was released to compound the fact that the sub-sector receives only 15% of the sector budget, for a sector that receives 3.4% of the national budget.

The starting point therefore would be for government to maintain current levels of funding, matching releases with allocations. Secondly, Government also needs to recognize the economic contributions of the sectors or their enabling role to development. For example, where the tourism sector contributed $570 million foreign exchange earnings and only $2.2 million in direct government support may represent limited appreciation for the sector. The sectors too could provide more information on the enabling functions for the economy of biodiversity conservation activities.

* 1. **Green markets through agricultural trade and value chains**

The potential for green markets in providing resources for biodiversity conservation lies in the value chains that direct funds to stakeholders engaged in biodiversity conservation. For example, when foreign exchange earnings from organic agriculture increased from $6.2million to over $36 million between 2005 and 2011 (Namuwoza & Tushemereirwe 2011) organic farmers were expected to earn premiums in the range of 10-35% depending on the product (Tumushabe et al. 2007). The incentive generate greater equity, encourage more farmers to participate and the local economies in producing areas are boosted.

The potential of green markets for non-wood forest products, as well as certification of forest and wildlife products is still unclear, especially with regard to how it is regulated at national level. Forestry biodiversity is estimated to contribute at least $154.8 million to the national economy, even though the non-wood products market is not structured, a similar situation exists of wildlife where the value is reported at about $6million per annum (NEMA and ACODE 2008).

The crucial issues for the sectors are to develop a specific resource mobilisation strategy, concurrent with a strategy for optimizing potential of the green markets in the country. Continual feasibility assessments are needed as well as value chain assessments to establish viable product and services lines as well as opportunities for creating additional value for primary stakeholders, especially communities.

* 1. **Climate finance**

Uganda is one of the few countries selected by the World Bank to start piloting REDD Plus (Reduced Emissions from deforestation and forest degradation). Biodiversity conservation is a key component and one of the key components of biodiversity financing under REDD plus.

Uganda is developing a series of Nationally Appropriate Mitigation Actions (NAMAs). Many of these NAMAs are either are concept or proposal stage and no single NAMA has been implemented in the country yet. However, many of the NAMAs proposed in agriculture, and wastewater management deal directly with biodiversity conservation.

Existing voluntary carbon projects such as those under the Plan Vivo standard (Trees for Global Benefits Programme), the Climate Community and Biodiversity (CCB) and Verified Carbon Standard (VCS) are currently operating in Uganda. There is still strong potential for voluntary carbon projects combining aspects of payments for ecosystem services and carbon finance.

The Clean Development Mechanism (CDM) of the Kyoto Protocol also offers financing opportunities for biodiversity conservation in Uganda. The future of CDM Programme of Activities to extend into new municipal solid waste composting projects and new agricultural landscape activities can provide opportunities for biodiversity conservation.

As climate change mitigation and adaptation opportunities, under the National Adaptation Plans (NAPs) emerge there is a need to develop a biodiversity mainstreaming strategy. The financing for biodiversity conservation will either be associated with the bundled carbon in PES actions or in explicit interventions for biodiversity conservation that boost primary sectors of forestry, agriculture and tourism.

* 1. **Donors**

Donors continue to be a major source of funds for biodiversity conservation in the country. For example, in the 2011/12 financial year over $49 million (43%) of the financial resources available to the water and environment sector were from donors. The major prospects for donors could be to support interventions that will achieve break-even positions of financial sustainability. At the same time, safeguards are needed for governance of funds, ensuring sustainable use of the environment and natural resources, supporting natural capital and green economy approaches, and social safeguards for equity in society.

Even though donors have been concerned about governance arrangements, and outcomes of previous funding programmes, there seems to be limited effort in creation of sustainable financing mechanisms for environment management. The long-term sustainability of some donor programmes, towards environment and natural resource sustainable utilization and management, may be hinged on establishing clear arrangements of benefits, incentives and contribution of key stakeholders. Underfunding on the one hand, abandoned pilot interventions and disruption of funding, for example due to governance concerns, often interferes with potential for sustainable environment and natural resource management, including biodiversity conservation.

* 1. **Payments for ecosystem services**

Payments for carbon sequestration, biodiversity conservation and watershed protection services are emerging mechanisms that offer future streams of financing for biodiversity conservation for rural communities. A new approach being piloted in eastern Uganda is establishing financing facilities (UNDP et al. 2013) to that are operable at regional level to offer bridge ex ante financing for farmers and time for the project developer to successful market ecosystem services.

Even though PES initiatives do not generate a lot of financial resources, their contribution to communities and social cohesion is reasonably large. PES schemes rely on and benefit from social capital created. The social infrastructure developments extend into communities gaining access to financial services, community health schemes, education services and entrepreneurship. In case of forestry, agriculture and livestock production PES initiatives, there is evidence of improve agricultural productivity and incomes associated with focus PES activities. In Uganda, PES interventions have been most successful as interventions at community, sub-county and District level.

* 1. **Biodiversity offsets**

Biodiversity offsets are new to the country. The first biodiversity offset in the country has been used to conservation Kalagala Falls and Mabira Central Forest Reserve. Even if they are new, biodiversity offsets have the potential to contribute to (i) large hydro-electric power projects, (ii) oil and gas extraction and refinery activities, (iii) mining activities, especially in protected areas, (iv) road construction and public infrastructure development activities, and (v) large scale agricultural production such as oil palm production in the areas with significant levels of biodiversity.

The implementation of biodiversity offsets is likely to be oriented towards a limited group of large scale investors. Whereas biodiversity conservation is achieved, only limited amounts of resources will be available for use beyond the areas where the offset investment activity is taking place. For the national regulators and Government, the effort will be on making biodiversity offsets attractive as part of the Environment Impact Assessment (EIA) processes in the country. Biodiversity offsets could also be useful in arbitration of disputes over whether or not adequate effort is being put in place for large scale investors and the general public.

**SECTION II: GUIDELINES AND ACTION PLANS**

5. GUIDELINES FOR BIODIVERSITY CONSERVATION FINANCE IN UGANDA

6. ACTION PLANS FOR BIODIVERSITY CONSERVATION FINANCE IN UGANDA

# 5. GUIDELINES FOR BIODIVERSITY CONSERVATION FINANCING

## 5.1 Purpose of guidelines for biodiversity conservation financing

Uganda’s guidelines for financing biodiversity conservation are aimed supporting the country mobilise adequate resources for biodiversity conservation in the country. The guidelines will enable the country implement its obligations towards resource mobilization and in establishing national targets, goals and actions for enhancing international financial flows and domestic funding for biological diversity. The guidelines also propose how the country has adapted to meet its obligations as agreed based on the assessment (Decision X/3) at United Nations Convention on Biological Diversity.

## 5.2 National resource mobilization strategy

Uganda will establish a National resource mobilisation for biodiversity conservation focal point and secretariat. The focal point will lead biodiversity conservation stakeholders in the country to develop and implement anational the strategy for resource mobilization should include, as appropriate, the design and dissemination of a country-specific resource mobilization strategy, with the involvement of key stakeholders, in the framework of updated national. The national resource mobilisation strategy comprises traditional and innovative financing mechanisms, criteria for selecting financing mechanisms and institutional arrangements.

### ***52.1 T*raditional Financing Mechanisms**

Traditional financing mechanisms in Uganda include financial disbursements from the central government, budget support allocations from donors, and trust funds. Biodiversity conservation stakeholders should aim at working with the government, donors and environment conservation trusts to ensure that the funds currently allocated and/or proposed in medium term and long-term expenditure frameworks are maintained.

Funds allocated and/or proposed by government, donors and trusts represent a core form of funding for biodiversity. Therefore stakeholders in government, private sector and civil society will work together to lobby parliament, and the finance ministry to ensure that the current proposals are at least maintained and at best increased in the medium and long-term

The key areas of public finance that need to be increased are for the agricultural sector to attain the 10% allocation agreed by African Union countries. Public financing for the environment and natural resources, tourism, wildlife and antiquities sub-sectors need to be raised. One of the key ways of ensuring better effort in biodiversity conservation is matching sub-sector allocations with releases from the Ministry of Finance as indicated in the Medium Term Expenditure Framework (MTEF).

The Agricultural Sector, ENR and Tourism, Wildlife and Antiquities sub-sector should provide for local government to support biodiversity conservation. This will be achieved when National agencies such as the National Environment Management Authority (NEMA), National Forestry Authority (NFA), and Uganda Wildlife Authority (UWA) provide an allocation for local government activities such as wetlands management, watershed protection and biodiversity conservation, sustainable fisheries management, and tourism development at local government level.

Local governments need to raise the percentage of the local revenue for environment and natural resource management from the 2-5% to 10%. The financing should go towards improvements in compliance and enforcement, and investments that will generate additional revenue from natural resources management.

Conservation Trusts have become established in national or regional institutions that deliver a range of long-term benefits and services. Whereas conservation trusts generally fund operating expenses, spend-down or ‘sinking’ funds, which are typically distributed over three to five years but can extend to 20 years to execute a project or accomplish a specific objective and endowment, providing perpetual funding to sustain a park or protected area. The main areas of success have been endowment funds. Conservation funds are encouraged to invest in sink-funds as long as these lead to increased productivity and resilience of ecosystems.

### **5.2.2 Innovative financing mechanisms instruments**

1. ***Payments for ecosystem services***

In these guidelines a payment for environmental services scheme is defined as (i) a voluntary transaction in which, (ii) a well-defined environmental service (ES), or a form of land use likely to secure that service, (iii) is bought by at least one ES buyer, (iv) from a minimum of one ES provider, and (v) if and only if the provider continues to supply that service (conditionality). The biodiversity conservation options proposed in these guidelines include, but are not limited to purchase of high-value habitat, payment for access to species or habitat, payment for biodiversity-conserving management practices, tradable rights under cap & trade regulations, and support biodiversity-conserving businesses.

To achieve success with PES systems in biodiversity conservation, it is important to include the following considerations in design:

1. A pro-poor PES program is one that maximizes its potential positive impact and minimizes its potential negative impact on the poor.
2. Keep transaction costs low. This is important in all PES programs, as it affects their efficiency. Keeping transaction costs low is particularly important when many potential participants are poor, as they will be relatively more heavily affected.
3. Devise specific mechanisms to counter high transaction costs. When many potential participants are smallholders, transaction costs will inherently be high. Specific mechanisms should be developed to reduce these costs, such as collective contracting.
4. Provide targeted assistance to overcome problems that impede the participation of poorer households. This may take the form of technical assistance or credit programs, for example.
5. Avoid implementing PES programs in areas with conflicts over land tenure.
6. Ensure that the social context is well understood, so that possible adverse impacts are anticipated and appropriate remedial measures can be designed.
7. ***Biodiversity offsets***

Offsets are measures taken to compensate for any residual significant, adverse impacts that cannot be avoided, minimised and/or rehabilitated or restored, in order to achieve no net loss or a net gain of biodiversity. Offsets can take the form of positive management interventions such as restoration of degraded habitat, arrested degradation or averted risk, protecting areas where there is imminent or projected loss of biodiversity.

Developers of large infrastructure projects such as hydroelectric power projects, mines, oil and gas projects and large agricultural production projects will be encouraged to use biodiversity offsets as part of the review of the Environmental Impact Statement (EIS). Results of cost-effectiveness, cost-benefit analyses and other economic instruments will be used to demonstrate the benefits of biodiversity offsets over alternative biodiversity loss mitigation measures. The main stakeholders, beneficiaries or losers, will use available incentives of acknowledgement in publications, international media, websites and use of environmental compliance audit reports and sector reporting to encourage project developers establish biodiversity offsets.

The 10 key principles for implementing biodiversity offsets are:

1. A biodiversity offset is a commitment to compensate for significant residual adverse impacts on biodiversity identified after appropriate avoidance, minimisation and on-site rehabilitation measures have been taken according to the mitigation hierarchy.
2. Limits to what can be offset: There are situations where residual impacts cannot be fully compensated for by a biodiversity offset because of the irreplaceability or vulnerability of the biodiversity affected.
3. A biodiversity offset should be designed and implemented in a landscape context to achieve the expected measurable conservation outcomes taking into account available information on the full range of biological, social and cultural values of biodiversity and supporting an ecosystem approach.
4. A biodiversity offset should be designed and implemented to achieve in situ, measurable conservation outcomes that can reasonably be expected to result in no net loss and preferably a net gain of biodiversity.
5. A biodiversity offset should achieve conservation outcomes above and beyond results that would have occurred if the offset had not taken place. Offset design and implementation should avoid displacing activities harmful to biodiversity to other locations.
6. In areas affected by the development project and by the biodiversity offset, the effective participation of stakeholders should be ensured in decision-making about biodiversity offsets, including their evaluation, selection, design, implementation, and monitoring.
7. A biodiversity offset should be designed and implemented in an equitable manner, which means the sharing among stakeholders of the rights and responsibilities, risks and rewards associated with a development project and offset in a fair and balanced way, respecting legal and customary arrangements. Special consideration should be given to respecting both internationally and nationally recognised rights of indigenous peoples and local communities.
8. The design and implementation of a biodiversity offset should be based on an adaptive management approach, incorporating monitoring and evaluation, with the objective of securing outcomes that last at least as long as the development project’s impacts and preferably in perpetuity.
9. The design and implementation of a biodiversity offset, and communication of its results to the public, should be undertaken in a transparent and timely manner.
10. The design and implementation of a biodiversity offset shall be a documented process informed by sound science, including an appropriate consideration of traditional knowledge.
11. ***Environmental fiscal reforms***

Environmental fiscal reform” (EFR) refers to a range of taxation and pricing measures which can raise fiscal revenues while furthering environmental goals. EFR measures include (i) taxes on natural resource extraction, (ii) product subsidies and taxes (product taxes and product subsidies), (iii) taxes on polluting or harmful emissions and (iv) user charges or fees. The feasibility of EFRs depends on: (i) natural resource pricing measures, such as taxes for forests and fisheries exploitation; (ii) reforms of product subsidies and taxes; (ii) cost recovery measures; (iii) pollution charges.

1. Fiscal instruments, i.e. taxes and subsidies, are mechanisms for raising and transferring funds between sectors. While economic development is critical for lifting people out of poverty and raising living standards for the broader population, it also causes harmful side effects—particularly for the environment—with potentially sizeable costs for the macro-economy.
2. Fiscal instruments (emissions taxes, trading systems with allowance auctions, fuel taxes, charges for scarce road space and water resources, etc.) can and should play a central role in promoting greener growth. Fiscal instruments for biodiversity conservation should be employed based on three criteria: (i) *a) effective at reducing environmental harm*—so long as they are carefully targeted at the source of the problem (e.g., emissions); (ii) *cost-effective* (i.e., they impose the smallest burden on the economy for a given environmental improvement)—so long as the fiscal dividend from these policies is exploited (e.g., revenues are used to strengthen fiscal positions or reduce other taxes that discourage work effort and investment); (iii) *strike the right balance between environmental benefits and economic costs*—so long as they are set to reflect environmental damages.
3. Charge systems: Charges are defined as payments for use of resources, infrastructure, and services and are akin to market prices for private goods. In Uganda charge systems are used as permits. Charges include pollution charges, user charges e.g. for wetlands, betterment charges (imposed on private property which benefits from public investments), impact fees, access fees and administrative charges
4. Financial instruments: The financial sector is the set of institutions, instruments, and the regulatory framework that permit transactions to be made by incurring and settling debts, that is, by extending credit. *All companies, regardless of sector, both impact on biodiversity and ecosystems and depend on ecosystem services.* There is an important role for the financial sector in this regard, including: the management of biodiversity risks in lending and investment decisions and setting up of new innovative financial mechanisms for pro-biodiversity businesses and biodiversity conservation areas. Business can show leadership on biodiversity and ecosystems:
5. ***Green markets through natural resource trade and value chains***

Market for green products refers to the trade mechanism for products certified using criteria that support the three objectives of the CBD. Such products are either natural products including wild plant and animal products used as food sources or used for bio-chemicals, new pharmaceuticals, cosmetics, personal care, bioremediation, bio-monitoring, and ecological restoration, or nature-based products involving many industries, such as agriculture, fisheries, forestry, biotechnology based on genetic resources, recreation and ecotourism.

Uganda is promoting green markets products through the organic agricultural value chains, sustainable non-wood and wood forest products, and wildlife products. The guidelines support the outcomes of the National Bio-trade Strategy and draft national organic agriculture policy.

Uganda’s priorities under bio-trade are : (i) ecotourism; (ii) wildlife use rights; (iii) non-wood forest products; and natural ingredients; and (iv) carbon trade. Organic agriculture in Uganda has generally focused on agricultural product lines for coffee, cotton and fruits and vegetables. Scenarios have suggested that bio-trade and organic agriculture can grow to up to between 5 and 10% of Uganda’s commodity exports.

Bio-trade and organic agriculture in Uganda will be promoted through: (i) community based interventions such as collaborative natural resource management for communities living near protected areas, as well as communities living in biodiversity-rich areas. For farming systems biodiversity conservation seeks to create premiums from certified organic agriculture production; (ii) take advantage of available indigenous traditional knowledge in developing production practices; (iii) promote growth of local and regional markets alongside international markets; (iv) take advantage of favourable climate conditions to promote various products. Therefore semi-arid areas products as well as wet area products should be promoted concurrently. In Uganda’s drier areas products such as Gum Arabica, hides and skins, beef and grains will be important products, while coffee, cotton and fish are important for the wetter areas; and (v) there will be a need to attract vocational skills and entrepreneurship training for viable value chains to emerge around product and services produced.

Institutional support will be needed to ensure that products are eligible to compete for markets. The markets in Europe, the United States, Asia and within Africa require appropriate standards attainment, volumes and regularity of supply. Other considerations such as market information, transaction costs and other business skills are acquired through product based entrepreneurship training.

1. ***Climate finance***

The more frequently implemented carbon projects focus on climate change mitigation. Communities and project developers are urged to implement voluntary carbon standards that have explicit biodiversity conservation criteria such as Plan Vivo, CCB and VCS. For CDM and REDD Plus projects, biodiversity is generally embedded in forestry projects.

Biodiversity conservation stakeholders supporting projects that could affect some form of biodiversity such as wetlands, fisheries, vegetation, insect and animal population as well as agro-ecosystems should seek specific biodiversity criteria. NEMA, UWA and NFA, among others, should indicate this dimension if EIAs are undertaken.

The development of NAMAs and National Adaptation Plans (NAPs) should make provisions, such as higher scores, where necessary, to convince providers of carbon finance to integrate biodiversity in the carbon projects.

There is a need to work partners who have a strong interest in biodiversity conservation such as the United States Agency for International Development (USAID), the World Bank, the German, Norwegian, Belgian, Swedish and United Kingdom Governments and other development partners to integrate biodiversity in their climate change support programmes.

Buyers of carbon credits should have the option of buying bundled carbon credits demonstrated. The possible bundled should include carbon, watershed and biodiversity conservation. If premiums are earned, they should be reflected as market incentives to attract more buyers.

There is a need to upscale community carbon finance initiatives and facilities that promote bundled carbon finance with other forms of PES. The early initiatives currently being promoted should be promoted with additional facility support.

### **5.2.3 Criteria for instruments selection**

The assessment of whether or not to adopt a financing mechanism will be based on the following criteria:

1. Environmental Effectiveness: Will the instrument achieve the environmental objective within the specified time span and what degree of certainty can be expected?
2. Cost Effectiveness: Will the instrument achieve the environmental objective (or target) at the minimum possible cost to society?
3. Flexibility: Is the instrument flexible enough to adjust to changes in technology, the resource scarcity, and market conditions?
4. Dynamic Efficiency: Does the instrument provide incentives for developing and adopting new environmentally cleaner and economically more efficient technologies? Does it promote development of an environmentally sound infrastructure and economic structure in general?
5. Equity: Will the costs and benefits of the instrument be equitably distributed? Who gains and who loses?
6. Predictability: Does the instrument combine flexibility and predictability?
7. Acceptability: Is the instrument understandable to the public, acceptable to the industry, and politically saleable?
8. Quantity of resources mobilized: What fraction of the problem is addressed by the resources mobilized from the instrument?
9. Governance in resource mobilisation and utilization: Has the design of the instrument catered for clarity in mobilisation and proper use of resources.

### **5.2.4 Institutional arrangements**

* + 1. Establishment of a National Resource Mobilisation Focal Point: Uganda will establish a national resource mobilization focal point to facilitate national implementation of the strategy for resource mobilization. The primary function of resource mobilization focal points is organizing the design and dissemination of a country-specific resource mobilization strategy, with the involvement of key stakeholders such as non-governmental organizations, indigenous peoples and local communities, environmental funds, businesses and donors, in the framework of updated national biodiversity strategies and action plans. In addition, resource mobilization focal points should act as liaisons with the Secretariat. The national resource mobilization focal point will be responsible for implementing the 15 criteria of obligations to the CBD, as well as coordinating all the actions proposed under these guidelines.
1. 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.
2. The Technical Committee on Biodiversity Conservation. The technical committee on biodiversity conservation was established under the National Environment Act Cap 153 (section 10). Persons appointed to serve on a technical committee serve in their personal capacity and appointment is based on qualifications and experience. The technical committee on biodiversity conservation is the lead technical advisory arrangement on biodiversity conservation in the country.
3. Key biodiversity conservation stakeholders: Directorate of Fisheries resources – management of fisheries; Uganda Wildlife Authority (UWA) – Wildlife Management (10 National Parks, 12 Wildlife Reserves); National Forestry Authority (NFA) – Forest Management –Central Forest Reserves (506); Uganda National Council of Science and technology (UNCST) – Biosafety and Biotechnology, Implementation of ABS regulations; National Agricultural Research Organisation (NARO) – Plant Genetic Resources, research on biodiversity, Directorates and departments of the Ministry of Agriculture Animal Industry and Fisheries (MAAIF), Ministry of Water and Environment (MWE), Ministry of Tourism Wildlife and Antiquities (MTWA).
4. Academia, especially Makerere University, Nkozi University, Busitema University and Gulu University – Research, training of personnel. These institutions shall continue to provide support in development of policies, regulations and institutional arrangements for biodiversity conservation, including, but not limited to, plant genetic resources, access and benefit sharing and organic agriculture.
5. Local governments - environment and natural management within their jurisdiction- e.g. Local forest reserves, wetlands etc. Local governments are the main stakeholders in management of biodiversity outside protected areas. The management of forests, agricultural zoning and urban physical planning and zoning, management of wetlands, watershed and waste disposal within their jurisdiction. Local governments are key partners in resource mobilisation through local revenue and utilization of allocations from central government, donors and charitable donations
6. The private sector is a key partner in the sustainable extraction use and disposal of resources from the environment and nature. The private sector contributes to biodiversity conservation resource mobilisation through payment of national taxes, through subscription to innovative financing mechanisms, and through charitable donations. The private sector is also a direct investor in the exploitation or sustainable enhancement of productivity of ecosystems.
7. NGOs are also involved in biodiversity conservation. NGOs mobilise communities to participate in biodiversity conservation, work with government institution to support implementation of national programmes on biodiversity conservation. NGOs mobilise, lobby and support governance measures for judicious, sustainable, optimal and equitable use of resources mobilised for biodiversity conservation.

## 5.3 Supporting regulatory framework for resource mobilisation strategy

*I. International Conventions for Biodiversity Conservation*

1. Convention on Biological Diversity (CBD) Uganda signed the convention on 12th June 1992 and ratified the convention on the 8th September 1993.
2. The Cartagena Protocol on Bio-safety: Uganda signed the protocol on the 24th May 2000 and on the 30th November 2001 the protocol was ratified.
3. International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)
4. Convention in International Trade of Endangered Species of fauna and flora (CITES) - Uganda ratified the convention on 18th July 1991 and acceded to it on 16th October 1991).
5. Ramsar Convention on Wetlands - Uganda signed the Convention on 4th March 1988 and ratified it on 4th July 1988.
6. The Lusaka Agreement on Cooperative Enforcement Operations directed at Illegal Trade in Wild Fauna and Flora. Uganda signed it on 8th September1994 and ratified it on 12th April 1996.
7. United Nations Convention to Combat Desertification (UNCCD) - Uganda signed the agreement on 21st November 1994 and deposited the instrument for ratification on 25th June 1997.
8. United Nations Framework Convention on Climate Change (UNFCCC) - Uganda signed the Convention in June 1994 and ratified in September 1997.
9. Convention on the Protection of the World Cultural and Natural Heritage -Uganda ratified it on 20th November 1987.

**II.** *The Legal Framework for Biodiversity Conservation*

**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.
2. The Land Act Cap 227.
3. The Uganda Wildlife Act Cap 200.
4. The Local Government Act Cap 243.
5. The Agricultural Seeds and Plant Act (1994).
6. The Plant Protection Act Cap 244
7. The Seeds and plant Act, 2006
8. The National Forestry and Tree Planting Act 2003.
9. Environment Impact Assessment Regulations, 1998.
10. Regulations on Access to Genetic Resources and Benefit Sharing 2005.
11. Regulations on Wetlands, Riverbanks, Lakeshores, Hilly and Mountainous areas (2000).
12. The National Environment (Minimum Standards for Discharge of effluents into water or land) Regulations

**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 socioeconomic development.

Other important policies include

1. The Decentralization Policy of 1997.
2. The Wildlife Policy of 1999.
3. The Forestry Policy of 2001.
4. The Fisheries Policy 2004.
5. The National Tourism Policy 2003.
6. The National Biotechnology and Biosafety Policy (2008).
7. The National Biodiversity Strategy and Action Plan (2008).
8. The National Forest Plan (2001).
9. The National Wetlands Policy (1996).
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, reforestation, tree planting, and enhancing private sector involvement.

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

1. Integration of environment concerns in the development initiatives.
2. Strengthening policy and legislative framework.
3. Developing national and international partnership for trans-boundary management of shared natural resources/ecosystems.
4. 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:

## 5.4 Obligations for reporting on national resource mobilization strategy

The National Focal Point in the country will take lead on facilitating the process for enabling fulfillment of reporting obligations on resource mobilisation for biodiversity conservation. Whereas Uganda has several means of mobilising and generating resources for biodiversity conservation, parties to the CBD have agreed on 15 indicators for reporting on Uganda’s resource mobilisation strategy. These indicators include:

Indicator 1: Aggregated financial flows, in the amount and where relevant percentage, of biodiversity-related funding, per annum, for achieving the Convention’s three objectives, in a manner that avoids double counting, both in total and in, inter alia, the following categories:

* 1. Official Development Assistance (ODA);
	2. Domestic budgets at all levels;
	3. Private sector;
	4. Non-governmental organizations, foundations, and academia;
	5. International financial institutions;
	6. United Nations organizations, funds and programmes;
	7. Non-ODA public funding;
	8. South-South cooperation initiatives; and
	9. Technical cooperation.

Indicator 2: Number of countries that have:

1. Assessed values of biodiversity, in accordance with the Convention;
2. Identified and reported funding needs, gaps and priorities;
3. Developed national financial plans for biodiversity; and
4. Been provided with the necessary funding and capacity building to undertake the above activities.

Indicator 3: Amount of domestic financial support, per annum, in respect of those domestic activities which are intended to achieve the objectives of the Convention on Biological Diversity;

Indicator 4: Amount of funding provided through the Global Environment Facility and allocated to biodiversity focal area;

Indicator 5: Level of CBD and Parties’ support to other financial institutions that promote replication and scaling-up of relevant successful financial mechanisms and instruments;

Indicator 6: Number of international financing institutions, United Nations organizations, funds and programmes, and the development agencies that report to the Development Assistance Committee of Organisation for Economic Co-operation and Development (OECD/DAC), with biodiversity and associated ecosystem services as a cross-cutting policy;

Indicator 7: Number of Parties that integrate considerations on biological diversity and its associated ecosystem services in development plans, strategies and budgets;

Indicator 8: Number of South-South cooperation initiatives conducted by developing country Parties and those that may be supported by other Parties and relevant partners, as a complement to necessary North-South cooperation;

Indicator 9: Amount and number of South-South and North-South technical cooperation and capacity building initiatives that support biodiversity;

Indicator 10: Number of global initiatives that heighten awareness on the need for resource mobilization for biodiversity;

Indicator 11: Amount of financial resources from all sources from developed countries to developing countries to contribute to achieving the Convention’s objectives;

Indicator 12: Amount of financial resources from all sources from developed countries to developing countries towards the implementation of the Strategic Plan for Biodiversity 2011-2020;

Indicator 13: Resources mobilized from the removal, reform or phase-out of incentives, including subsidies, harmful to biodiversity, which could be used for the promotion of positive incentives, including but not limited to innovative financial mechanisms, that are consistent and in harmony with the Convention and other international obligations, taking into account national social and economic conditions;

Indicator 14: Number of initiatives, and respective amounts, supplementary to the financial mechanism established under Article 21, that engage Parties and relevant organizations in new and innovative financial mechanisms, which consider intrinsic values and all other values of biodiversity, in accordance with the objectives of the Convention and the Nagoya Protocol on Access to Genetic Resources and the

Fair and Equitable Sharing of the Benefits Arising out of Their Utilization;

Indicator 15: Number of access and benefit sharing initiatives and mechanisms, consistent with the Convention and, when in effect, with the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of the Benefits Arising out of Their Utilization, including awareness-raising, that enhance resource mobilization;

# 6. ACTION PLANS

Sixteen action plans have been proposed outlining the resources required for financing biodiversity conservation in Uganda. The action plans show the resources required by different stakeholders to undertake biodiversity conservation in Uganda as well as the new operational framework that coalesces all stakeholders actions around the new resource mobilisation focal proposed. Therefore, the action plans draws from the NBSAP document, and discussions with stakeholders, to propose strategic biodiversity conservation actions and the resources that will be required to attain the set goals. The overall resources required are estimated at $329.5 million/year between 2015 and 2020. Whereas the financing gap is estimated at $455 million/year and $670 million is needed for biodiversity conservation related activities, a number of these activities lie outside the confines of the NBSAP and future improvements in financial analysis will need to collate information on activities in private sector, non-governmental agencies and impact mitigation activities within public sector.

## 6.1 Action Plan to establish and operationalize a resource mobilisation focal point

The resource mobilisation focal point will be the central focus of developing and scaling up biodiversity conservation financing arrangements. The focal point will also collate data on ongoing initiatives within and outside the country and passing on adequate information and guidance to national stakeholders and international partners and parties who may be interested in similar instruments or information. The focal point will provide support for public finance revenue and management arrangements for biodiversity conservation stakeholders in the country.

|  |
| --- |
| Goal: establishing and operationalising a National Resource Mobilisation Focal Point |
|  | **Responsibility** | **Funds required****$** | **Human & other resources** | **Time line** |
| Objective : Review policy, legal and institutional frameworks and agree on appropriate institutional arrangements and make contribution for operationalizing focal point | CBD focal pointAll other stakeholders  | 150,000 | Consultancy services, office space | 2015 - 2016 |
| Objective: Establish and operationalise the secretariatActivities* Develop instruments based on the traditional and innovative financing options (2 years)
* Pilot or initiate scale-up of successful instruments with different stakeholders (2 years)
* Contribute reports on financing mechanisms for CBD secretariat (5 years)
* Support governance and M&E activities for biodiversity action plan implementation – establish public finance arrangements for revenue and management finance (5 years)
 | As agreed by stakeholdersCBD Focal point | 600,000600,000100,000500,000200,000 X 51,000,000 | Programme officer/ coordinator on biodiversity finance mechanism for UgandaOffice space | 2015-20162015-20162015-20202015-2020 |
| **Sub-total** |  | **2,850,000** |  |  |

## 6.2 Action Plan for Biodiversity Conservation Coordination 2014 - 2020

The biodiversity conservation activities in Uganda are coordinated through the actions of key stakeholders and the existing coordination arrangements under the CBD secretariat in NEMA. However, the biodiversity coordination activities extend to all three objectives of the CBD as well as interlinked activities under the Cartagena Protocol, the Treaty on Plant Genetic Resources Food and Agriculture, and the other Rio Multilateral Environmental Agreements (MEA), which have components of biodiversity. The key actions for biodiversity coordination in Uganda over the 2006 to 2020 period will include supporting current enforcement and compliance actions, capacity building and valuation studies to complement the efforts for resource mobilisation.

|  | **Responsibility**  | **Funds $/year** | **Human resource**  | **Others** |
| --- | --- | --- | --- | --- |
| **Goals Functioning of Biodiversity Conservation Coordination Initiative & CBD Focal Point & Improved collaboration between the CBD NFP and other international conventions** |
| **Objective 1:** Operationalizing of BBCI the institutional network (platform for cooperation on collaborative management and benefit sharing) |
| **Activities to be implemented** Support law enforcement on biodiversity conservation at LG level - District (112) @3000 (5 years) |  | 448,000 X 52,240,000 | A focal point and programme assistant | 2015 - 2020 |
| Capacity building to plan for biodiversity conservation - central government and LGs - District (112) @3000 (5 years) |  | 448,000 X52,240,000 |  | 2015 - 2020 |
| Sub-total |  | 4,480,000 |  |  |
| Objective 2: Valuation of biodiversity by ecosystems level. |
| 1. Valuation of Mountain biodiversity – (2 years)Rwenzoris complex - Rwenzori, Baker, Speke, Stanley;Virunga complex – Gahinga, Muhabura, SabyinyoMt. Elgon &Tororo RockKaramoja Region - Moroto, Imotong Mountains, Zulia and Kadam, Morungole, 2. Valuation of forest biodiversity (2 years)3. Valuation of wetlands biodiversity (2 years)4. Valuation of National Parks & Reserves (2 years)5. Valuation of wildlife outside Pas (2 years)6. Valuation of biodiversity in aquatic systems (2 years)7. Valuation of biodiversity of agro-ecosystems (2 years)8. Valuation of biodiversity of grasslands) (2 years) | NEMA/LGs – Mountains;NFA – Forests and District Local Gov’tsUWA & LGs/NEMA – PAs & wildlife outside PAsDept. Fisheries Res./NAFIRRIMAAIF/PMA/NEMA – agro-ecosystems MAAIF/MoLG/MWE/ UWA/NEMA/LGs - grasslands | 500,000500,000300,000500,000200,000500,000500,000500,000 | Consultancy servicesSteering committeesTechnical oversight (international) | 2015-20162014 – 20202015-20162015-20162015-20162015-20162015-20162015-20162015-2016 |
| **Sub-total (2015-2020)** |  | **3,500,000** |  |  |
| **Total**  |  | **7,980,000** |  |  |

## 6.3 Management of biodiversity in protected areas

Management of biodiversity in protected areas represents one of the largest activities of biodiversity conservation in the country. The biodiversity to be protected is in national parks, wildlife reserves and sanctuaries. In addition, there is biodiversity in central and local forest reserves. The function therefore is split between central government agencies and District Local Governments (DLGs).

| **Goal: Management of biodiversity in Protected Areas** |
| --- |
|  | **Responsibility** | **Funds$/year** | **Other resources** | **Timeline** |
| Objective 1: Improve Sustainability of Conservation Agency in charge of 10 National Parks, 12 Wildlife Reserves, 14 Wildlife Sanctuaries and provides guidance for 5 Community Wildlife Areas (5 years)Activities:* Implementation of UWA Business plan and Wildlife System Plan
* Ecotourism development especially community based eco-tourism
* Develop and implementation of monitoring and research policy for biodiversity components e.g. PAs
* Policy and institutional framework that enhances collaboration and ensures coordination regarding wildlife trade
 | **Uganda Wildlife Authority** and Ministry of Tourism, Wildlife and AntiquitiesNEMA Focal Point | 156,000,000 | Office spaceTechnical experts and staff hoursField monitoring, data collection reporting and interventionsDatabase managementResearch and management actions | 2014 - 2020 |
| Objective 2: Capacity building on law enforcement on illegal Wildlife tradeActivities (5 years)* UWA, Customs – URA, Uganda Police; cross border cooperation
* Lusaka Agreement - Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora
* Develop legislation on enforcement of CITES and specify mechanisms for monitoring wildlife trade
 | **Ministry of Trade & Industry****Ministry of Tourism, Wildlife and Antiquities****UWA**URA, Uganda PoliceNEMALocal Governments | 500,000 | UWA technical capacity buildingOffice space and equipment | 2015 - 2020 |
| Objective 3: National Forest Plan components for biodiversity protected in central forest reserves, *based on the NFA Business Plan (2009-2014)* (5 years)Activities::* NFA inventories for biodiversity monitoring
* NFA reforestation of degraded areas, plan to plant 2500 ha/year for 10 years (2010-2020)
* Benefit sharing in Collaborative Forest Management.
* NFA - Forest Nature Conservation Master plan integration of biodiversity concerns into NFA programmes.
 | **National Forestry Authority**Ministry of Water and Environment – Forestry Sector Support DepartmentDistrict Forest Services  | 99,160,400 | Office spaceEquipmentTechnical assistance | 2015 - 2020 |
| Objective 4: Management of 12 Ramsar sites (PAs and wetlands), and management of wetland areas gazetted as PAsActivities :* Strategic plan development & development of bylaws (2 years)
* Wetland Restoration and management & law enforcement (6 years)
 | Wetlands Department, NEMA, DWRM/MWE | 250,0003,360,000 | Office spaceEquipmentTechnical assistance | 2015-20162015-2020 |
| **Subtotal**  |  | **3,610,000** |  |  |
| Objective 5: Biodiversity conservation for local forest reserves.Activities* Development management plans through stakeholder engagement (2 years)
* Implement management plans together with District leaders, including potential for enhancing community benefits (5 years)
 | DLGsMoLGNEMA, UWA, NFANGOs | 1,120,,000 | extra technical support to implement biodiversity conservation strategiesoffice space, equipment | 2015-20162015-2020 |
| **Total**  |  | **260,390,400** |  |  |

## 6.4 Action Plan for National Bio-trade Programme

After implementing a successful bio-trade programme, there is potential for scaling up the successes in ecotourism, wildlife trade, and trade in non-wood forest products. A strategy and institutional arrangements will be needed. Some of the initiatives were new and required piloting while others need scaling up. A financing facility provides a plat form for scaling up the national bio-trade opportunities.

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| **Goal: Implementation of a National Biotrade Programme** |
|  | **Responsibility** | **Funds required** **$/year** | **Human & other resources** | **Timeline** |
| Objective 1: A National Biotrade Programme Regulatory, Policy and Institutional FrameworkActivities:* Establish regulations and guidelines for bio-trade for sustainable use of ecosystems and ecosystem services (2 years)
* Establish a multi-institutional coordination and operating platform for Bio-Trade (1 year)
 | **Uganda Export Promotions Board & Ministry of Trade and Industry**Ministry of Tourism, Wildlife & AntiquitiesUEPBUWANEMANFANGOs: WCS, IUCN, | 600,000200,000 | Office spaceFocal Point on Biotrade Programme Assistant Consultancies | 2014 - 2020 |
| Objective 2: Provide financing facility for start-up with recoverable funds in a revolving fund for other start ups**Activities*** Establish a financing facility secretariat for bio-trade (1 year)
* Mentoring and financial management to recover funds and maintain a revolving fund (1 year)
* Provide funds for facility at $1 million (4 years)
 | UEPBUWANEMANFA | 100,000100,0001,000,000 | Equipment and staff timeExpertise from long-term contracted consultants and short term consultants or technical expertsFinancial institutions | 201520162016-2020 |
| **Sub-total** |  | **2,000,000** |  |  |

## 6.5 Action plan regulations on access to genetic resources & benefit sharing

Genetic resources and benefit sharing are new areas, and while NEMA has developed regulations, there may be a need to consider industrial level activities and the protection poor communities would needed. On the other hand, there is a need to consider the possibility of exploiting these rights to genetic resources for the economic benefit they could offer communities. However, there is a need to ensure that exploitation and use of genetic resources is safe, equitable and sustainable.

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| **Goal: Implementation of Regulations on Access to Genetic Resources and Benefit Sharing** |
|  | **Responsibility** | **Funds $/year** | **other resources** | **Timeline** |
| Objective 1: Ongoing activities of maintaining compliance to - Access to Genetic Resources and Benefit SharingActivities:* Investment in infrastructure (2 years)
* Capacity Building (2 years)
* Operational costs & Coordination mechanism
 | NEMA Focal Point Uganda National Council for Science and Technology (UNCST) Competent Authority. NEMAGEFNARO | 250,000250,000500,000 | Focal PointProgramme Assistant | 2015-20162015-20162015-2020 |
| Objective 2: Feasibility studies and establishment of baselinesActivities* Develop baseline for genetic resources and current benefit sharing arrangements (5 years)
* Feasibility analyses for investment possibilities as well as sustainable increase in productivity of ecosystems (2 years)
 | NEMA Focal Point Uganda National Council for Science and Technology (UNCST) Competent Authority. NEMANAROUniversitiesGEF | 500,000250,000 | International and national Technical experts Analysts for pharmaceutical, ingredients & other uses | 2015-20202016-2017 |
| **Sub-total**  |  | **1,750,000** |  |  |

## 6.6 Action Plan for information sharing mechanisms – CHM

The clearing house mechanism is an information sharing mechanism for biodiversity conservation stakeholders in the country, among themselves, with the CBD secretariat and other parties to the convention. The funds required will go towards establishing a database and supporting data collection, and analyses and reports, as well maintaining working time. Crucially, this activity will allow for efforts to include as many stakeholders as possible.

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| **Goal: Implementation of Biodiversity information sharing mechanisms - CHM** |
|  | **Responsibility** | **Funds $/year** | **Other resources** | **Timeline** |
| Objectives: Support operations of the Clearing House MechanismActivities:* Complement information management systems of UNCST, UWA, NFA, WMD, NARO, Botany Department at Makerere University, Zoology Department (Makerere University), Institute of Environment and Natural Resources (Makerere University) and Nature Uganda among others. (5 years)
* Maintaining online network (5 years)
* Synthesis and maintaining information exchange platform among different institutions (5 years)
 | **NEMA/MWE**UNCST, UWA, NFA, WMD, NARO, Botany Department at Makerere University, Zoology Department (Makerere University), Institute of Environment and Natural Resources (Makerere University) and Nature Uganda among others | 1,000,000250,000300,000 | Focal point in NEMAAn information management system assistantOffice spaceCooperation from information systems officers of key institutions | 2015-20202015-20202015-2020 |
| **Total** |  | **1,550,000** |  |  |

## 6.7 Action Plan for Implementation of National Invasive Species Strategy and Action Plan

Invasive species can have debilitating effects on indigenous ecosystems. Existing species that are unable to compete with invasive species are at risk of extinction and the livelihoods therefore supported are also at risk. Therefore, a programme for managing invasive species and the associated risks is considered in this action plan.

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| **Goal: Implementation of National Invasive Species Strategy and Action Plan** |
|  | **Responsibility** | **Funds req’d $/year** | **Human & other resources** | **Timeline** |
| Objective: Implementation of National Invasive Species Strategy, Action Plan and Policy Guidelines for :Activities: * Awareness creation (2 years)
* Undertake training using Manual to manage/control several species for District Environment Officers (2 years)
* Monitoring evaluation (4 years)
 | **NEMA, MAAIF, LGs,** NFA, UWA,NGOs | 506,0001,120,000400,000 | Focal pointProgramme AssistantOffice spaceCoordination mechanism | 2015-20172015-20172016-2020 |
| **Total** |  | **2,026,000** |  |  |

## 6.8 Action plan for involvement of local communities in biodiversity management

The political economy of biodiversity conservation in Uganda is skewed with both urban and rural communities unable to effectively participate in the management of biodiversity because of inadequate information, and/or capacity to participate. Therefore using the existing structures of the Ministry of Water and Environment (MWE), Ministry of Local Government (MoLG), Ministry of Agriculture Animal Industry and Fisheries (MAAIF), NEMA and the DLGs capacity building is proposed. The capacity building will take local environment committees in the local governments and pilot support will be provided to mobilise and educate local communities.

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| **Goal: Facilitated the involvement of local communities in biodiversity management** |
|  | **Responsibility** | **Funds required $/year** | **Human & other resources** | **Timeline** |
| Objectives: capacity building for Local governments, and awareness creation for communities on biodiversity conservation.Activities ($ 10,000 for each of 112 Districts for 5 years)* Develop a capacity building programme and strategy and materials local environment committees ($10,000)
* Implement training programmes and awareness
* Develop and implement a communication strategy
 | MWE, MoLG, MoTWA, MAAIFDistrict Local Governments | 1,120,000 | Focal pointProgramme AssistantOffice spaceCoordination mechanism | 2015-2020 |
| **Total** |  | **1,120,000** |  |  |

## 6.9 Integrate of indigenous knowledge & practices in biodiversity conservation

Indigenous knowledge and practices are key to the survival of some of the oldest communities in the country. The knowledge and practices have been useful in biodiversity conservation and maintaining livelihoods. Actions are proposed towards continued development, reporting, monitoring and evaluation of the indicators on indigenous knowledge and practices.

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| **Goal: Continued Development, reporting and Monitoring and Evaluation of Biodiversity Indicators**  |
|  | **Responsibility** | **Funds required****$/year** | **Human & other resources** | **Timeline** |
| Objective 1: Implementation of data collection on indicators for biodiversity conservation and Monitoring and Evaluation FrameworkActivities:* Identify and build capacity on skills and other capacity to collection information on biodiversity indicators (5 years)
* Implement and report on M&E biodiversity indicators (5 years)
* Capacity building for all DLGs (5 years)
 | NEMAUWA, UNCST, NAFORRINAROMakerere University – Botany, Zoology and Dept of Environment MgtMAAIF, MOLG and all other key stakeholders | 600,000200,0001,120,000 | Have a focus person in all key biodiversity conservation agenciesOffice space and maintenance of a database  | 2015 – 20202015 – 20202015 - 2020 |
| **Total** |  | **1,920,000** |  |  |

## 6.10 Action plan for information, education and public awareness on biodiversity

Public information, education and awareness will be essential in creating a political economy where stakeholders are support of efforts to mobilise additional resources for biodiversity conservation, through public information and awareness stakeholders will be able to easily identify with their role in the effort of biodiversity conservation.

| **Goal: Public awareness on biodiversity promoted and implemented**  |
| --- |
|  | **Responsibility** | **Funds $/year** | **Human & other resources** | **Timeline** |
| Objective 2: Develop and implement a National Communication Strategy on biodiversity conservation (3 years)Activities: * Develop communication strategy through consultations of public stakeholders and local stakeholders.
* The communication strategy should be piloted and tested
* Materials like fliers, internet uploads, articles should be available for use in subsequent phases
 | Most of the relevant government agencies as well as NGOs, CSOs and CBOs are involved in education and awareness programmes (own funds) | 600,000 | Coordination among all stakeholdersCBD Focal PointNational and Local media outlets for piloting and testing material | 2015 – 2016 |
| Objective 2: Implement a public media communication strategy on biodiversity conservation (2 years)Activities::* Organize public media outreaches on radio – design educational materials and broadcast
* Organize public media outreaches on radio – design educational materials and broadcast
* Organise press conferences as well education for environmental journalists
 | NEMA, UNCST, NGOs/SCOs | 800,000 | Staff in information and education sections, Biodiversity conservation expertsPrinting, stationery and media coverage | 2015-2017 |
| Objective 3: Implement awareness on biodiversity conservation at local government levelActivities:* Develop public awareness programme
* Implement public awareness programme
 | NEMA, DLGs, MWE, UWA, NFA, UNCST, NGOs/CSOs | 2,240,000 | District Local Government – Natural Resources and Production Departments | 2016 - 2020 |
| **Total**  |  | **3,640,000** |  |  |

## 6.11 Action Plan for progress made in the area of biotechnology and biosafety

Resources will be mobilized to implement the national biotechnology and biosafety policy and upcoming legislation and regulations. The need for biotechnology and biosafety regulation is important to ensure consideration of feelings of the general public, while at the same time provide appropriate technology solutions to overcome livelihoods challenges and health challenges, among others.

|  |
| --- |
| **Implementation of Biotechnology and Biosafety** |
|  | **Responsibility** | **Funds required $/year** | **Human & other resources** | **Timeline** |
| Objective: implementation of National Policy on Biotechnology and Biosafety in April 2008; Activities:* Maintenance of focal point (5 years)
* Set up National Biosafety Committee (NBC) and technical recruitment of staff (2 years)
* Operational functions NBC monitoring compliance (5 years)
 | NAFORRI/NAROMAAIF | 300,000200,000600,000 | Focal Point Supported by Programme AssistantOffice space | 2015 – 20202015-201720015-2020 |
| **Total** |  | **1,100,000** |  |  |

## 6.12 Action Plan for Thematic programme of work on inland water biodiversity

Uganda’s surface water systems occupy nearly one-fifth of the country’s surface area, numerous livelihoods are based on fisheries and water travel, and water used in urban areas and industry is largely abstracted from the surface water systems. The biodiversity of the inland water systems leads to provision of fish, nutrition for the fish as well as pollution mitigation. Given the importance of inland water systems an allocation has been provides in the action plan summary below.

|  |
| --- |
| **Goal: Programme of work on Inland Water Biodiversity** |
|  | **Responsibility** | **Funds required $/year** | **Human & other resources** | **Timeline** |
| Objective: Develop & Implement programme to complement current independent efforts on biodiversity conservation in aquatic systemsActivities:* Develop programme (2 years)
* Build capacity to generate information on biodiversity conservation for aquatic systems & Education programmes (2 years)
* Compliance efficiency against illegal fishing (5 years)
* Research on fisheries biodiversity (NaFIRRI) (5 years)
 | NAFIRRIMAAIF/Dept. Fisheries ResourcesDirectorate of Water Resources Management, NEMA, wetlands Management Department | 500,000500,0003,000,0003,000,000 | A programme officer at the Dept. of Fisheries Resources/ MAAIF | 2015-20162016-20172016-20202016 - 2020 |
| **Total** |  | **7,000,000** |  |  |

## 6.13 Action Plan for Programme of work on Agro-biodiversity

About 80% of Ugandans derive their primary livelihoods from agriculture, while 66% of the workforce is employed in agriculture. At the other extreme poor management of agro-ecosystems is the leading source of environmental degradation in the country. Biodiversity is lost as agro-ecosystems are degraded. Therefore, efforts are needed to provide additional and adequate resources to stakeholders for biodiversity conservation in the country.

| **Programme of work on Agro-biodiversity** |
| --- |
|  | **Responsibility** | **Funds $/year** | **Other resources** | **Timeline** |
| Objective 1: Identification, monitoring and assessment, and indicatorsActivities:* Investment into infrastructure and capacity building for local governments and national stakeholders
* Operational costs
 | MAAIFNARONEMAMakerere & other UniversitiesMOLGDistrict Local governments | 5,600,000 | A focal person and programme assistant on biodiversity conservation for agro-ecosystems | 2014 - 2020 |
| Objective 2: Biological diversity of dry and sub-humid landsActivities:* Feasibility of investment, investment guides and pilot initiatives
 | MAAIFNARONEMAMakerere & other UniversitiesMOLG & DLGs | 2,400,000 | A focal person and programme assistant on biodiversity conservation for grasslands | 2014 – 2020 |
| Objective 3: Policy diagnosis (2 years)Analysis of farmer land use and policy (3 years)Removal of reverse subsidies/replacePolicy harmonsation (3 years) | MAAIF, NEMA, MWE, Wetland Department, MoLG | 150,0001,000,000250,000 | Office space Consultants technical staff time | 2015-20162016-20182016-2018 |
| **Sub total**  |  | **1,400,000** |  |  |
| Objective 4: Support implementation of agro-biodiversity enterprisesActivitiesCapacity building for District farmers associationsValue chain analyses and supportSupport incentives and disincentives within existing policy and regulatory frameworks | MAAIFDLGs NARONEMAMakerere & other UniversitiesMOLG | 17,800,000 |  | 2015 - 2020 |
| **Total**  |  | **27,200,000** |  |  |

## 6.14 Action Plan for Mountain Biodiversity management

Uganda’s mountain ecosystems are one of the most neglected in the country. There are largely no management plans and the obligations of District Local Governments (DLGs) to support NEMA in mountain ecosystem management are limited by low prioritization and local resources. Therefore, it is envisaged that the resources mobilized will be crucial in initiative more intensive mountain ecosystem management.

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| --- |
| **Mountain Biodiversity** |
|  | **Responsibility** | **Funds $/year** | **Other resources** | **Timeline** |
| Implementation of Mountainous and Hilly Areas Management Regulations: support District Councils regularly make by-laws for three major mountains Elgon, Ruwenzori & Virunga mountains and the main 15 Mt. ranges: (5 years)* Identifying hilly areas at risk of environmental degradation and taking appropriate measures.

15 Mt. ranges plans, by-laws, management committees and implementationInvestment $200,000/ Mt. Range* Operational 100,000/year
 | NEMADistrict Local GovernmentUWANFANGOs and CSOs | 4,500,000 | A programme assistant for biodiversity in Hilly Areas International and national conservation experts, universities | 2015 - 2020 |
| **Total** |  | **4,500,000** |  |  |

## 6.15 Action Plan for Biodiversity and Climate Change

The synergies between biodiversity conservation and climate change actions are clear under the Rio MEAs; however, they are not often very clear at national and project implementation level. The need to mainstream biodiversity in NAPs and NAMA processes should be addressed at this crucial stage as new financing mechanisms for climate change are being lined-up.

|  |
| --- |
| **Biodiversity and Climate Change** |
|  | **Responsibility** | **Funds $/year** | **Other resources** | **Timeline** |
| Objective 1: mainstreaming biodiversity conservation in adaptation plans and programmesActivities* Establish a discussion platform on biodiversity and the National Adaptation Plans (5 years)
 | Meteorology Department**Climate Change Unit**MWE/ NEMADistrict Local Government | 2,000,000 | A desk officer with additional responsibilitiesOffice space | 2015 - 2020 |
| Objective 1: mainstreaming biodiversity conservation in mitigation actions and plansActivities (5 years)* Enhance engagement with REDD plus process
* Engagement with the NAMAs
* Enhance engagement with existing voluntary and CDM carbon projects
 | Meteorology Department**Climate Change Unit**MWE/ NEMADistrict Local Government | 1,500,000 | Office spaceExpertsEngagement government stakeholders, DLGs, NGOs, CSOs, CBOsExplore working with new standards | 2015 - 2020 |
|  |  | **3,000,000** |  |  |

## 6.16 Action Plan for Impact assessment for Biodiversity Conservation

Proper impacts assessment will be essential to allowing for use of certain innovative financing mechanisms such as biodiversity offsets and environmental fiscal reforms to implement biodiversity conservation in the country. The basic investments needed are in the capacity of the regulators and capacity of practitioners. Effort is needed to provide information to project developers about the options for biodiversity loss mitigation.

|  |
| --- |
| **Goal: Implementation of national regulations on EIAs and audits components on biodiversity conservation** |
|  | **Responsibility** | **Funds $/year** | **Other resources** | **Timeline** |
| **Objective: implement biodiversity component in Environmental Impact assessments and Audits**Activities:* Review and improve current guidelines
* Capacity building to show values of biodiversity in EIAs and Audits
* Undertake independent biodiversity monitoring to assess compliance of EIAs
* Capacity building for EIA practitioners
* Information and awareness materials for Lead Agencies, public and District Local Governments, project developers
* Piloting measures
 | **NEMA,** UWA, NFA, MAAIF, District LGsEIA PractitionersFocal Points for Biodiversity Conservation | 300,000200,000200,000560,000200,000 | No additional office space and existing staff  | 20152015/20162015/20162016-2017 |
| **Total** |  | **1,460,000** |  |  |

# BIBLIOGRAPHY

|  |
| --- |
| Burnside International Limited, R. J.; Dilon Consultants Limited, Canada; Ecological Writings Inc. Canada; Emviro and Industrial Consult (U) Ltd., Uganda; Frederic Giovannetti, Consultant, France; Tonkin & Taylor International Ltd., New Zealand. 2010. *Kalagala offset sustainable management plan (201 0-2019): popular version*. Vol. 12 of *Uganda - Private Power Generation Project: social and environmental assessment*. s.l.; s.n.. <http://documents.worldbank.org> |
| Chongtham I. R., de Neergaard A. and Pillot D. 2010 Assessment of the strategies of organic fruit production and fruit drying in Uganda, *Journal of Agriculture and Rural Development in the Tropics and Subtropics* 111 (1): 23-34 |
| GOU 2010 National Development Plan 2009/10-2-14/15, National Planning Authority, Kampala, Uganda |
| Kakuru, W., Turyahabwe, N. and Mugisha J. 2013 Total Economic Value of Wetlands Products and Services in Uganda, *The Scientific World Journal 2013* (192656) 13 pps |
| Lin-Heng, L., Mulne, J.E., Aslnabor. H., Kreise, L., Deketelacre, K. eds. 2009, Critical issues in Environmental taxation: International and comparative perspective, volume VII, PP423-442, Oxford University Press New York |
| MAAIF/PMA 2012 Agricultural Sector Development and Investment Plan 2009/2010 – 2014/15, Ministry of Agriculture, Animal Industry and Fisheries and the Plan for Modernisation of Agriculture Secretariat, http://www.agriculture.go.ug |
| Masiga, M., Muramira, E.T. and Kaggwa, R. (2013) Contribution of Uganda’s Forestry Sub-Sector to the National Economy: A Natural Resource Accounting Approach; in Hassan, R.M. and Mungatana, E. (upcoming) Implementing Environmental Accounts: Case Studies from Eastern and Southern Africa, Eco-efficiencies in industry science, |
| Masiga, M., Muramira, E.T. and Kaggwa, R. 2013 Contribution of Uganda’s Forestry Sub-Sector to the National Economy: A Natural Resource Accounting Approach; in Hassan, R.M. and Mungatana, E. (2013) Implementing Environmental Accounts: Case Studies from Eastern and Southern Africa, *Eco-efficiencies in industry science* |
| MFPED 2012 Background to the Budget of Uganda, 2012/13, Ministry of Finance, Planning and Economic Development (MFPED), <http://www.finance.go.ug> |
| MFPED 2013 Semi-Annual Budget Performance Report, Ministry of Finance Planning and Economic Development, Kampala, Also available at <http://www.finance.go.ug> |
| MFPED 2014 Annual budgetary Central Government finance statistics and values, 2002/03 – 2012/13, Ministry of Finance Planning and Economic Development, Kampala, Also available at <http://www.finance.go.ug> |
| MWE 2009. Water and Environment Sector Performance Report (MWE SPR) 2009, Ministry of Water and Environment Kampala, also available at <http://www.mwe.org> |
| MWE 2010. Water and Environment Sector Performance Report (MWE SPR) 2013, Ministry of Water and Environment Kampala, also available at <http://www.mwe.org> |
| MWE 2011. Water and Environment Sector Performance Report (MWE SPR) 2013, Ministry of Water and Environment Kampala, also available at <http://www.mwe.org> |
| MWE 2012). Final concept paper- Joint water and environment sector support programme (JWESSP 2013-2018), Kampala |
| MWE 2012. Technical support to Joint Appraisal of the Joint Water and Environment Sector Support Programme (JWESSP), Uganda <http://www.mwe.org> Kampala Uganda |
| MWE 2012. Water and Environment Sector Performance Report (MWE SPR) 2013, Ministry of Water and Environment Kampala, also available at <http://www.mwe.org> |
| MWE (2013). Water and Environment Sector Performance Report (MWE SPR) 2013, Ministry of Water and Environment <http://www.mwe.org> Kampala Uganda |
| MTWA 2011 Sector Budget framework Paper Trade Tourism and Industry 2010/11, Ministry Tourism, Wildlife and Antiquities, Kampala |
| MTWA 2012 Uganda Tourism Assessment, Ministry of Tourism, Wildlife and Antiquities (MTWA), Kampala, htttp://www. **tourism**.go.ug |
| Namuwoza, C and Tushemerirwe, H. 2011 Uganda Country Report on certified organic agriculture; in Willer, H. and Kilcher, L. 2011. The World of Organic Agriculture: Statistics and Emerging Trends 2011. IFOAM, Bonn & FiBL, Frick |
| Namuwoza, C and Tushemerirwe, H. 2011 Uganda Country Report on certified organic agriculture; in Willer, H. and Kilcher, L. 2011. The World of Organic Agriculture: Statistics and Emerging Trends 2011. IFOAM, Bonn & FiBL, Frick |
| NEMA (2008) National State of the Environment Report for Uganda, NEMA House, Kampala, Uganda |
| NEMA 2007 National State of Environment Report, National Environment Management Authority, Uganda, Kampala, Uganda Available from: <http://www.nemaug.org> |
| NEMA and ACODE (2008) building a foundation for sustainable wildlife trade in Uganda: a review of the national wildlife trade policies in support of the convention on international trade in endangered species of fauna and flora (cites) national, NEMA House, Kampala, Uganda |
| NEMA and ACODE (2008) building a foundation for sustainable wildlife trade in uganda: a review of the national wildlife trade policies in support of the convention on international trade in endangered species of fauna and flora (cites) national, NEMA House, Kampala, Uganda |
| NFA 2009 National Biomass Survey 2005, National Forestry Authority, Springs Road, Kampala |
| NOGAMU 2010 Uganda Organic Agriculture Statistics Report 2009/10, National Organic Agriculture Movement of Uganda, Kampala |
| OECD 2013 Scaling-up Finance Mechanisms for Biodiversity, OECD Publishing, <http://dx.doi/10.1787/978964193833-en> |
| Ogwal, F.O. 2011 Presentation - State of Biodiversity and National Biodiversity Strategy & Action Plan in Uganda, Presentation for Regional Workshop for East Africa on Updating National Biodiversity Strategy and Actions Plans, Lemigo Hotel, Kigali Rwanda |
| Ruhweza, A., Byamukama, B. and Kalanzi, C 2008 Inventory of payments for environmental services in Uganda, updated 2008, Katoomba Group, Washington DC. http://www.katoombagroup.org |
| Slade, G. & Weitz, K. 1991. Uganda environmental issues and options. Unpublished Master’s Thesis, Duke University, Durham, NC. |
| Ssali, Henry. 2001. "Soil Fertility," in *Agriculture in Uganda: Volume 1*. Joseph K. Mukiibi ed. East Lansing, MI: Michigan State University Press, pp. 104-35. |
| Stefan Speck 2010 Uganda: Options for promoting Environmental Fiscal Reform in EC Development Cooperation, European Commission in: Schlegelmich, K., Speck, S., Maro, P. 2010 Options for promoting Environmental Fiscal Reform in EC Development Cooperation, Soges S.p.A for the European Commission, Contract No. 2008/160146/2, also available at <http://www.foes.de> |
| The global mechanism 2008. Budget Process and Financing Instruments in Uganda: Towards Increased Financing for the Implementation of UNCCD, the Global Mechanism UNCCD |
| Tumushabe, G., Ruhweza, A., Masiga, M and Naturinda, B. (2008) Integrated Assessment of the National Organic Agriculture Policy, Advocates Coalition for Development and the Environment (ACODE), Kampala, Uganda |
| UBOS (2010) National Statistical Abstract 2010, Uganda Bureau of Statistics, Kampala, Uganda htpp://www.ubos.org |
| UEPB 2004 National Biotrade Pre-Assessment Study and Proposed Country Programme Structure. Ministry of Tourism, Trade and Industry/United Nations Conference on Trade & Development (UNCTAD) Export Development Programme Implemented by [www.ugandaexportsonline.com/biotrade](http://www.ugandaexportsonline.com/biotrade) |
| UNDP/ECOTRUST/ENR Africa Centre 2013 – Financing Facility for carbon payments and watersheds in the Mt Elgon area, Environmental Conservation Trust – ECOTRUST and ENR Africa Centre, Kampala |
| UWA 2014 Uganda Wildlife Authority Financial Performance 2005-2011, Uganda Wildlife Authority, Kampala |
| Williamson, T. 2011 Reforms to Budget Formulation in Uganda: *The challenges of building and maintaining and a credible process, Overseas Development Institute (ODI), London* |
| World Bank 2012 Uganda Country Environmental Assessment, Environment and Natural Resources Unit, Africa Region (AFTEN), Report No. 68225-UG, World Bank, Washington DC. |

# ANNEXES

## Annex I: Aichi Biodiversity Targets

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| --- |
| ***Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society***  |
|  | **Target 1** By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.  |
|  | **Target 2** By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.  |
|  | **Target 3** By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.  |
|  | **Target 4** By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.  |
| ***Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use***  |
|  | **Target 5** By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced. |
|  | **Target 6** By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.  |
|  | **Target 7** By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.  |
|  | **Target 8** By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.  |
|  | **Target 9** By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.  |
|  | **Target 10** By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.  |
| ***Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity***  |
|  | **Target 11** By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.  |
|  | **Target 12** By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.  |
|  | **Target 13** By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.  |
| ***Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services***  |
|  | **Target 14** By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable. |
|  | **Target 15** By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.  |
|  | **Target 16** By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.  |
| ***Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building***  |
|  | **Target 17** By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.  |
|  | **Target 18** By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.  |
|  | **Target 19** By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.  |
|  | **Target 20** By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.  |

## Annex II: Global Environment Facility support for biodiversity conservation & other environment management projects

[**GEF-5 Allocation and Utilization Summary (All amounts in US$)**](http://www.thegef.org/gef/country_profile/UG?countryCode=UG&op=Browse&form_build_id=form-ISzYe8OS4r5YFbNUERcCsu5OjzPNJrCJH7KdCP7zs-M&form_id=selectcountry_form)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Focal Area** | **STAR GEF-5 Indicative allocation** | **Allocation utilized** | **PIFs cleared by CEO awaiting approval** | **Allocations remaining to be programmed** |
| Biodiversity | 3,830,000 | 3,830,000 | 0 | 0 |
| Climate Change | 4,640,000 | 3,821,000 | 0 | 819,000 |
| Land Degradation | 2,220,000 | 1,210,000 | 0 | 1,010,000 |
| Total | 10,690,000 | 8,861,000 | 0 | 1,829,000 |

All focal areas are still within budget for Uganda (GEF 5 2010 – 2014).

[**GEF-4 Allocation and Utilization Summary (All amounts in US$)**](http://www.thegef.org/gef/country_profile/UG?countryCode=UG&op=Browse&form_build_id=form-ISzYe8OS4r5YFbNUERcCsu5OjzPNJrCJH7KdCP7zs-M&form_id=selectcountry_form)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Focal Area** | **GEF-4 Indicative Allocation\*** | **Allocation Utilized** | **PIFs cleared by CEO awaiting approval** | **Allocations remaining to be programmed** |
| Biodiversity | 3,900,000 | 2,402,500 | 0 | 1,497,500 |
| Climate Change | 3,200,000 | 2,516,400 | 0 | 683,601 |

\* Individual Allocation Countries (Biodiversity & Climate Change) The indicative allocations for all countries were recalculated at the midpoint of GEF-4, as per Council decision, and these revised amounts and other details of the reallocation are available here. Individual allocation countries can access up to their revised indicative allocation, within the limits of available funding. GEF 4: 2006 - 2010

## Annex III: COP 10 Decision X/3

**X/3.Strategy for resource mobilization in support of the achievement of the Convention's three objectives**

**A. *Concrete activities and initiatives including measurable targets and/or indicators to achieve the strategic goals contained in the strategy for resource mobilization and on indicators to monitor the implementation of the Strategy***

*The Conference of the Parties,*

Recalling the strategy for resource mobilization in support of the achievement of the Convention’s objectives adopted in [decision IX/11](http://www.cbd.int/decisions/?m=cop-09&n=11) B,

Having considered [recommendation 3/8](http://www.cbd.int/recommendations/?m=wgri-03&n=8) of the third meeting of the Ad Hoc Open-ended Working Group on the Review of Implementation of the Convention,

Reaffirming the commitment of Parties to meet the obligations set out in the provisions of Article 20 of the Convention and in accordance with the Rio Principles,

Emphasizing that any new and innovative funding mechanisms are supplementary and do not replace the financial mechanisms established under the provisions of Article 21 of the Convention,

Bearing in mind the Strategic Plan for Biodiversity 2011-2020,

1.Invites Parties that have not done so to appoint a "resource mobilization focal point" to facilitate national implementation of the strategy for resource mobilization;

2.Reiterates that national implementation of the strategy for resource mobilization should include, as appropriate, the design and dissemination of a country-specific resource mobilization strategy, with the involvement of key stakeholders, in the framework of updated national biodiversity strategy and action plans;

3.Requests the Executive Secretary, subject to the availability of resources, to organize regional and sub-regional workshops to assist with the development of country-specific resource mobilization strategies, including for indigenous and local communities, as part of the process of updating national biodiversity strategy and action plans, to promote exchange of experience and good practice in financing for biological diversity, and to facilitate the national monitoring of the outcomes of country specific resource mobilization strategies;

4.Requests the Global Environment Facility to provide timely and adequate financial support for updating national biodiversity strategies and action plans, which may include the development of country-specific resource mobilization strategies;

5.Decides that the global monitoring reports on the implementation of the strategy for resource mobilization should be prepared in time for consideration by the Conference of the Parties at its ordinary meetings, with national and regional participation, and should provide essential information on the status and trends in biodiversity financing and help to disseminate funding knowledge and know-how as related to biodiversity;

6.Requests the Executive Secretary, within available resources, to undertake concrete activities and initiatives to achieve the strategic goals of the strategy for resource mobilization, which could include, *inter alia*, the following:

(a)Periodic global monitoring reports on the implementation of the strategy for resource mobilization;

(b)Regional or sub-regional workshops to assess funding needs and identify gaps and priorities;

(c)Global support to the development of national financial plans for biodiversity;

(d)Continuation of the Development and Biodiversity Initiative;

(e)Further activities on new and innovative financial mechanisms;

(f)Training for resource mobilization focal points;

(g)Global forums on biodiversity and associated ecosystem services;

7.Adopts the following indicators for monitoring the implementation of the strategy for resource mobilization, based on its mission and eight goals:

(1)Aggregated financial flows, in the amount and where relevant percentage, of biodiversity-related funding, per annum, for achieving the Convention’s three objectives, in a manner that avoids double counting, both in total and in, *inter alia*, the following categories:

(a)Official Development Assistance (ODA);

(b)Domestic budgets at all levels;

(c)Private sector;

(d)Non-governmental organizations, foundations, and academia;

(e)International financial institutions;

(f)United Nations organizations, funds and programmes;

(g)Non-ODA public funding;

(h)South-South cooperation initiatives;

(i)Technical cooperation;

(2)Number of countries that have:

(a)Assessed values of biodiversity, in accordance with the Convention;

(b)Identified and reported funding needs, gaps and priorities;

(c)Developed national financial plans for biodiversity;

(d)Been provided with the necessary funding and capacity-building to undertake the above activities;

(3)Amount of domestic financial support, per annum, in respect of those domestic activities which are intended to achieve the objectives of this Convention;

(4)Amount of funding provided through the Global Environment Facility and allocated to biodiversity focal area;

(5)Level of CBD and Parties’ support to other financial institutions that promote replication and scaling-up of relevant successful financial mechanisms and instruments;

(6)Number of international financing institutions, United Nations organizations, funds and programmes, and the development agencies that report to the Development Assistance Committee of Organisation for Economic Co-operation and Development (OECD/DAC), with biodiversity and associated ecosystem services as a cross-cutting policy;

(7)Number of Parties that integrate considerations on biological diversity and its associated ecosystem services in development plans, strategies and budgets;

(8)Number of South-South cooperation initiatives conducted by developing country Parties and those that may be supported by other Parties and relevant partners, as a complement to necessary North-South cooperation;

(9)Amount and number of South-South and North-South technical cooperation and capacity-building initiatives that support biodiversity;

(10)Number of global initiatives that heighten awareness on the need for resource mobilization for biodiversity;

(11)Amount of financial resources from all sources from developed countries to developing countries to contribute to achieving the Convention’s objectives;

(12)Amount of financial resources from all sources from developed countries to developing countries towards the implementation of the Strategic Plan for Biodiversity 2011-2020;

(13)Resources mobilized from the removal, reform or phase-out of incentives, including subsidies, harmful to biodiversity, which could be used for the promotion of positive incentives, including but not limited to innovative financial mechanisms, that are consistent and in harmony with the Convention and other international obligations, taking into account national social and economic conditions;

(14)Number of initiatives, and respective amounts, supplementary to the financial mechanism established under Article 21, that engage Parties and relevant organizations in new and innovative financial mechanisms, which consider intrinsic values and all other values of biodiversity, in accordance with the objectives of the Convention and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of the Benefits Arising out of Their Utilization;

(15)Number of access and benefit-sharing initiatives and mechanisms, consistent with the Convention and, when in effect, with the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of the Benefits Arising out of Their Utilization, including awareness-raising, that enhance resource mobilization;

8.Committed to substantially increasing resources (financial, human and technical) from all sources, including innovative financial mechanisms, balanced with the effective implementation of the Convention on Biological Diversity and its Strategic Plan for Biodiversity 2011-2020, against an established baseline:

(a)Invites Parties and other Governments to implement the indicators set out in paragraph 7 and associated targets following collection of information from the Parties and advice of the Executive Secretary to the Conference of the Parties at its eleventh meeting, consistent with target 20 of the Strategic Plan for Biodiversity 2011-2020, in accordance with the process below;

(b)Invites Parties, other Governments and levels of governments, relevant international organizations, and civil-society organizations, in response to the indicators contained in paragraph 7 above and other information pertinent to the indicators, to submit information not later than 30 June 2011 for the Executive Secretary to compile and present a synthesis of this information;

(c)Invites Parties, relevant organizations and initiatives, such as the World People’s Conference on Climate Change and the Right of Mother Earth, to submit information concerning innovative financial mechanisms that have potential to generate new and additional financial resources as well as possible problems that could undermine achievement of the Convention’s three objectives, not later than 30 June 2011, for the Executive Secretary to compile and present a synthesis of this information;

(d)Requests the Executive Secretary to compile information from all sources, including but not limited to the Biodiversity Indicator Partnership, to give methodological guidance to the above indicators, including collaborating with the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD/DAC) and informed by the work of the ad hoc technical expert group on indicators for the Strategic Plan for Biodiversity 2011-2020;

(e)Requests the Executive Secretary to provide guidelines to the Parties during 2011 for the implementation of this methodology on the application of indicators and establishment of a baseline year;

(f)Invites Parties to apply the methodology during 2011-2012 to measure gaps and needs as well as progress in the increase in, and mobilization of, resources against the indicators set out in paragraph 7 of the present decision, using the baseline year established above;

(g)Invites Parties to present relevant information to the Secretariat in a timely manner;

(h)Requests the Executive Secretary to compile and consolidate information from all relevant sources, and on this, determine baselines to be presented to the Conference of the Parties at its eleventh meeting for agreement by the Parties;

(i)Decides to adopt targets at its eleventh meeting, provided that robust baselines have been identified and endorsed and that an effective reporting framework has been adopted. This will allow progress towards the targets set out in this decision and towards target 20 of the Strategic Plan, including an effective reporting framework, to be used in assessing the information provided by Parties as outlined in this decision for the consideration of the Conference of the Parties at its eleventh meeting;

9.Considers the following for the development of targets:

(a)Increase the annual international financial flows by 2020 to partner countries to contribute to achieving the Convention’s three objectives.

(b)All Parties provided with adequate financial resources, will have, by 2015:

(i)Reported funding needs, gaps and priorities;

(ii)Assessed and/or evaluated the intrinsic value, ecological, genetic, social economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components;

(iii)Prepared national financial plans for biodiversity;

(c)Increase the number of initiatives for the removal, reform or phase-out of incentives, including subsidies harmful to biodiversity, which could be used for the promotion of positive incentives that are consistent and in harmony with the Convention and other international obligations;

10.Invites Parties to submit, through the Executive Secretary, information to the Working Group on Review of Implementation regarding their views about the basis upon which targets are to be adopted at eleventh meeting of the Conference of the Parties;

11.Recognizing that many developing countries have undertaken analyses of the values of their biodiversity and are working to close the financial gap to effectively conserve their biological resources, invites Parties to share their experiences and lessons learned, and calls upon developed countries to respond to the needs identified, and to create enabling conditions for those countries yet to undertake such analyses to identify their respective needs.

12.Invites the Development Assistance Committee of the Organisation for Economic Co-operation and Development to revisit the Rio Markers with a view to provide methodological guidance and coherence in support of paragraph 7, indicator 1 (a);

13.Notes with appreciation the "Policy statement on the integration of biodiversity and its associated ecosystem services into development co-operation" by the Development Assistance Committee of the Organisation for Economic Co-operation and Development at its senior-level meeting on 15 April 2010;

14.Stresses the importance of mobilizing the necessary resources for mainstreaming biodiversity in national strategies for sustainable development and poverty reduction strategies in order to integrate biodiversity better in the national, regional and local decision-making processes, in the light of this strategy for resource mobilization;

15.Invites donor Parties to provide timely and adequate financial support to the realization of the concrete activities and initiatives to achieve the strategic goals of the strategy for resource mobilization.

**B. *Review of implementation of the Convention’s strategy for resource mobilization (goals 1, 3 and 4, as well as goals 6 and 8)***

*The Conference of the Parties [to the Convention on Biological Diversity]*

1.Takes note of the note pertinent to goals 1, 3 and 4 as well as goals 6 and 8 of the resource mobilization strategy in support of the achievement of the Convention’s three objectives, prepared by the Executive Secretary, in accordance with paragraph 5 of [decision IX/11](http://www.cbd.int/decisions/?m=cop-09&n=11) B;

2.Decides to continue the review of implementation of goals 1, 3 and 4 as well as goals 6 and 8 of the Convention’s strategy for resource mobilization at the twelfth meeting of the Conference of the Parties, in accordance with [decision IX/11](http://www.cbd.int/decisions/?m=cop-09&n=11) B;

3.Requests the Ad Hoc Open-ended Working Group on the Review of Implementation of the Convention at its fourth meeting, with support of the Executive Secretary, to prepare for reviews of implementation of the Convention’s strategy for resource mobilization to be undertaken by the eleventh meeting of the Conference of the Parties, in accordance with [decision IX/11](http://www.cbd.int/decisions/?m=cop-09&n=11) B;

4.Invites Parties and relevant organizations to submit views, information and experience on the implementation of the Strategy for Resource Mobilization, and requests the Executive Secretary to prepare a compilation of the information received for consideration by the Ad Hoc Open-ended Working Group on Review of Implementation of the Convention at its fourth meeting.

## Annex IV: Select donor funded biodiversity conservation-related projects, 2009 -2014

| **NDP Sector** | **Name of Intervention** | **implementation Agency** | **Key Objectives and activities** | **Year** | **Donors**  | **Amount$** |
| --- | --- | --- | --- | --- | --- | --- |
| **Forestry** | Farm Income Enhancement and Forest Conservation Project | Ministry Of Water & Environment | Forestry Support including Community Watershed Management and Tree Planting and Agricultural Enterprise Development  | End 2012 | Bilateral - AfDB | 62.1 |
| **Forestry**  | Sawlog Production Grant Scheme | NFA/MWE | Support to private sector tree planting for timber | End 2012 | MultilateralEuropean Commission | 19.3 |
| **Environment** | Mt. Elgon Region Environment Conservation  | NEMA/Min of Environment | Conservation of the vulnerable Mt Elgon Region | Ended 2011 | BilateralDFID | 9.2 |
| **Environment** | Conservation of Biodiversity in the Albertine Rift Forests of Uganda | Ministry of Environment | Conserve and manage rich biodiversity forests in the Albertine Rift of Uganda, allowing sustainable development for all stakeholders. | Ended 2011 | Bilateral - UNDP | 3.4 |
| **Environment** |  Extending protected areas through community based initiatives (COBWEB) | International Union for Conservation of Nature (IUCN) | To strengthen the Ugandan National Protected Area (PA) network by expanding the coverage of the PA network to include the country’s biologically important wetland ecosystems. The project will develop, pilot, and adapt suitable PA management paradigms in two representative wetland systems adjacent to two terrestrial protected area networks.  | Ended 2011 | Bilateral - UNDP | 1.0 |
| **Environment** | Enabling environment for SLM to overcome land degradation in the cattle corridor of Uganda | Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) | The objective of the project is to provide land users and managers with the enabling policy, institutional and capacity environment for effective adoption of SLM within the complexity of the cattle corridor production system, achieved through 3 major outcomes plus a project management component.  | 2014 | Bilateral - UNDP | 2.2 |
| **Environment** | Territorial Approach to Climate change project (TACC) | Mbale District Local Government | This project will assist the Mbale region of Uganda, encompassing the three districts of Mbale, Manafwa and Bududa, to realize low carbon and climate change resilient development. Towards this objective, the project will assist the Mbale region to develop their Integrated Territorial Climate Plan (ITCP), to fully integrate climate change adaptation and mitigation strategies into their regional development planning;  | Ended 2012 | Bilateral – UNDP/DFID/ Welsh Assembly Government | 0.8 |
| **Tourism** | Wildlife, Landscapes and Development for Conservation (WILD) | Wildlife Conservation Society | (1) Biodiversity Management; (2) Environmental Education and Communication; (3) Property Rights and Resource Governance; and (4) Improved Livelihoods. | Ended 2010 | Bilateral - WILD | 4.8 |
| **Tourism** | Sustainable Tourism in the Albertine Rift (STAR) | WCS, AWF; Global Sustainable Tourism Alliance | (1) Conserve Mountain Gorilla habitat and Northern Albertine Rift | Ended 2010 | Bilateral - USAID | 6.8 |
| **Environment** | Environmental Management and Capacity Building II Additional  | National Management Authority | To support sustainable management of environmental and natural resources at the national, district, and community levels. | Ended 2011 | Bilateral – World Bank | 15.0 |
| **Environment** | Protected Areas Management and Sustainable Use Project | UWA/Min of Tourism | Ensure effective long term conservation of Uganda's biodiversity through sustainable and cost effective management of its wildlife and cultural resources. | Ended 2010 | Bilateral – World Bank | 27 |
| **Environment** | GEF: Protected Areas Management and Sustainable Use Project | UWA/Min of Tourism | Ensure effective long term conservation of Uganda's biodiversity through sustainable and cost effective management of its wildlife and cultural resources. | Ended 2010 | Bilateral – World Bank | 8.0 |
| **Environment** | Second Environmental Management and Capacity Building | Ministry Of Water, Lands And Environment | To support sustainable management of environmental and natural resources at the national, district, and community levels. | Ended 2010 | Bilateral – World Bank | 37 |

Source: MFPED 2013

1. Conservation funds could also be seen as innovative financing mechanisms, under Environmental Fiscal Reforms [↑](#footnote-ref-1)