FINANCE NEEDS ASSESSMENT FOR BIODIVERSITY CONSERVATION IN UGANDA

NOVEMBER 2018

This project is co-funded by the European Union

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

NORWEGIAN MINISTRY OF FOREIGN AFFAIRS

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FOREWORD

I am pleased to present to you the Finance Needs Assessment (FNA) report 2018 which compares the financial needs and the expected biodiversity expenditures over a medium-to long-term planning horizon. The findings have provided an estimate of financing required to deliver national biodiversity plans, targets and results.

An insight into the Biodiversity Expenditure Review (BER) report, 2017, which provides the basis for the finance needs assessment reveals that; on average biodiversity conservation and management was allocated about **UGX 91** billion in real terms per fiscal year; that translates to about **1.2%** of the annual budget for Government of Uganda (GOU).

On average, Uganda requires about **UGX 472.6 billion** for biodiversity conservation and management per fiscal year. Furthermore, about **96.6%** of the costs are to reduce and manage negative impacts while enhancing positive impacts on biodiversity (restoration of forests and wetlands). The concentration of the costs on one of the strategic objectives might be attributed to high habitat loss in terms of forests and wetlands.

In addition, the concentration of the costs on one of the strategic objectives might be attributed to high habitant lost in terms of forests and wetlands. However, the cost of habitat restoration might not be the best strategy; if the root cause of forest and wetland degradation are not addressed. Therefore, the FNA reveals that only about **0.5%** of Government costs are for development while the remaining is for recurrent costs. The high proportion of the recurrent costs are attributed to restoration of forests and fragile ecosystems that are spread out till 2024/25.

Dr. Tom .O. Okurut
EXECUTIVE DIRECTOR
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Ministry of Tourism, Wildlife and Antiquities
Ministry of Water and Environment
Mukono district local government
Oyam district local government
Wakiso district local government
National Animal Genetic Resources Centre and Data Bank
National Fisheries Resources Research Institute
National Forestry Authority
National Planning Authority
Uganda Wildlife Authority
Wetlands Management Department
The Technical Committee on Biodiversity Conservation
Plant Genetic Resource Centre
Uganda Bureau of Statistics
Uganda Export Promotion Board
Uganda National Council for Science and Technology
United Nations Development Programme
Uganda Wildlife Conservation Education Centre
Wildlife Conservation Society
World Wide Fund for the Conservation of Nature
Rhino Fund Uganda
Total E&P Uganda
Nature Uganda

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EXECUTIVE SUMMARY

The Financial needs Assessment present the detailed costing of the NBSAP (2018-2025). The total cost of the implementation of the NBSAP was estimated at UGBX 2,859.9 billion on average, Uganda required about **UGX 472.6 billion** for biodiversity conservation and management per fiscal year. Furthermore, about **96.6%** of the total cost of implementation of the NBSAP II are to implement the objective 3; these costs are related to the restoration of forests and wetlands. The main drivers of habitat loss in forest and wetlands areas are demand for biomass fuel and land for agricultural production respectively. It should be noted that cost of habitat restoration might not be the best strategies if the root cause of forest and wetland degradation are not addressed. Further analysis revealed that only about 0.5% of the total costs of implementation of the NBSAP are capital development costs while the remaining is for recurrent costs. The high proportion of the recurrent costs are attributed to restoration of forests and fragile ecosystems that are spread out till 2024/25.

The financial gap was not quantified since the NBSAP1 and the estimated biodiversity expenditure baseline review are not comparable because the NBSAP does not capture all on going biodiversity conservation activities. However, the average annual total cost of implementation of the NBSAP II was estimated at about **UGX 472.6 billion** per fiscal year which represent about **6.2%** of the government of Uganda national budget.

The FNA indicates that the total cost of implementing strategic objective three "reduce and manage negative impacts while enhancing positive impacts on biodiversity" on average was about **UGX 456.4 billion** per fiscal year as indicated in the table below. Furthermore, about **81%** and **17%** of this annual total cost are for activities related to restoration of forest and fragile ecosystems respectively Figure 5.3. The current focus on the strategy for the restoration of forests and fragile ecosystems might not be the most effective way for the management of biodiversity in Uganda if drivers of biodiversity losses are not addressed.

	Fiscal Year (UGX-billion)						
Strategic objectives	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**
1. Strengthen stakeholder co-ordination and frameworks for biodiversity management	3.0	3.2	4.0	3.9	3.8	3.7	5.9
2. To facilitate and build capacity for research, knowledge and information management and exchange on biodiversity	2.5	2.5	2.6	2.9	2.9	3.2	3.4
3. To reduce and manage negative impacts while enhancing positive impacts on biodiversity	391.9	411.7	432.5	454.4	479.3	500.3	524.9
4. To promote the sustainable use and equitable sharing of costs and benefits of biodiversity	3.1	3.4	3.9	4.1	4.1	4.0	4.3
5. To enhance awareness and education on biodiversity issues among the various stakeholders	2.7	3.2	2.8	3.0	3.1	3.9	3.4
6. To harness modern biotechnology for socio-economic development with adequate safety measures for human health and the environment	1.7	1.9	1.9	2.1	2.0	2.0	2.1
7. To promote innovative and sustainable funding mechanisms to support NBSAP implementation	0.4	0.4	0.6	0.4	0.4	0.4	0.5
Overall	**405.3**	**426.2**	**448.2**	**470.7**	**495.6**	**517.6**	**544.5**

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ACRONYMS

BER	Biodiversity Expenditure Review
BIOFIN	Biodiversity Finance Initiative
CBD	Convention on Biological Diversity
CCU	Climate Change Unit
CDM	Clean Development Mechanism
CFRs	Central Forest Reserves
COCTU	Coordinating Office for Control of Trypanosomiasis in Uganda
CSOs	Civil Society Organizations
DAR	Directorate of Animal Resources
DCC	Directorate of Climate Change
DCR	Directorate of Crop Resources
DEA	Directorate of Environmental Affairs
DESS	Department of Environmental Support Services
DFR	Directorate of Fisheries Resources
DDA	Dairy Development Authority
DWRM	Department of Water Resources Management
ENRs	Environment & Natural Resources
FSSD	Forestry Sector Support Department
FMIS	Financial Management Information System
FSSD	Forestry Sector Support Department
HTTI	Hotel and Tourism Training Institute
IGR	Internally Generated Revenues
KP	Kyoto Protocol
KRAs	Key Result Areas
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MALGs	Ministries, Agencies and Local Governments
MEMD	Ministry of Energy and Mineral Development
MoFPED	Ministry of Finance, Planning and Economic Development
MTEF	Medium –Term Expenditure Framework
MTTI	Ministry of Tourism, Trade and Industry
MTWA	Ministry of Tourism, Wildlife and Antiquities
MWE	Ministry of Water and Environment
NAADS	National Agricultural Advisory Services
NARO	National Agricultural Research Organization
NAGRC&DB	National Animal Genetic Resources Center and Data Bank
NBSAP	National Biodiversity Strategy Action Plan
NDA	National Designated Authority
NEMA	National Environment Management Authority
NFA	National Forestry Authority
NGOs	Non-Governmental Organizations
NSCG	Non-Sectoral Conditional Grant
NTR	Non-Tax Revenues
ODA	Official Development Assistance
PMA	Plan for Modernization of Agriculture
RWSS	Rural Water Supply and Sanitation
SPRs	Sector Performance Reports
TCC	Tourism Coordination committee

UBOS	Uganda Bureau of Statistics
UCDA	Uganda Coffee Development Authority
UCDO	Uganda Cotton Development Organization
UCOTA	Uganda Community Tourism Association
UNDP	United Nation Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UTA	Uganda Tourism Association
UTB	Uganda Tourism Board
UWA	Uganda Wildlife Authority
UWCEC	Uganda Wildlife Conservation Education Centre
UWSS	Urban Water Supply and Sanitation
UWTI	Uganda Wildlife Training Institute
WFP	Water for Production
WMD	Wetland Management Department
WRM	Water Resources Management
WSS	Water Supply & Sanitation
WTTC	World Travel & Tourism Council
WWF	World Wildlife Fund

CHAPTER ONE: INTRODUCTION

Available evidence and the decisions adopted by Parties to the Convention on Biological Diversity (CBD) indicate that a significant global financial gap for biodiversity conservation and management. A preliminary assessment recently conducted under the auspices of the High-level Panel on Global Assessment of Resources for Implementing the CBD Strategic Plan estimated that the global investment required ranges between US$150 and US$ 440 billion annually. The countries have to mobilize and drastically scale up their efforts and achieve the 20 Aichi Targets defined in the CBD's Strategic Plan for 2011-2020.

Defining biodiversity finance needs and gaps with greater precision and to determine related challenges and opportunities for resource mobilization requires detailed national-level (bottom-up) assessments. In this context, UNDP in October 2012 launched the Biodiversity Finance Initiative (BIOFIN), as a new global partnership seeking to address the biodiversity finance challenge in a comprehensive manner by building a sound business case for increased investment in the management of ecosystems and biodiversity. Uganda is among the 30 pilot countries participating in the BIOFIN project. Other countries include; 30 countries namely Belize, Brazil, Botswana, Bhutan, Chile, Colombia, Costa Rica, Cuba, Ecuador, Fiji, Georgia, Guatemala, India, Indonesia, Kazakhstan, Kyrgyzstan, Malaysia, Mexico, Mongolia, Mozambique, Peru, Philippines, Rwanda, Seychelles, South Africa, Sri Lanka, Thailand, Vietnam and Zambia.

The Biodiversity Finance Initiative-BIOFIN, is a UNDP-managed global collaborative partnership to develop and implement an evidence-based methodology that improves biodiversity outcomes using finance and economics. The BIOFIN methodology provides an innovative, stepwise and adaptable approach that enables countries to:

(i) Analyse the policy and institutional context for biodiversity finance;
(ii) Measure the current biodiversity expenditures;
(iii) Assess future financial needs; and
(iv) Identify and mobilize the resources and policies required to successfully implement the most suitable finance solutions to achieve national biodiversity plans and targets.

The basic approach of the BIOFIN process in a country include the following three assessments that culminate in a Biodiversity Finance Plan:

1) Biodiversity Finance Policy and Institutional Review (PIR) analysis of the policy and institutional context, establishes what will be analysed within the National BIOFIN study (e.g. which biodiversity targets) and the context for the intended change in financing;

2) Biodiversity Expenditure Review (BER) analysis of public and private expenditures benefitting biodiversity, establishes, past and projected expenditures on biodiversity;

3) Financial Needs Assessment (FNA) estimates the financing required to deliver national biodiversity plans, targets and results, and then assesses the financing gap between this and the projected expenditures;

4) Biodiversity Finance Plan (BFP) Prioritizes financing solutions that will close the financing gap by optimizing current and expanding future investments (public, private, national, international, traditional and innovative) in biodiversity management, and develops the business case for the best options.

By completing the BIOFIN process, Uganda will have a clear idea of how much it will cost to implement the NBSAP and understand how to mobilize the resources required to implement the NBSAP. The goal of the BIOFIN process is to enable to transform the trajectory of biodiversity finance and development, and to chart a pathway to a sustainable future.

Uganda has already completed 2 assessments the policy and institutional review and the biodiversity expenditures review. This report is focusing on estimating finance *needs for biodiversity conservation in Uganda, by* calculating the costs of implementing each of the strategies within the revised NBSAP.

Aim and Objectives of the Financial needs Assessment.

The FNA aims to make a comprehensive estimate of the financial resources needed to achieve national and sub-national biodiversity targets. It compares these financial needs to expected biodiversity expenditures over a medium- to long-term planning horizon. As described previously, national biodiversity targets are typically articulated in NBSAPs and other key national strategies such as national development plans, sectoral development plans and climate change plans.

In order to achieve the above aims, the objectives of the FNA are to:

1. Review and integrate the FNA with the national planning and budgeting process for optimal impact.
2. Clarify strategies and actions in national biodiversity plans (NBSAPs) to describe "costable actions" that link to expected biodiversity results1 in a logical framework that lends itself to costing.
3. Produce a detailed budget for each costable action by defining unit costs and quantities over the target time frame.
4. Use these detailed budgets to make a stronger case for biodiversity finance – linking the costs of achieving specific results to the National Budget processes. 2
5. Prioritize biodiversity strategies and actions based on specific biodiversity and cost criteria.
6. Link the FNA to the Biodiversity Expenditure Review (BER) through a tagging system that associates financing needs with expenditure categories, sectors and organizations.
7. Calculate the finance gap between businesses as usual biodiversity expenditure projections (from the BER) and financial needs identified in the FNA in as detailed a manner as possible.

CHAPTER TWO: METHODOLOGY

2.1 Introduction

This section details the methods that were applied to collect, manage and analyze the data for the assessment of biodiversity financing needs. The chapter further explains how the costs of implementing *National Biodiversity Strategy and Action Plan (NBSAPII)* were determined.

2.2: Review of National Biodiversity Strategy and Action Plan (NBSAPII)

To obtain information on costable actions, small groups of the TSC on each of the NBSAP strategic objectives were constituted. The members of the group were nominees from government of Uganda Ministry, Agencies and Local Government (MALGs), academia, and civil society organisations that implement or regulate biodiversity related activities. The groups reviewed the NBSAP II strategic objectives, related specific objectives outcomes, outputs, actions and activities with their related inputs.

2.3: Costing of biodiversity related activities:

Activity Based Costing (ABC) was used to estimate the cost of implementing the proposed actions in Uganda. In addition to the estimated cost from the market, experts from the stakeholders were also interviewed to assess if the proposed costs and magnitude of the actions could deliver desired conservation outcomes. These consultations were conducted by visiting the MALGs. The activity-based costing involved mainly four steps namely: Identify and classify activities, (ii) Estimate the cost for whole activity, (iii) compute a cost driver rate, and (iv) apply activity costs using cost driver.

The National Biodiversity strategy and action plan (NBSAP) was costed for the whole period.

Each biodiversity strategy was costed including recurrent and capital costs. Costs were regroup using the following categories as defined below:

1) **Strategies on cost of mainstreaming biodiversity**: This provides summary of the one-time costs and recurring costs for 2018-2019; and 2020-2025 for strategies on mainstreaming biodiversity and sustainable use, including strategies related to the integration of biodiversity into sectoral, development and poverty alleviation and into sustainable use, production and consumption of biodiversity resources
2) **sustainable use**
3) **Strategies on cost of protection**: This is a summary of the one-time costs and recurring costs for 2018-2019; and 2020-2025 for protection strategies, including *in situ* and *ex situ* strategies.
4) **Strategies on cost of restoration strategies**: This is a summary of the one-time costs and recurring costs for 2018-2019; and 2020-2025 for restoration strategies, including the maintenance of essential ecosystem services, strengthening climate resilience, and promoting adaptation and mitigation.
5) **Strategies on cost of access and benefits sharing strategies**: This is a summary of the one-time costs and recurring costs for 2018-2019; and 2019-2025 for access and benefits-sharing strategies, including strategies related to securing prior informed consent, mutually agreed terms, benefits sharing arrangements, traditional knowledge, conservation and sustainable use of key ABS species, and legal enforcement of agreements, among others.

Strategies on cost of implementation strategies: This is a summary of the one-time costs and recurring costs for 2018-2019; and 2020-2025, for implementation strategies, including strategies related to public outreach and communication, and strategies related to knowledge, research, data and data management, among others

2.4: Consultative workshop

Data validation and compilation workshop was then organized in Entebbe Lakeview hotel. The workshop involved a team of 12 stakeholders who reviewed the activities, their costs, outputs and outcomes. The costs of implementing each identified activities of the specific objectives of the NBSAPII were aggregated to establish the overall cost of implementing the strategy. Final excel sheets that detail the inputs and costs for implementation of the NBSAP II were developed. The costs were then summarised by summing up by specific actions and categorisation as capital development (one off) and recurrent costs. The aggregated costs were then projected in the future using average inflation rate obtained from Uganda Bureau of Statistics (UBOS). The results are summarised using graphs as well as tables in the next chapters.

CHAPTER THREE: IMPLEMENTATION OF NATIONAL BIODIVERSITY STRATEGY AND ACTION PLAN

3.1 INTRODUCTION

Uganda ratified CBD on 8th September 1993. The CBD has three objectives namely: the conservation of biological diversity, its sustainable use and the fair and equitable sharing of the benefits arising from the utilization of genetic resources. Article 6 (a) of the CBD requires Parties to the Convention to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity.

The National Biodiversity Strategy and Action Plan (NBSAP) is the main instrument for implementing the Convention at country level. NBSAP provides Government with a framework for implementing its obligations under CBD as well as the setting of conservation priorities, channelling of investments and building of the necessary capacity for the conservation and sustainable use of biodiversity in the country.

At its tenth meeting in Nagoya, Japan, the CBD Conference of the Parties (COP 10) adopted the new Strategic Plan for Biodiversity 2011-2020, with 20 Aichi Biodiversity Targets. The Parties then committed themselves to revising their NBSAPs and to adopt them as policy instruments by 2015. They also committed themselves to developing national targets that would support the achievement of the Strategic Plan and Aichi Targets, and to report thereon at COP 11 or 12 in 2012 or 2014. The revision of the NBSAP at this time would enable Uganda to demonstrate its commitment to the achievement of the Strategic Plan for Biodiversity 2011-2020, with its Aichi Biodiversity Targets while having its own national targets. Uganda has developed national biodiversity targets in the revised NBSAP II using the Aichi targets as a flexible framework. The revised NBSAP II has seven strategic objectives:

1. To strengthen stakeholder co-ordination and frameworks for biodiversity management
2. To facilitate and enhance capacity for research, monitoring, information management and exchange on biodiversity
3. To put in place measures to reduce and manage negative impacts on biodiversity
4. To promote the sustainable use and equitable sharing of costs and benefits of biodiversity
5. To enhance awareness and education on biodiversity issues among the various stakeholders
6. To harness modern biotechnology for socio-economic development with adequate safety measures for human health and the environment
7. To promote innovative sustainable funding mechanisms to mobilize resource for implementing the Strategy

3.2 NBSAP II strategic objectives and proposed actions

We analysed the strategic objectives of the NBSAP II into specific objectives, outcomes, outputs as well as actions to achieve the objectives. The results are summarised in the Table 4.1.

Table 3.1: NBSAP strategic objectives and proposed actions

Strategic objective	Specific objective	Focus	Outcome	Outputs	Actions
1.0 Strengthen stakeholder co-ordination and frameworks for biodiversity management	To strengthen agency performance capability among all stakeholders in biodiversity management in Uganda	Agency performance capability	Improved performance capabilities among stakeholders working in biodiversity management in Uganda	Number of joint stakeholders meeting	Establish performance capability review and development into agency strategic planning
				Biodiversity indicators developed	
				Stakeholder assessment tool developed and distributed	
				Number of stakeholders trained	
	To strengthen the coordination of biodiversity activities among all the stakeholders in delivering shared government priorities	Working across government	Improve the co-ordination of activity across government to deliver shared priorities	Number of joint stakeholders meeting	Develop framework for delivering shared priorities, Define all stakeholders that conserve, protect and use biodiversity during service delivery
				Number of consultant agencies engaged	
				Consolidated framework for biodiversity management	
	To strengthen evaluation capacity across all stakeholders in biodiversity management for policy and program evaluation	Policy and program evaluation	· Increased evaluation capacity across all MALGs and LGs for biodiversity management	Number of people working in biodiversity trained	Develop formal biodiversity evaluation policy and guidelines through the Policy and Institutional review at all levels of government (PIR)
				Number of meetings and issues discussed	
				Program evaluation report	· Co-ordinate and monitor government evaluation activity through the conducting biodiversity expenditure reviews and evaluation
	To evaluate the efficiency and effectiveness of biodiversity spending on resource allocation and government performance among all stakeholders	Resource allocation	Improved efficiency in resource allocation for biodiversity management	Existing budget review report	Biodiversity budget/expenditure attribution Biodiversity Expenditure Reviews (BER)
				Expenditure review report	
		Government performance reporting	More accessible and transparent reporting of Government performance against its priorities	Number of stakeholders trained	Present summary of government performance in the new Statement of Achievement
				Number of reports printed	
				Biodiversity progress review report	
	Strengthen community engagement for biodiversity management	Community engagement	Improved level of community awareness and feedback about government performance for biodiversity management	Community engagement guidelines developed	Development and disseminate community engagement guidelines for biodiversity management in Uganda
				Conservation, protection and biodiversity guidelines reviewed	
				Number of printed copies of guidelines	
				Number of guideline copies distributed to the communities	
				Number of community meetings held	
				Number of consultative meetings conducted	
	To increase accesses and reporting of biodiversity management and progress	Reporting the biodiversity management progress	More accessible and timely progress reporting	Number of planning meetings conducted	Develop and maintain data base on biodiversity management indicators
				Number of consultative meetings carried out	
				Database on biodiversity indicators	

Strategic objective	Specific objective	Focus	Outcome	Outputs	Actions
	Strengthen the government's focus on sustainability and its visibility in public reports	Sustainability	Strengthen the government's focus on sustainability and its visibility in public reports	Website for easy access and information sharing	Reflect the dimensions of sustainability on the Measuring our Progress website
				Number of agencies and staff trained on the use of website	
				Report on score card and assessment developed and distributed to stakeholders	Report Triple Bottom Line Indicator Scorecard in agency Annual Reports
2.0 To facilitate and build capacity for research, knowledge and information management and exchange on biodiversity	Build capacity for research on biodiversity	Integration of research, Policy and practice	Increased capacity of governmental and MALGs to link research, policy and practice	Number of evidence-based Policies	Review existing policies
				Number of evidence-based development interventions	Implementation of development interventions
		Standard guidelines for governing biodiversity research	Improved national standards and LG regulatory frameworks for research governance on biodiversity	Research ethics standards put in place	Formulation of ethics standards
				System of accreditation and quality assurance standards for research institutions evaluation established	Develop guidelines for quality assurance standards
				Number of institutions trained on biodiversity	Build capacity for institutions
				Number of plans and policies to support research	Set guidelines and standards
		Government and development partners' commitment to support and fund biodiversity related research.	Increased capacity and commitment of government and development partners to support and fund research	Formation of scientific research committee that vets research proposals in an efficient and transparent manner	Establishment of scientific research committee
				Competitive salaries of researchers set	Put in place a standard enumeration criterion
				Level of funding of biodiversity research by government and development partners	Review government expenditure on biodiversity research
		Increased capacity of MALGs to manage/ conduct the research	Increased capacity of MALGs to manage/ conduct the research	Level of financial sustainability for biodiversity research;	Facilitate process of proposal writing
				Number of approved research grants	Provide seed funds to initiate and sustain research on biodiversity
				Registered research projects (number, funding level, funder spread);	Prioritise biodiversity research projects for funding
				Number of staff trained for higher education	Facilitate capacity building for higher education of staff
				Establishment of a unit dedicated to research management, researchers trained, quality of the organization according to national standards	Facilitate establishment of research unit
				Research unit established	
		Collaborate on biodiversity research	Increased synergy between MALGs on biodiversity research	Number of collaborations with the public/private/ NGO sector	Facilitate formation of joint forums
				Number of joint activities with other research Institutions;	Operationalize partnerships
				Number of formal partnerships with other research institutions;	
		Publish and share research findings	Increased capacity of MALGs to apply and share results of research	Number of joint scientific Publications	Operationalize partnerships
				Number of conferences facilitated by the MALGs for staff to present research findings	

Strategic objective	Specific objective	Focus	Outcome	Outputs	Actions
		Capacity of staff to do research	Increased capacity to do research	Number of peer reviewed publications	Operationalize partnerships
				Number of conference papers; level of career development; number of prizes, number of awards, type of awards	Facilitate research activities
		Capacity to manage research	Increased capacity to manage research	Number of competitive grants won per year individually or as team quality of plans and reports	Writing of grant proposals
				Amount of funds obtained from other sources;	Establish review committee to ensure quality
				Number of approved research grants	
		Capacity to share research findings	Increased capacity to apply and share results of research	Number of participation times in policy processes, Policy briefs	Engagement with policy makers and implementers
				Number of consultancies (e.g. public, private, NGO sector);	
				Number of professional publications	
	To establish and examine the existing information and knowledge packages on biodiversity management in Uganda.	Existence and generation of Information and knowledge on biodiversity	Improved generation and management of information among all stakeholders	Number of knowledge maps	Review of the existing biodiversity and ecosystems data, information and knowledge packages among the MALGs implementing biodiversity related projects
				Knowledge and information review report	Draft reports and disseminate results
				Number of publications on biodiversity issues that exists	Develop and author working papers
				Information, data and knowledge collection tools developed	Design of data collection tools to carry out data collection of biodiversity and ecosystems, information and knowledge packages across all biodiversity related projects
				Row data both quantitative and qualitative collected and captured in databases in various packages as proposed by the different stakeholders	Carry out data entry and analysis of collected data and information for knowledge mapping
	To increase organizational effectiveness by enabling stakeholders to intuitively find, share and connect to relevant information and knowledge packages about biodiversity and ecosystems management and other related interventions.	Increase in the level of knowledge among the staff and stakeholders and general population about biodiversity and ecosystems	Increased level of knowledge among the staff and stakeholders and general population about biodiversity and ecosystems management	Number of consultative meetings carried out	Carry out Consultative meetings and key informant interviews and focus group discussions among project staff, beneficiaries and policy makers.
				Database with clear metadata report on biodiversity information and knowledge packages	Create databases for information, data and knowledge products
				Number of workshops conducted among the MALGs staff	Training of MALGs on how to access and use of water and environmental information and knowledge among all stakeholders
				Number of people attending the workshops aggregated by sex, disability, age and education level across all project areas.	
		Information and knowledge sharing and utilization	Improved information and knowledge sharing among the different stakeholders	Number of users accessing biodiversity related information and knowledge packages aggregated by sex, disability and age and education level	Formation of knowledge platforms as a way to improve the sharing and uptake of knowledge and information products
				Number and membership to Network platforms formed for sharing of water and environmental knowledge and information across all stakeholders	Development of network platforms for sharing of water and environmental knowledge and information across all stakeholders

Strategic objective	Specific objective	Focus	Outcome	Outputs	Actions
	To aid the development of knowledge management strategy for biodiversity information issues and its initial implementation among stakeholders	Information and knowledge management strategy	Improved knowledge management systems for biodiversity management across all the stakeholders	Review report on knowledge management systems of the different organizations	Review the existing knowledge management systems among all MALGs involved in biodiversity conservation and management in Uganda
				List of knowledge management officers per organization	Develop a database
				Number of people reached out with knowledge information	Establishing of information and knowledge management committee by identifying knowledge management persons in the different MALGs in Uganda
				Number of research activities facilitated	Conduct case studies to explore and learn about the experiences of organizations in the management of information and knowledge on biodiversity conservation and management in Uganda
				Number of trainings, workshops and radio talk shows conducted	Disseminate results among stakeholders through workshops, trainings and radio talk shows
				Number of consultative meetings held	Develop knowledge management strategy with clear goals and objectives in line with key result areas of biodiversity management
3.0 To reduce and manage negative impacts while enhancing positive impacts on biodiversity	Support fast-tracking of establishment of an integrated monitoring and evaluation system that collects, stores, analyze and disseminate biodiversity impacts among stakeholders.	Effective monitoring	Improved monitoring and evaluation of biodiversity and ecosystems interventions	Report on the status of the current monitoring and evaluation systems	Review the current monitoring and Evaluation systems used by the MALGs
			Improved quality of data and frequency of collection	Needs assessment report indicating the existing gaps in monitoring and evaluating impacts on biodiversity	Conduct needs assessment among the staff of the MALGs on biodiversity and ecosystems information to effectively monitor and evaluate the impacts
			Increased tracking of progress of negative and positive biodiversity impacts	Integrated tool that could be used to monitor impacts on biodiversity	Development of monitoring and Evaluation tools among the stakeholders
			Increased knowledge on drivers of biodiversity loss	M&E strategy with set targets for biodiversity impacts developed	Design strategy for capacity building on monitoring and evaluation of biodiversity impacts among stakeholders
			Increased knowledge on setting targets of indicators for negative and positive impacts on biodiversity	Number of training workshops	Training of MALGs through workshops, on development of output and outcome indicators for biodiversity management
	Strengthen the enforcement of environmental laws and regulations by increasing number of times to monitor natural resources and engaging communities in monitoring biodiversity and ecosystems	Reduce the impact of activities in the communities on ecosystems degradation	Reduced negative impacts on biodiversity and ecosystems	Sustainable monitoring model	Analyze the environmental data collected and make informed policy decision on the state of biodiversity in Uganda and develop a sustainable model for biodiversity and ecosystems monitoring
				Update report on status of biodiversity in the communities	
			Increased awareness of community about the negative impacts on biodiversity	Number of community members involved in protection of biodiversity and ecosystems	
		Community involvement in protecting biodiversity and ecosystems	Increased community involved in enforcement of environmental laws	Number of community monitors recruited and trained	Identify and recruit environmental community based monitors who will be routinely monitoring and collecting data on activities in the communities and submit the data in a predesigned tool

Strategic objective	Specific objective	Focus	Outcome	Outputs	Actions
		Capacity of the community to monitor and protect biodiversity and ecosystems	Build capacity of the local communities to monitor and report human related activities that have potential to negatively affect biodiversity and ecosystems	Number of environmental community based monitors trained	Train environmental community based monitors and equip then with tools to be used for monitoring
		Employment creation through community based monitoring	Increased benefits for the community from conservation efforts	Amount of incentives allocated	Facilitate the community based monitors to periodically monitor and submit the data on the state of activities on identified ecosystems in their communities
		Increased vigilance and operationalisation of enforcement laws	Reduced pollution levels	Reduced incidence of airborne diseases	Facilitate collection and analysis of pollution data from industries and factories
			Improved water, air and soil quality	Reduced incidences of water born diseases	Build capacity of monitors to collect and analyze the data to make informed decisions
				Reduced incidences of vector borne diseases	Build capacity of the polluters to reduce the levels of pollution and their implications for the population
	To strengthen monitoring, conservation and management of biodiversity through reward systems	Use of incentives in conservation and management of biodiversity	Increased community participation in conservation and management of biodiversity	Number of households involved in community-based management of biodiversity	Facilitate the establishment of incentives/reward system and their operations
				Number of incentive mechanisms operating among the communities	Train community members on the reward system and its importance to conservation and livelihoods
			Increased knowledge and value of biodiversity among the communities	Kinds of benefits to the community	Support government community partnerships/ engagements
			Increased benefits from biodiversity to the communities	Number of MOUs signed for the conservation and management of communities based on the reward system	Facilitate operationalization of reward systems
					Facilitate and support signing of MoUs
	To improve waste generation, disposal and management	Better waste management at generation	Improved waste management at point of generation	Categories of waste generated	Develop and implement guidelines on waste management at all levels
				Number of waste collection bags for the different type of waste	Build capacity of the communities on waste management, waste segregation handling and disposal
				Waste segregated and transport to the different points	Sensitize the communities on waste management practices and their implications
		Reduced volume of waste generated and disposed to the environment	Increased use of waste as a raw material in manufacture of compost manure and liquid fertilizer	Volume of solid waste used for production of manure	Establish cheaper compost plants
				Volume of wastewater used in the production of liquid fertilizers	Support innovative ways of making compost manure
			Increased use of animal waste in the production of clean energy Biogas	Volume and mass of annual waste used in the production of biogas	Build capacity of the communities in using wastewater in making fertilizers
		Raw material for product development	Increased volume of compost manure produced	Mass of compost manure produced	Scale up the construction of biogas plants especially in rural areas and around fragile ecosystems
			Increased use of compost manure by farmers	Volume of liquid fertilizer produced	Facilitate and promote innovations to covert waste into useful products

Strategic objective	Specific objective	Focus	Outcome	Outputs	Actions
	To increase the forest cover through promotion of agro-forest farming systems among the communities in Uganda	Increased forest cover through agricultural systems	Reduced agricultural expansion on forest land and	Number of farmers that have adopted agro-forest farming systems	Tree planting on private land
			Increase area under forest on private land	Area under forest on private land	Increase area under forest cover on private land
			Increase forest cover through agro-forest farming system	Number of farmers trained	Training of farmers on agro-forestry farming systems
			Increased number of community members sensitized about biodiversity	Number of sensitization meetings held in the communities	Sensitization of the people in the community
			Increased area mapped where agro-forestry have been conducted	Areas mapped where agro-forestry have been conducted	Mapping of areas where agro-forestry have been adopted
	Improve the efficiency and effectiveness of the EIA system in reducing and minimizing negative impacts on biodiversity	Effective and efficient EIA system	Increased efficiency of the EIA system	Number of days to review EIA reports	Establishment of an integrated EIA system
				Quality of the EIA reports	Support evidence-based EIA system
				Capacity of reviewers in identifying impacts and follow the mitigation hierarchy	Strengthen institutional linkages
				Number of interventions implemented that avoided fragile ecosystems	Political support and commitment in the implementation of EIA process
				Number of community members involved in EIA process	Local community involvement in EIA process
	Increased the area of fragile ecosystems and number of biodiversity species	Restoration of wetlands and forests and fragile ecosystem like river banks, lakeshores	Increased wetland cover	Number of management plans developed	· Facilitate the formation of management plans at district, sub-county and community
			Increased forest cover	Number of partnerships formed	· Facilitate the operationalisation of the community and district management committees
			Increased area of lakeshores restored	Community management plans developed	· Facilitate the demarcation and restoration through the communities by use of tree seedlings in communities rather than concrete poles
			Increased area of river banks restored	District management plans developed and operationalised	· Facilitate the formation and operationalisation of community monitoring committees for the natural resources within the communities
			Number of biodiversity species identified and conserved	Number of community management committees formed	Facilitate the formation of community management committees
			Increased area of wetland cover restored and gazetted	· Area of wetland cover restored and gazette	Restoration of wetlands
			Increased number of tree seedlings and variety planted	· Number of tree seedlings and variety planted	Promote planting variety of tree seedlings
			Increased proportion of area of forest cover planted	· Area of forest cover planted	Establishment of tree nurseries
	To promote establishment of offsets and woodlots among construction companies, schools, industries and households.	Increased commitment of the construction industry to participate in conservation efforts	Reduced negative impact of construction projects on biodiversity and environmental degradation in Uganda	· Number of offset sites established for schools, hotels, road constructions and woodlots for households	· Training of schools teachers, pupils' hotel staff and people in the construction industry
			Increased number of schools and hotels trained and sensitized	· Number of schools and hotels trained and sensitized	· Sensitization workshops for the people in the construction industry

Strategic objective	Specific objective	Focus	Outcome	Outputs	Actions
			Increased budget allocations for offsets and other conservation work among the stakeholders in the construction industry	· Number of people trained	· Formation/rejuvenation of environmental clubs among school pupils
			Increased forest cover	Number of trees planted and monitored	· Tree planting and monitoring
4.0 To promote the sustainable use and equitable sharing of costs and benefits of biodiversity	To promote sustainable use of biodiversity	Enhancing livelihood	Optimise benefits from sustainable biodiversity	Increased efficient use of resources	Build skill through trainings, internship and volunteering and pilot activities
				Number of jobs created in the different sectors	Creation of employment opportunities
				Number of people who shift to different sectors	Livelihood diversification
				Number of enterprises created that doesn't depend directly on natural resources	Enterprise creation
				Increase value captured from biodiversity use	Value addition
		Efficient production of charcoal	Improved methods of charcoal production	Volume of charcoal	Capacity building on efficient charcoal production methods
			Increased volume of charcoal from the same input wood	Number of charcoal producers who have adopted improved technology	Promote efficient charcoal production technologies
			Increased proportion of charcoal producers trained	Number of charcoal producers trained.	Conduct meetings and trainings on charcoal production
		Efficient use of biomass energy	Reduced wastage	Number of households that have adopted energy saving technologies	Promote affordable energy saving technology
			Better energy saving technologies	Number of institutions that have adopted new technologies	Capacity building on energy saving technologies
		Reduced dependency on charcoal and firewood	Alternative sources of cooking energy	Number of households using alternative sources of energy for cooking	Promote adoption of alternative energy for cooking
				Types of energy used	Capacity building on alternative types of energy for cooking
				Volume of charcoal and firewood used	Attitude change
		Manage the forest resources	Improved Management of forest resources	Forest product accounts developed	Development of forest products accounts
					Value addition
					Capacity building on resource accounting
	Sustainable utilization of fisheries resource	Sustainable harvesting of fish	Improved fishing methods	Number of fisheries projects funded	Encourage fish farming
				Number of trainings conducted	Capacity building on efficient monitoring of fishing activities
		Efficient Management of fish stock	· Improved Management of fish resources	· Fisheries accounts developed	· Development of fisheries accounts
					· Value addition
					· Capacity building on resource accounting
	Sustainable utilisation of water	· Efficient utilisation of water resources	Increase in water reuse	Water reuse technologies adopted	Adopting water reuse technologies
					Sensitisation of masses on efficient utilisation of water
		Efficient management of water resource	Reduced wastage	· Volume of water	Adopting water management practices

Strategic objective	Specific objective	Focus	Outcome	Outputs	Actions
		Efficient irrigation systems	Increased awareness on the drought resistant crops and better farming methods	· Records of trainings conducted	Improvement of water allocation among competing uses
			· Improved irrigation systems	· Reduced pollution	Carrying out regular Water Resources Assessments
				· Number of innovations adopted	Prevention strategies and new technologies that enhance existing natural water resources, reduce demand, and achieve higher efficiency
			Increased number of farmers trained on better farming methods	Number of farmers trained on better farming methods	· Encourage better farming methods that don't need irrigation
		Efficient Management of water resources	· Improved Management of water resources	· Water accounts developed	· Development of water accounts
					Value addition
					Capacity building on resource accounting
		Sustainable utilisation of clay	Efficient use of clay	· Records of trainings conducted	Promote certification
				· Clay guidelines developed	· Adopting of efficient extraction skills
				· Extraction skills adopted	· Encourage innovations which require less materials
				Number of extractors trained	· Capacity building of extractors
				Clay extraction guidelines developed	· Develop guidelines for clay extraction.
			· Improved Management of clay resources	· Clay accounts developed	· Development of clay accounts
					· Value addition
					· Capacity building on resource accounting
		Sustainable utilisation of sand	· Sand alternatives	· Sand alternatives adopted	· Encourage adoption of other alternatives for sand
			· Improved Management of sand resources	· Sand accounts developed	· Development of sand accounts
					· Value addition
					· Capacity building on resource accounting
5.0 To enhance awareness and education on biodiversity issues among the various stakeholders	Develop and implement stakeholder awareness programmes on biodiversity	Awareness creation among Policy maker/ implementers	Increased awareness	Number of meetings	Policy engagement
				Number of print and audio slots	Policy dialogues
				Number of meetings held	Meetings
				Biodiversity information published in the print media	Multimedia approach (radio talk shows, TV shows, newspapers, documentaries)
				Number of radio and TV talk shows conducted	
		Awareness creation among Researchers/ Academia	Increased awareness among researcher /academia	Number of training workshops conducted	Facilitate Publications
				Number of ToTs recruited	Training of Trainers
				Number of retreats and meetings	Retreats
				Written reports on biodiversity	Writing reports
		Awareness creation of Private sector, civil society and media	Increased participation of private sector, civil society and media in biodiversity programmes	Number of meetings conducted	Policy engagement
				Number of print and audio slots	Policy dialogues

Strategic objective	Specific objective	Focus	Outcome	Outputs	Actions
				Number of fact sheets developed	Meetings
				Biodiversity information published in the print media	Multimedia approach (radio talk shows, TV shows, newspapers, documentaries)
				Number of radio and TV talk shows about biodiversity conducted	
		Create awareness in Schools (all levels)	Increased participation of schools in biodiversity programmes	Number of TOT workshops conducted	Workshops
				Number of environmental clubs	School clubs
				Number of branded message material distributed	Develop branding messages
				Number of community engagement programmes	Clean up programmes
			Increased awareness in schools	Number of print and audio slots	Multimedia approach (radio talk shows, TV shows, newspapers, documentaries)
				Number of community engagement programmes	Clean up programmes
				Number of print and audio slots	Multimedia approach (radio talk shows, TV shows, newspapers, documentaries
				Number of flyers and banners developed and distributed	Develop branding messages
	Enhancing education programmes on biodiversity issues	Education and attitude change among Policy maker/implementers	Increased participation in biodiversity activities	Number of training workshops	Training Workshops
			Informed decisions on biodiversity issues	Number of retreats	Retreats
				Policy briefs on biodiversity developed	Policy engagement
				Number of workshops	Dissemination through workshops
		Education and attitude change among Researchers/Academia	Increased participation of researchers/academia	Number of workshops	Training workshops
				Number of research papers	Training of trainers
				Number of retreats held	Retreats
		Education and attitude change Private sector, civil society and media	Increased participation of Private sector, civil society and media in biodiversity programmes	Number of agencies that are trained	Capacity building of stakeholders on biodiversity programmes
		Education and attitude change Schools (all levels)	Increased Knowledge on biodiversity issues	Number of environmental education programmes	Environmental education programmes
			Improved attitude on biodiversity	Number of print and audio slots	(Debates, clean-up, restoration)
				Number of radio and TV talk shows conducted	Multimedia approach (radio talk shows, TV shows, newspapers, documentaries)
				Number written reports on biodiversity	Writing reports
				Number of developed and authored working papers	Develop working papers through Training of trainers (TOTs)
				Number of message t-shirts made and distributed	Develop branding messages
				Number of flyers and banners developed and distributed	

Strategic objective	Specific objective	Focus	Outcome	Outputs	Actions
				Guidelines to integrate environment education programmes into curriculum developed	Develop guidelines to integrate environment education programmes into curriculum
				Materials for clean-up and restoration provided and distributed	Clean up and restoration programmes
		Education and attitude change of Indigenous people and local communities	Integration of indigenous with modern knowledge	Number of meetings	Meetings(barazas)
			Improved utilisation of biodiversity	Number of community engagement programmes	Community engagement programmes (clean-up and restoration)
			Improved attitude of indigenous people and local communities on biodiversity	Number of branded message material distributed	Multimedia approach (radio talk shows, TV shows, newspapers, documentaries)
				Number of flyers and banners developed and distributed	Develop flyers
					Develop banners
6: To harness modern biotechnology for socio-economic development with adequate safety measures for human health and the environment	Develop and apply biotechnology for socio-economic development	Crop pests control using biotechnology	Reduced incidences of pests	Number of biological pest controls technologies	Support innovative research
				Number of farmers trained	Training farmers in biological pest control technologies
				Number of farmers making and using biological pest control	Develop pest resistant crops
				Number of farmers making and using organic pesticides	Promote use of organic pesticides
		Reduce storage grain/ seed losses using biotechnologies	Reduced grain/seed loss at storage	Number of farmers using biological pest control technologies during storage	Support innovative research
					Train farmers on biological pest control technologies during storage
					Promote use of organic pesticides
		Reduced crop diseases using biotechnology	Reduced disease incidence	Number of biological disease controls technologies	Support innovative research for biological disease control technologies
				Number of demonstration farms established	Establishment of demonstrations farms
				Number of farmers using biological disease control technologies	Develop and release disease resistant crop varieties
				Number of farmers making and using organic herbicides	Promote use of organic herbicides
		Waste management	Reduced pollution	Number of waste treatment technologies developed	Promoting biological treatment of waste
					Popularise waste treatment among the people
		Management and control of Invasive species	Control and elimination of invasive species	Number of biological control technologies for invasive species developed	Support development of biological control technologies for invasive species
				Number of biological control technologies for invasive species adopted	Promote the use of biological control technologies for invasive species
				Number of farmers making and using biological pest control	Develop pest resistant crops
7: To promote innovative and sustainable funding mechanisms to support NBSAP implementation	Mobilize financial resources for biodiversity	Identify potential funders and funding priorities	Increased funding base	Database of potential funders and their priorities	Facilitate development and operationalisation of database for potential funders
		Build networks and partnerships for funding	Increased public private partnerships	Number of Partnerships developed	Strengthen Public private partnerships
		Project proposal development	Increased number of funding proposals submitted	Number of funding proposals developed and submitted	Facilitate development of project proposals
				Number of proposals approved	Capacity building on project proposal writing
		Developing a biodiversity conservation program	Biodiversity conservation program developed	Number of biodiversity conservation programs developed	Capacity building on biodiversity conservation program

CHAPTER FOUR: SUMMARY RESULTS OF THE COST OF IMPLEMENTATION OF THE NBSAP

4.1 Overall total cost of implementing the NBSAP II

The financing needs for biodiversity conservation and management in Uganda were derived from the different sectors and subsectors that implement biodiversity related activities. The cost and budget for effectively implementing NBSAP II in Uganda was computed based on the intended actions expected to have an impact on biodiversity conservation and management. The activity-based costing involved mainly four steps namely: Identify and classify activities, (ii) Estimate the cost for whole activity, (iii) compute a cost driver rate, and (iv) apply activity costs using cost driver. Furthermore, consultations with different stakeholders on the possible costs for each of the suggested actions were carried out. The cost for implementing the NBSAP II for each of the strategic objective are summarised in Table 4.1 detailed costing can be found in annex 1.

Table 4.1: Total Estimated Costs of implementing the NBSAP II 2018-2025

	Fiscal Year (UGX-billion)						
Strategic objectives	**2019/20**	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**2018/19**
1. Strengthen stakeholder co-ordination and frameworks for biodiversity management	3.0	3.2	4.0	3.9	3.8	3.7	5.9
2. To facilitate and build capacity for research, knowledge and information management and exchange on biodiversity	2.5	2.5	2.6	2.9	2.9	3.2	3.4
3. To reduce and manage negative impacts while enhancing positive impacts on biodiversity	391.9	411.7	432.5	454.4	479.3	500.3	524.9
4. To promote the sustainable use and equitable sharing of costs and benefits of biodiversity	3.1	3.4	3.9	4.1	4.1	4.0	4.3
5. To enhance awareness and education on biodiversity issues among the various stakeholders	2.7	3.2	2.8	3.0	3.1	3.9	3.4
6. To harness modern biotechnology for socio-economic development with adequate safety measures for human health and the environment	1.7	1.9	1.9	2.1	2.0	2.0	2.1
7. To promote innovative and sustainable funding mechanisms to support NBSAP implementation	0.4	0.4	0.6	0.4	0.4	0.4	0.5
Overall	**405.3**	**426.2**	**448.2**	**470.7**	**495.6**	**517.6**	**544.5**

On average, Uganda required about **UGX 472.6 billion** for biodiversity conservation and management per fiscal year. Furthermore, about **96.6%** of the costs are to reduce and manage negative impacts while enhancing positive impacts on biodiversity (restoration of forests and wetlands). The concentration of the costs on one of the strategic objectives might be attributed to high habitat loss in terms of forests and wetlands. It should be noted that cost of habitat restoration might not be the best strategies if the root cause of forest and wetland degradation are not addressed. Further analysis revealed that only about 0.5% of the costs are for development while the remaining is for recurrent costs Table 4.2. The high proportion of the recurrent costs are attributed to restoration of forests and fragile ecosystems that are spread out till 2024/25.

Table 4.2: Distribution of total costs by capital development and recurrent costs (UGX billion)

Strategic objectives	Budget profile	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
1. Strengthen stakeholder co-ordination and frameworks for biodiversity management	Capital development	0.07	0.21	0.85	0.60	0.35	0.13	2.08
	Recurrent	2.94	2.97	3.12	3.28	3.44	3.61	3.80
2. To facilitate and build capacity for research, knowledge and information management and exchange on biodiversity	Capital development	0.13	0.02	0.03	0.24	0.04	0.17	0.28
	Recurrent	2.33	2.45	2.57	2.70	2.84	2.98	3.13
3. To reduce and manage negative impacts while enhancing positive impacts on biodiversity	Capital development	0.33	0.55	0.77	1.04	3.32	0.54	0.14
	Recurrent	391.59	411.17	431.73	453.31	475.98	499.78	524.77
4. To promote the sustainable use and equitable sharing of costs and benefits of biodiversity	Capital development	0.01	0.11	0.49	0.51	0.25	0.00	0.13
	Recurrent	3.14	3.29	3.46	3.63	3.81	4.00	4.20
5. To enhance awareness and education on biodiversity issues among the various stakeholders	Capital development	0.03	0.57	0.01	0.04	0.01	0.67	0.01
	Recurrent	2.66	2.65	2.78	2.92	3.07	3.22	3.38
6. To harness modern biotechnology for socio-economic development with adequate safety measures for human health and the environment	Capital development	0.11	0.22	0.12	0.24	0.13	0.00	0.00
	Recurrent	1.58	1.65	1.74	1.82	1.91	2.01	2.11
7. To promote innovative and sustainable funding mechanisms to support NBSAP implementation	Capital development	0.03	0.01	0.01	0.00	0.00	0.00	0.00
	Recurrent	0.34	0.36	0.55	0.39	0.41	0.43	0.45

4.2 Analysis of total costs per NBSAP strategic objective

4.2.1: Costs to implement the NBSAP strategic objective 1: To strengthen stakeholder co-ordination and frameworks for biodiversity management

This strategic objective is divided into two main components to help in addressing the underlying causes of biodiversity loss at different levels in Uganda. The actions are directed towards mainstreaming biodiversity issues in the NDP, Sectoral, District and Local Development Plans, strengthening coordination among stakeholders and establishing and operationalisation of implementation, planning, monitoring and evaluation frameworks for the NBSAP in Uganda. The strategic objective will operate under the following specific objectives

a) To strengthen the coordination of biodiversity activities among all the stakeholders in delivering shared government priorities
b) To strengthen evaluation capacity (across all stakeholders in biodiversity management) for policy and program evaluation
c) To strengthen performance capability among all stakeholders in biodiversity management in Uganda
d) To evaluate the efficiency and effectiveness of biodiversity spending among all stakeholders
e) Strengthen community coordination for biodiversity management among all stakeholders
f) Improved reporting and increased access and sharing to biodiversity information among all stakeholders

To achieve the above stated specific objectives, detailed actions and activities were developed and estimates of the cost were determined. Table 4.3 shows the estimated cost for the implementation of each specific objectives under strategic objective one.

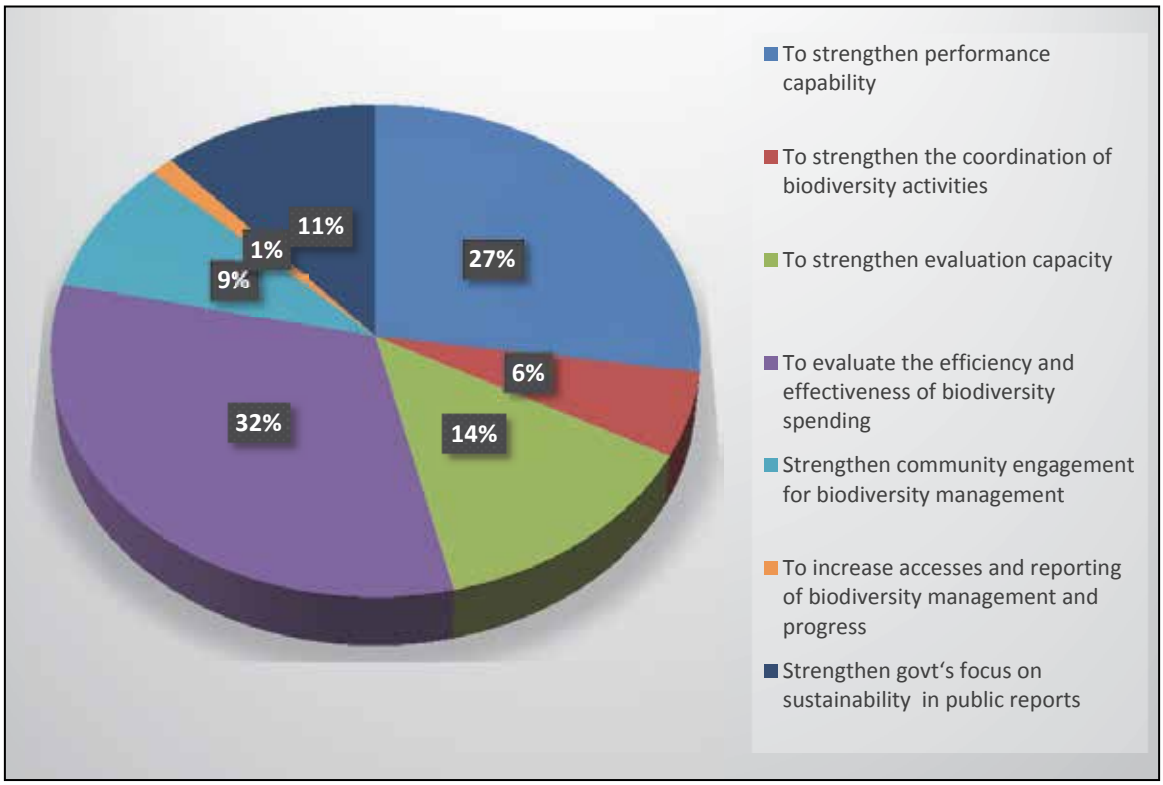
Table 4.3: Summary of estimated costs to implement strategic objective one UGX billion

Specific objective	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
To strengthen performance capability	0.98	0.96	1.01	1.06	1.11	1.16	1.22
To strengthen the coordination of biodiversity activities	0.17	0.18	0.39	0.19	0.20	0.21	0.22
To strengthen evaluation capacity	0.33	0.34	0.36	0.86	0.40	0.42	1.00
To evaluate the efficiency and effectiveness of biodiversity spending	0.90	0.94	0.99	1.04	1.09	1.14	2.72
Strengthen community engagement for biodiversity management	0.17	0.34	0.77	0.31	0.38	0.22	0.23
To increase accesses and reporting of biodiversity management and progress	0.03	0.07	0.09	0.04	0.04	0.04	0.04
Strengthen govt's focus on sustainability in public reports	0.44	0.35	0.37	0.39	0.58	0.56	0.45
Overall	**3.01**	**3.18**	**3.97**	**3.88**	**3.79**	**3.75**	**5.88**

On average, the total cost for implementation per year was estimated at UGX 3.92 billion

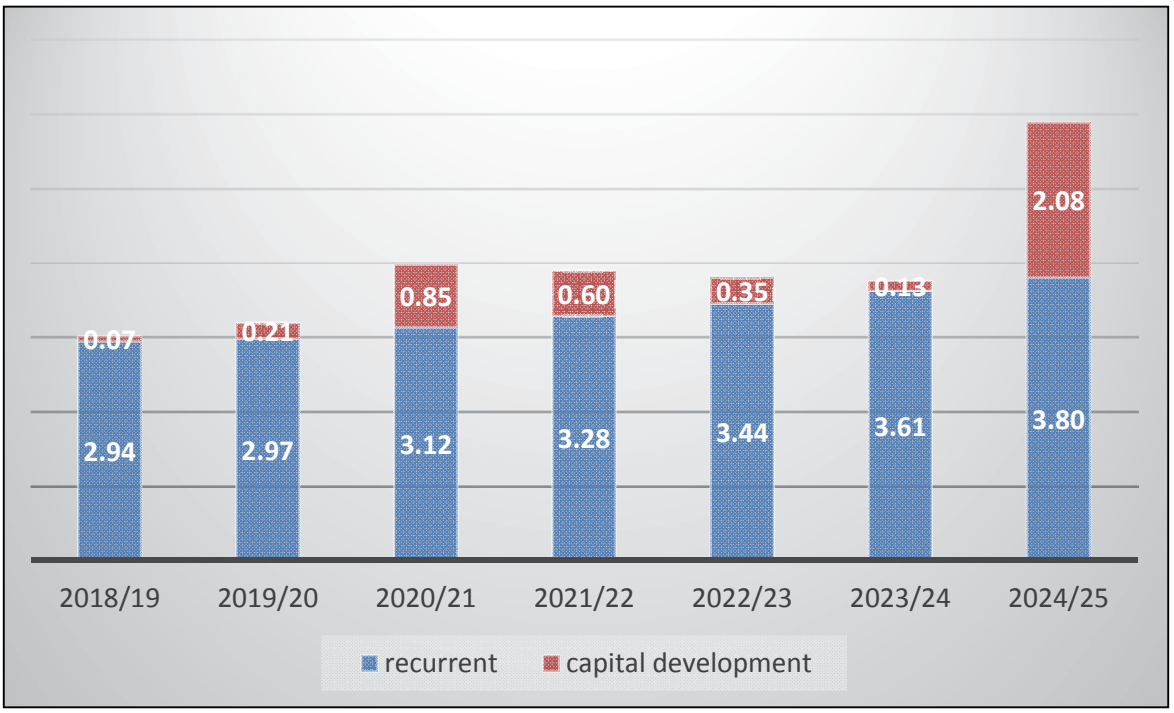
Figure 4.1 shows the summary cost share of each of the actions. For example, about 32% of the costs under this strategic objective will be allocated to evaluate the efficiency and effectiveness of biodiversity spending among stakeholders.

Figure 4.1: Share of total cost of implementation of each specific objective under strategic objective one



Furthermore, on average, about 13.4% of the costs are attributed to capital development while the rest will be for recurrent costs as shown in Figure 4.1.1. Detailed /costs for the suggested actions/activities are provided in Annex 1.

Figure 4.1.1: Share of total cost of implementation of each specific objective under strategic objective one



4.2.2: Costs to implement the NBSAP strategic objective 2: To facilitate and build capacity for research, knowledge and information management and exchange on biodiversity

Gathering and dissemination of biodiversity information is fundamental for sustainable biodiversity management in Uganda. Building capacity for research and improving information management and exchange among stakeholders and decision makers is important for identifying and overcoming the barriers to knowledge exchange. Policies and practices that would greatly improve management of information and knowledge on biodiversity research include; Standard guidelines for governing biodiversity research, commitment to support and fund biodiversity related research, manage, facilitate and sustain research, collaborate on biodiversity research, publish and share research findings, among others.

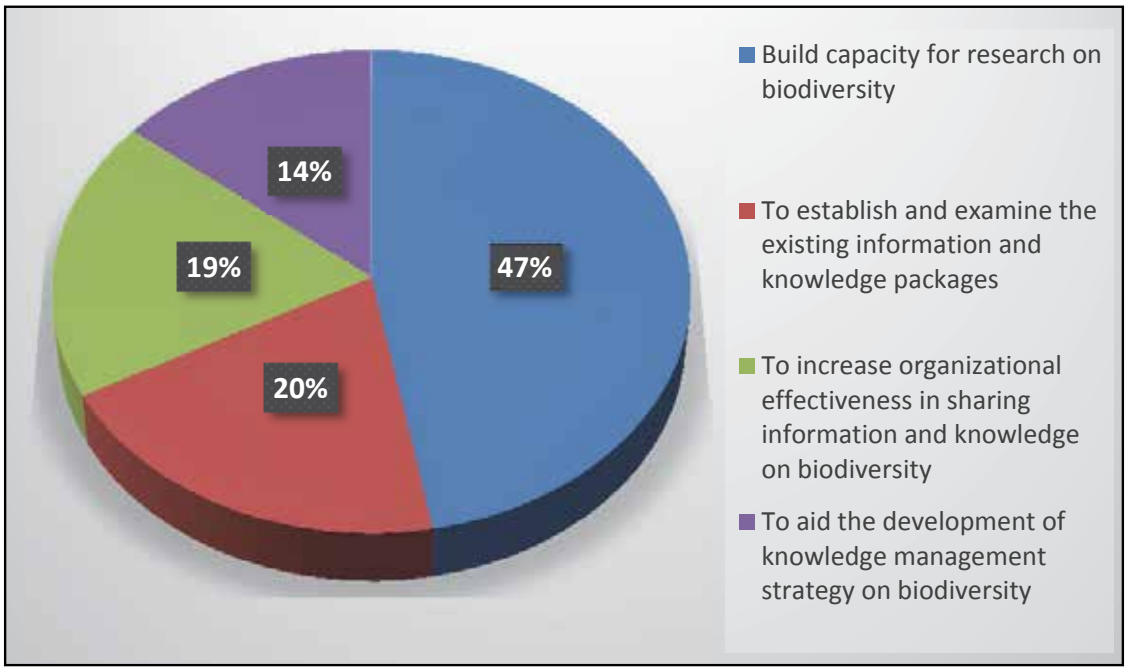
Strategic objective two was divided into four specific objectives: build capacity for research on biodiversity at both institutional and individual level, establish and examine existing information and knowledge on biodiversity, development of knowledge management strategy on biodiversity and increasing organizational effectiveness through research and publication. Table 4.4 shows the estimated total cost of each of the suggested specific objectives based on costing of actions (Annex 1).

Table 4.4: Summary of estimated costs under strategic objective two (UGX billion)

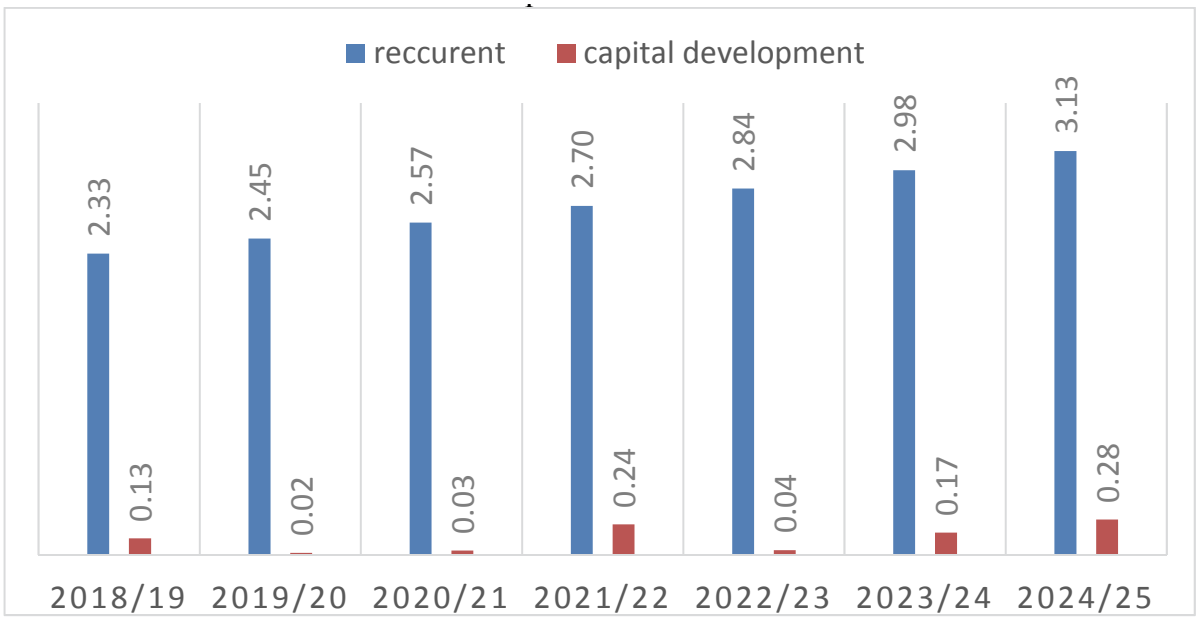
Specific objective	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Build capacity for research on biodiversity	1.22	1.18	1.23	1.36	1.35	1.42	1.61
To establish and examine the existing information and knowledge packages	0.48	0.50	0.56	0.60	0.59	0.61	0.64
To increase organizational effectiveness in sharing information and knowledge on biodiversity	0.44	0.44	0.46	0.61	0.54	0.70	0.56
To aid the development of knowledge management strategy on biodiversity	0.33	0.34	0.36	0.38	0.40	0.43	0.59
Overall	**2.5**	**2.5**	**2.6**	**2.9**	**2.9**	**3.2**	**3.4**

To achieve the specific objectives under strategic objective two, on average about **UGX 2.84 billion** per year are required. Figure 4.2 shows distribution of budget allocations per each of the specific objectives and actions suggested to effectively implement NBSAP II.

Figure 4.2: Share of total estimated cost of implementation of each specific objective under strategic objective two



Our cost analysis/ revealed that about 47% of the total costs is related to building capacity for research on biodiversity while 19% is for increasing organizational effectiveness in sharing information and knowledge on biodiversity among stakeholders. Details of proposed actions, activities and their estimated costs are provided in Annex 1.



4.2.3: Costs to implement the NBSAP objective 3: To reduce and manage negative impacts while enhancing positive impacts on biodiversity

Biodiversity loss has impacts on several aspects of human well-being, such as food security, vulnerability to natural disasters, energy security, and access to clean water and raw materials. Many animal and plant populations in Uganda have declined in numbers, geographical spread, or both. Human activity is the primary cause of these declines. To protect biodiversity and ecosystem services, direct and indirect drivers of loss must be addressed. Specific objectives identified for implementation include:

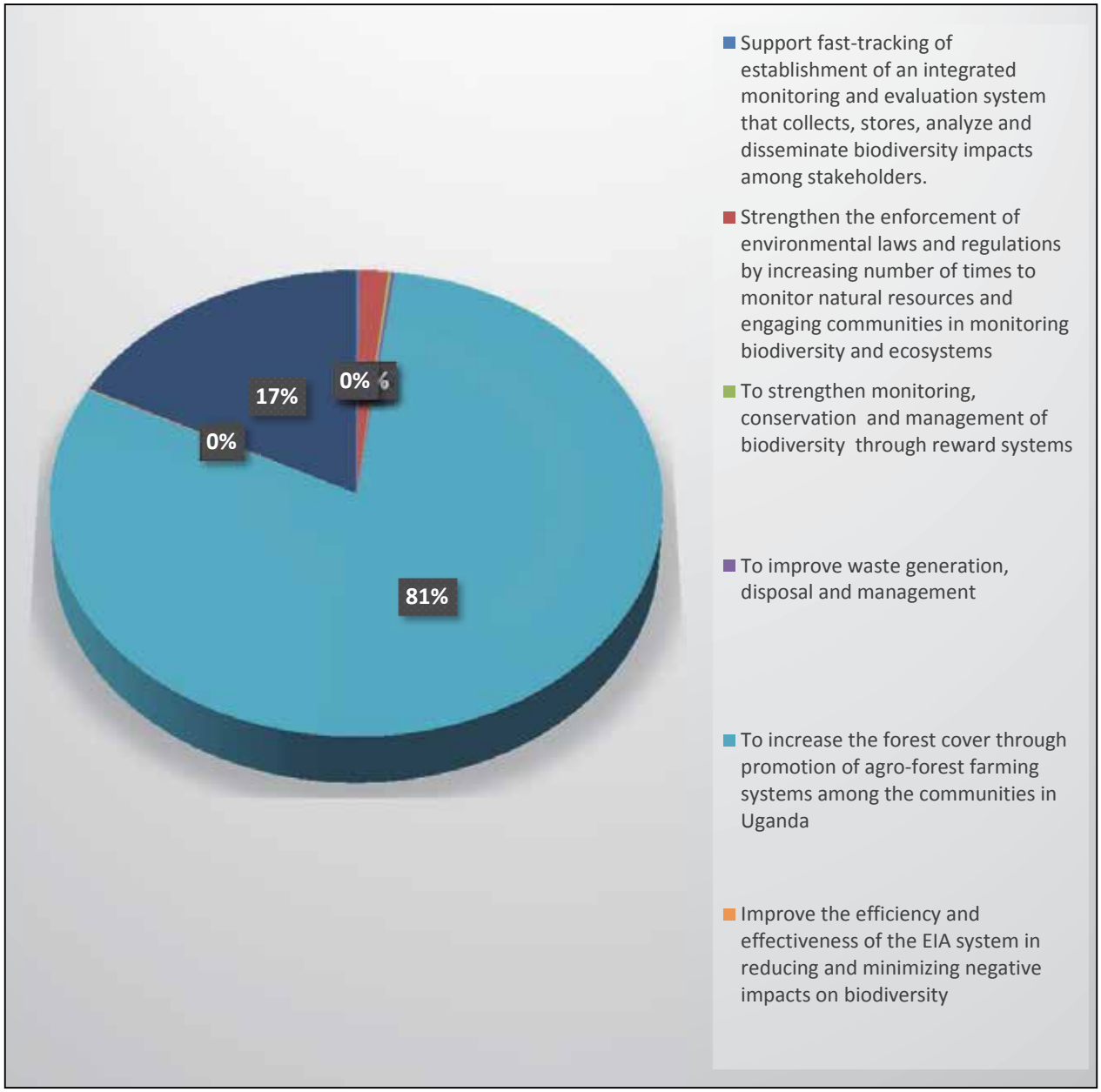
a) Support fast-tracking of establishment of an integrated monitoring and evaluation systems that collects, stores, analyze and disseminate biodiversity impacts among stakeholders.
b) Strengthen the enforcement of environmental laws and regulations by engaging communities in monitoring biodiversity and ecosystems
c) Strengthen the enforcement of environmental laws and regulations by increasing monitoring frequency of the natural resources in the communities
d) To strengthen monitoring, conservation and management of biodiversity through reward systems
e) To improve waste generation, disposal and management
f) To increase the forest cover through promotion of agro-forest farming systems among the communities in Uganda
g) Improve the efficiency and effectiveness of the EIA system in reducing and minimizing negative impacts on biodiversity
h) Increased the area of fragile ecosystems and number of biodiversity species
i) To promote establishment of offsets and woodlots among construction companies, schools, industries and households.

The heart of biodiversity conservation and management majority depend on protection, restoration resulting in reduced negative impacts while enhancing positive impacts. Table 4.5 shows the summary total costs for implementation of the proposed specific objective under this strategic objective. Detailed costing of actions proposed can be found in Annex 1

Table 4.5: Summary of total estimated costs to implement strategic objective three (UGX billion)

Specific objective	2018/19 bn UGX	2019/20 bn UGX	2020/21 bn UGX	2021/22 bn UGX	2022/23 bn UGX	2023/24 bn UGX	2024/25 bn UGX
Support fast-tracking of establishment of an integrated monitoring and evaluation system that collects, stores, analyze and disseminate biodiversity impacts among stakeholders.	0.66	0.80	0.80	0.67	0.70	0.73	0.77
Strengthen the enforcement of environmental laws and regulations by increasing number of times to monitor natural resources and engaging communities in monitoring biodiversity and ecosystems	6.12	6.55	6.76	7.20	7.43	7.80	8.19
To strengthen monitoring, conservation and management of biodiversity through reward systems	0.63	0.82	0.64	0.67	0.70	0.73	0.77
To improve waste generation, disposal and management	0.36	0.34	0.36	1.28	2.95	0.95	0.44
To increase the forest cover through promotion of agro-forest farming systems among the communities in Uganda	315.58	331.25	348.39	365.20	383.46	402.63	422.90
Improve the efficiency and effectiveness of the EIA system in reducing and minimizing negative impacts on biodiversity	0.31	0.33	0.34	0.36	0.38	0.40	0.42
Increased the area of fragile ecosystems and number of biodiversity species	68.18	71.54	75.11	78.87	83.58	86.95	91.30
To promote establishment of offsets and woodlots among construction companies, schools, industries and households.	0.09	0.09	0.10	0.10	0.11	0.11	0.12
Overall	**391.92**	**411.72**	**432.50**	**454.35**	**479.30**	**500.31**	**524.91**

The activity-based costing exercise estimated the cost of implementing strategic objective three "reduce and manage negative impacts while enhancing positive impacts on biodiversity" on average was about **UGX 456.4 billion** per fiscal year. Furthermore, about **81%** and **17%** of the budget allocations are for restoration of forest and fragile ecosystems respectively. Figure 4.3. The high costs are associated with planting of about 120,000 hectares of forest cover at a unit cost of UGX 2,5 million and restoration of about 20,000 hectares of wetland cover at unit cost of about UGX 3.5 million per fiscal year. The current strategy for the restoration of forests and fragile ecosystems might not be the most effective way for the management of biodiversity in Uganda. Integration of biodiversity conservation and management into agricultural production and livelihood diversification might be a better option for the conservation of wetlands and forests. Furthermore, promotion of efficient technologies that reduces consumption of biomass might be more effective in reducing forestry loss rather than concentrating of tree planting.



4.5: Costs to implement the NBSAP Objective 4: To promote the sustainable use and equitable sharing of costs and benefits of biodiversity

Ecosystems generate numerous benefits which include provisioning, cultural, regulating and supporting services. Sustainable use and management of biodiversity can build bridges between biodiversity, poverty reduction and development. It involves strengthening the rights of people over resources and developing financial incentives measures through which those who are living in biodiversity rich regions receive payment from those who benefit from them. Local people can benefit financially or from training, employment, provision of infrastructure and equipment arising from development activities or projects on biodiversity conservation. Both costs as well as benefits from biodiversity conservation must be shared otherwise many stakeholders may not see any reason to support new approaches to biodiversity management in their areas.

The sustainable use and equitable sharing of costs and benefits of biodiversity can be achieved through:

(i) Enhancing livelihood
(ii) Efficient production of charcoal
(iii) Efficient use of biomass energy
(iv) Reduced dependency on charcoal and firewood
(v) Manage the forest resources
(vi) Sustainable harvesting of fish
(vii) Efficient Management of fish stock
(viii) Efficient utilisation of water resources
(ix) Efficient management of water resources
(x) Efficient irrigation systems
(xi) Efficient Management of water resources
(xii) Sustainable utilisation of clay
(xiii) Sustainable utilisation of sand

Three specific objectives are proposed to implement this strategic objective of the NBSAPII:

a) To promote sustainable use of biodiversity
b) Sustainable utilization of fisheries resource
c) Sustainable utilisation of water

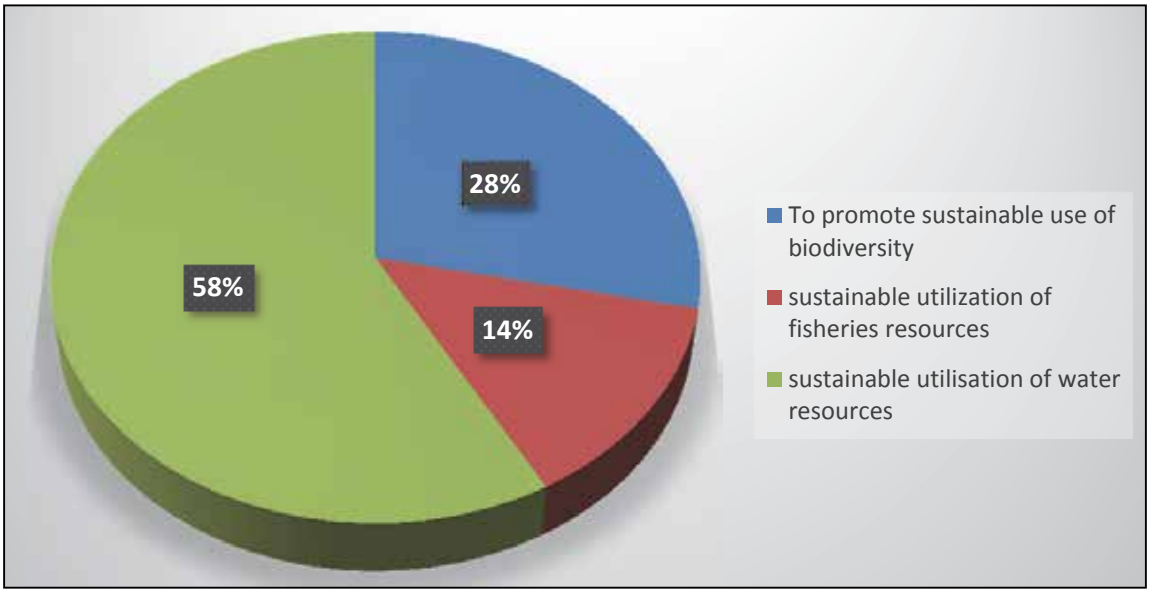
Table 4.6 shows the summarised total cost of implementing actions and activities under the NBSAP strategic objective: promotion of sustainable use and equitable sharing of costs and benefits of biodiversity among the population in Uganda. Detailed costing of actions can be found in Annex1

Table 4.6: Summary of estimated total cost to implement strategic objective four (UGX billion)

Specific objective	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
To promote sustainable use of biodiversity	0.90	0.95	1.19	1.18	1.08	1.14	1.20
Sustainable utilization of fisheries resource	0.42	0.51	0.46	0.67	0.51	0.54	0.56
Sustainable utilisation of water	1.82	1.94	2.29	2.29	2.47	2.33	2.57
Overall	**3.1**	**3.4**	**3.9**	**4.1**	**4.1**	**4.0**	**4.3**

Estimates of the cost of implementing actions and activities under this strategic objective revealed that on average about **UGX 3.9 billion** per fiscal year. Therefore, aligning of actions/activities that promote sustainable utilization of biodiversity resources might provide better conservation outcomes. Figure 4.4 shows the distribution of the cost of implantation of each specific objective for sustainable utilization of biodiversity resources.

Figure 4.4: Share of total cost of implementation of each specific objective under strategic objective four



Findings revealed that about 58% of the total estimated costs are related to the specific objective: promoting of sustainable utilization of water resources as compared to 28% of total costs for sustainable use of other biodiversity resources.

4.6: Costs to implement NBSAP strategic objective 5: To enhance awareness and education on biodiversity issues among the various stakeholders

Raising general awareness on biodiversity and the need for conservation is absolutely necessary if significant results on biodiversity conservation are to be achieved. The more people become aware of the issues concerning biodiversity, the more general awareness and understanding of a need for actions will emerge. To achieve this objective increased participation of various stakeholders should be enhanced. These include: Policy maker/implementers, researchers/Academia, private sector, schools, indigenous people, local community's civil society and media.

Two specific objectives are proposed for implementation:

a) Develop and implement stakeholder's awareness programmes on biodiversity
b) Enhancing education programmes on biodiversity issues

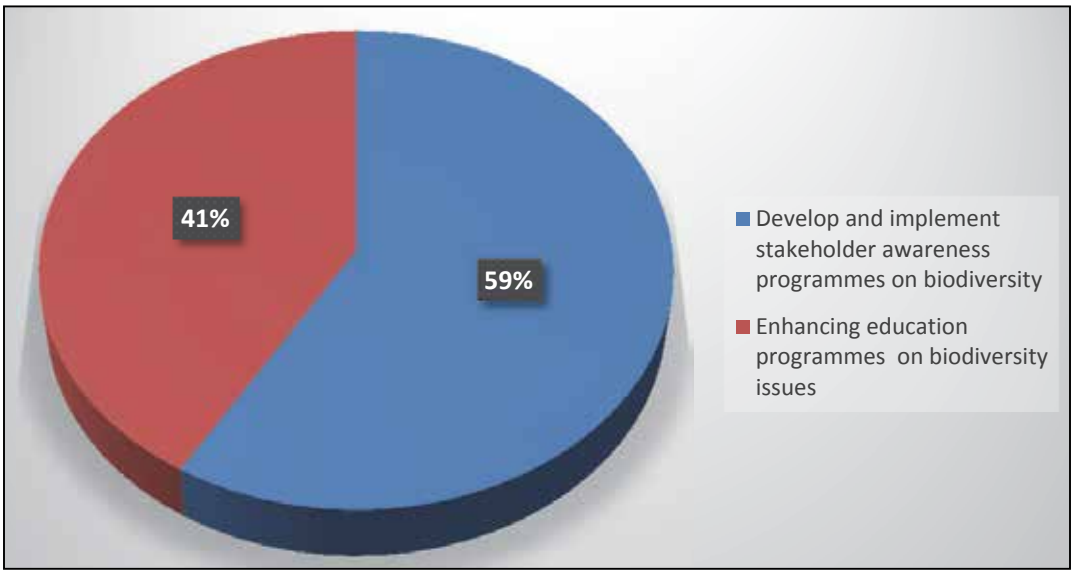
Table 4.7 shows the total cost of implementing proposed for each specific objectives based on detailed costing of actions/activities (refer Annex 1) that will enhance awareness and education on biodiversity issues among the various stakeholders in Uganda. Detail costing can be found in Annex 1

Table 4.7: Summary of estimated total costs to implement strategic objective five (UGX billion)

Specific objective	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Develop and implement stakeholder awareness programmes on biodiversity	1.51	2.14	1.68	1.76	1.84	1.94	2.03
Enhancing education programmes on biodiversity issues	1.17	1.08	1.11	1.21	1.23	1.95	1.36
Overall	**2.7**	**3.2**	**2.8**	**3.0**	**3.1**	**3.9**	**3.4**

On average about **UGX 3.1 billion per year** need to be spent on awareness and education on biodiversity issues among the various stakeholders in Uganda. Figure 4.5 shows the share of the total cost of each strategic objective to implement the strategic objective related to enhance awareness and education on biodiversity issues among stakeholders in Uganda.

Figure 4.5: Share of total cost of implementation of each specific objective under strategic objective five



4.7: Costs to implement the NBSAP strategic objective 6: To harness modern biotechnology for socio-economic development with adequate safety measures for human health and the environment

Uganda has registered positive strides in the direction of enhancing and promoting biotechnology as compared to many countries in sub-Sahara Africa. This is reflected in the steady increment in the number of applications for research on improved crops varieties received by the Uganda national council of science and technology and consequently received and approved by the national bio-safety committee over the year. This field gives a lot of hope for the prospective development and application of modern biotechnologies in the country for the years to come.

However, more effort are needed to develop and apply biotechnology to reduce incidence of pests and diseases, seed loss during storage, pollution and control the spread of invasive species. The specific objectives identified for implementation are:

a) Control crop pests using biotechnology
b) Reduce storage grain/seed losses using biotechnologies
c) Reduced crop diseases using biotechnology
d) Management of waste
e) Management and control of Invasive species

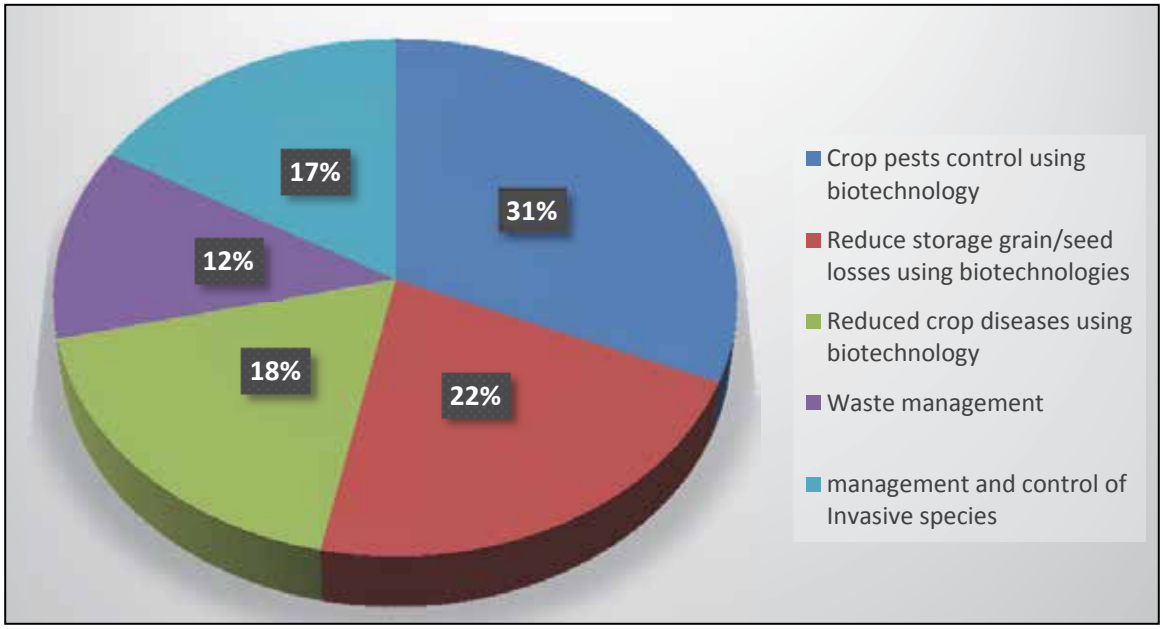
Table 4.8 shows the summary of total cost to implement the specific objectives based on a details costing of actions (that will contribute to harness modern biotechnology for socio-economic development with adequate safety measures for human health and the environment.

Table 4.8: Summary of total estimated costs to implement strategic objective six (UGX billion)

Focus	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Crop pests control using biotechnology	0.53	0.55	0.58	0.61	0.64	0.67	0.70
Reduce storage grain/seed losses using biotechnologies	0.37	0.39	0.41	0.43	0.45	0.47	0.49
Reduced crop diseases using biotechnology	0.37	0.50	0.29	0.30	0.32	0.34	0.35
Waste management	0.16	0.17	0.29	0.43	0.19	0.20	0.21
Management and control of Invasive species	0.26	0.28	0.29	0.30	0.45	0.34	0.35
TOTAL	**1.68**	**1.87**	**1.85**	**2.07**	**2.04**	**2.01**	**2.11**

On average about **UGX 1.9 billion** per fiscal year are required to effectively implement the proposed actions/activities under harnessing modern biotechnology for socio-economic development with adequate safety measures for human health and the environment. Figure 4.6 shows the distribution of the budget for the proposed actions. Findings revealed that about 16% of the budget should be allocated for management and control of invasive species.

Figure 4.6: Share of total cost of implementation of each specific objective under strategic objective six



4.8: Costs to implement the NBSAP strategic objective 7: To promote innovative and sustainable funding mechanisms to support NBSAP implementation

Biodiversity in Uganda has a high economic value. Despite its high value, there are costs associated with management. The resources allocated to the implementing and management of biodiversity activities are usually not enough to make significant impact hence the need to increase the funding base. Mobilizing financial resources for biodiversity management aims at increasing the funding base, efficient and effective use of available resources, and increased public private partnerships, through:

i) Identify potential funders and funding priorities
ii) Cost control
iii) Build networks and partnerships for funding
iv) Project proposal development
v) Developing a biodiversity conservation program

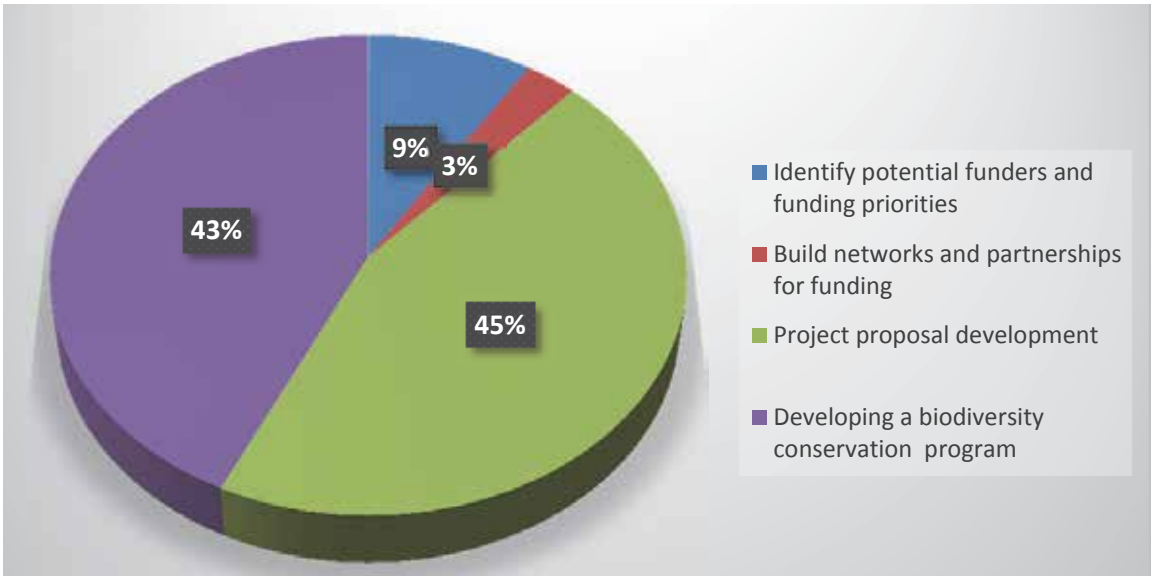
Table 4.9 shows the summary of the cost for the implementation of identified specific objective based on a detailed costing of proposed actions (Refer Annex 1) intended to promote innovative and sustainable funding mechanisms to support NBSAP implementation.

Table 4.9: Summary of estimated total cost to implement strategic objective seven (UGX billion)

Focus	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Identify potential funders and funding priorities	0.037	0.017	0.191	0.006	0.006	0.007	0.007
Build networks and partnerships for funding	0.011	0.011	0.012	0.012	0.013	0.013	0.014
Project proposal development	0.166	0.174	0.183	0.192	0.202	0.212	0.222
Developing a biodiversity conservation program	0.158	0.165	0.174	0.182	0.191	0.201	0.211
Total	**0.37**	**0.37**	**0.56**	**0.39**	**0.41**	**0.43**	**0.45**

The costing established that on average about **UGX 0.43 billion** is required per fiscal year to effectively implement actions/activities to promote innovative and sustainable funding mechanisms to support NBSAP II implementation. The current investment into development of proposals for grants, projects and programs were not reflected in the expenditures of the MALGs reviewed. Furthermore, about 43% of total cost are related to the development of biodiversity conservation programme while 45% of total cost are related to project proposal development respectively as indicated in Figure 4.7.

Figure 4.7: Share of total cost of implementation of each specific objective under strategic objective seven



CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

One of the objectives of the analysis was to estimate how much more resources are required for biodiversity conservation and management in Uganda. The difference between the required resources and available resources are referred to as financial gap. In the current analysis it's difficult to estimate the financial gap since the NBSAP and the estimated biodiversity expenditure reviews are not comparable; because the NBSAP does not include all biodiversity activities currently implemented in Uganda. Moreover, it is difficult to compare budget and real expenditures. The activity-based costing was used to estimate the cost of implementing NBSAP II. The costing of the NBSAP estimated that biodiversity conservation and management at about **UGX 472.6 billion** per fiscal year which is about **6.2%** of the government of Uganda national budget. Furthermore, about **96.6%** of the costs are to reduce and manage negative impacts while enhancing positive impacts on biodiversity.

The cost of implementing strategic objective three "reduce and manage negative impacts while enhancing positive impacts on biodiversity" on average was about **UGX 456.4 billion** per fiscal year. Furthermore, about **81%** and **17%** of the budget allocations are for restoration of forest and fragile ecosystems respectively.

The concentration of the costs on one of the strategic objectives might be attributed to high habitant lost in terms of forests and wetlands. It should be noted that cost of habitat restoration might not be the best strategies if the root cause of forest and wetland degradation are not addressed. Further analysis revealed that only about 0.5% of the costs are for development while the remaining is for recurrent costs. The high proportion of the recurrent costs are attributed to restoration of forests and fragile ecosystems that are spread out till 2024/25.

Challenges
The team of experts identified difficulties in enumeration of all activities under each strategic objective. To overcome the challenges, members suggested that the NBSAP should have a focus for specific period.

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Annex 1: Proposed cost estimates of NBSAP II

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
1.0 Strengthen stakeholder co-ordination and frameworks for biodiversity management											
To strengthen performance capability among all stakeholders in biodiversity management in Uganda	Agency performance capability	Improved performance capabilities among stakeholders working in biodiversity management in Uganda		Establish performance capability review and development into agency strategic planning	Joint stakeholder meetings (for Setting baselines for performance indicators, Setting up achievable performance targets that are in line with the strategic objective)	Meals	100,000	80	5	2	80,000,000
						Venue	4,000,000	1	1	2	8,000,000
						Stationary	50,000	80	1	2	8,000,000
						Perdiem	140,000	80	5	2	112,000,000
						Transport refund	4,000	3,000	1	4	48,000,000
						Airtime	1,000,000	1	1	2	2,000,000
					Sub-total 1.1						**258,000,000**
					Joint stakeholder workshop for Reviewing performance indicators	Meals	100,000	80	5	2	80,000,000
						Venue	4,000,000	1	1	2	8,000,000
						Stationary	50,000	80	1	2	8,000,000
						Perdiem	140,000	80	5	2	112,000,000
						Transport refund	4,000	3,000	1	4	48,000,000
						Airtime	1,000,000	1	1	2	2,000,000
					Sub-total 1.2						**258,000,000**
					Develop stakeholder needs assessment tool	Consultancy services	2,000,000	1	30	1	60,000,000
					Sub-total 1.3						**60,000,000**
					Capacity building/Training of stakeholders on biodiversity management	Meals	100,000	450	3	1	135,000,000
						Venue	2,000,000	1	1	1	2,000,000
						Stationary	10,000	450	1	1	4,500,000
						Perdiem	140,000	450	3	1	189,000,000
						Transport refund	4,000	5,000	1	1	20,000,000
						Airtime	100,000	1	1	1	100,000
						Facilitation allowances	200,000	4	3	1	2,400,000
					Sub-total 1.4						**353,000,000**
To strengthen the coordination of biodiversity activities among all the stakeholders in delivering shared government priorities	Working across government	Improve the co-ordination of activity across government to deliver shared priorities		Develop framework for delivering shared priorities	Joint stakeholder meetings (Establish a technical working group, Review existing documentation on biodiversity & document agency performance priorities)	Perdiem	140,000	80	2	2	44,800,000
						Transport refund	4,000	1,000	1	2	8,000,000
						Airtime	100,000	1	1	2	200,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
					Sub-total 1.5						**53,000,000**
					Sharing draft framework to the different stakeholders for input	Coordination	100,000	1	80	1	8,000,000
					Sub-total 1.6						**8,000,000**
					Engage consultant agencies in developing the framework	Advertisement	1,000,000	1	1	1	1,000,000
						Interviewing	2,000,000	1	1	1	2,000,000
						Selection	2,000,000		1	1	2,000,000
					Sub-total 1.7						**5,000,000**
					Develop a stakeholders database that are involved in biodiversity management	Stakeholder mapping	30,000,000	1	1	1	30,000,000
						Equipment	30,000,000	1	1	1	30,000,000
						Consultancy services	2,000,000	1	45	1	90,000,000
						Database piloting	30,000,000	1	1	1	30,000,000
					Sub-total 1.8						**180,000,000**
					Update and maintenance of database (data collection, validation, entry and analysis and reporting)	Data collection	50,000,000	1	1	1	50,000,000
						Validation	10,000,000	1	1	1	10,000,000
						Data entry	40,000,000	1	1	1	40,000,000
					Sub-total 1.9						**100,000,000**
To strengthen evaluation capacity across all stakeholders in biodiversity management for policy and program evaluation	Policy and program evaluation	· Increased evaluation capacity across all MALGs and LGs for biodiversity management · Increase the scope and quality of evaluation activity for biodiversity management		Develop formal biodiversity evaluation policy and guidelines through the Policy and Institutional review at all levels of government (PIR)	Conduct trainings on policy and program evaluation	Meals	100,000	80	5	2	80,000,000
						Venue	2,000,000	1	1	2	4,000,000
						Stationary	50,000	80	1	2	8,000,000
						Perdiem	140,000	80	5	2	112,000,000
						Transport refund	4,000	3,000	1	2	24,000,000
						Airtime	1,000,000	1	1	2	2,000,000
						Facilitation allowances	500,000	4	5	2	20,000,000
					Sub-total 1.10						**250,000,000**
					Meetings for Technical Committee on Biodiversity Conservation (TCBC)	Meals	100,000	20	5	2	20,000,000
						Perdiem	140,000	20	5	2	28,000,000
						Transport refund	4,000	20	75	2	12,000,000
					Sub-total 1.11						**60,000,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
		Improved co-ordination of evaluation activity across government		· Define all stakeholders that conserve, protect and use biodiversity during service delivery	Seek consultancy services for evaluation of performance of various stakeholders (consultancy services, transportation, data collection, entry, analysis and report writing, dissemination)	Consultancy services	2,000,000	2	90	1	360,000,000
				· Co-ordinate and monitor government evaluation activity through the conducting biodiversity expenditure reviews and evaluation		Dissemination	40,000,000	1	1	1	40,000,000
					Sub-total 1.12						**400,000,000**
To evaluate the efficiency and effectiveness of biodiversity spending among all stakeholders	Resource allocation	Improved efficiency in resource allocation for biodiversity management		Biodiversity budget/ expenditure attribution Biodiversity Expenditure Reviews (BER)	Review existing budgets	Meals	100,000	80	5	1	40,000,000
						Venue	4,000,000	1	1	1	4,000,000
						Stationary	50,000	80	1	1	4,000,000
						Perdiem	140,000	80	5	1	56,000,000
						Transport refund	4,000	3,000	1	1	12,000,000
		· Improved effectiveness of biodiversity spending among all stakeholders				Airtime	1,000,000	1	1	2	2,000,000
					Sub-total 1.13						**118,000,000**
						Survey Preparation	100,000,000	1	1	1	100,000,000
					Measure effectiveness of biodiversity spending	Data collection	500,000,000	1	1	1	500,000,000
						Data entry	100,000,000	1	1	1	100,000,000
						Data cleaning and Analysis	200,000,000	1	1	1	200,000,000
						Report writing	80,000,000	1	1	1	80,000,000
						Dissemination	100,000,000	1	1	1	100,000,000
					Sub-total 1.14						**1,080,000,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
Strengthen community engagement for biodiversity management	Community engagement	Improved level of community awareness and feedback about government performance for biodiversity management		Development and disseminate community engagement guidelines for biodiversity management in Uganda	Developing guidelines on community engagement	Consultation services	2,000,000	1	75	1	150,000,000
					Review guidelines on conservation, protection and biodiversity	Consultation services	2,000,000	2	34	1	136,000,000
					Print the guidelines	Printing	10,000	50,000	1	1	500,000,000
					4. Distribute guidelines to the communities with help of biodiversity management agencies/focal persons	Distribution of guidelines	18,000,000	1	1	1	18,000,000
					5. Create awareness to the communities through community meetings	Awareness creation through community meetings	144,000,000	1	1	1	144,000,000
					Create a technical committee to coordinate the community activities	Coordination allowance	960,000	100	1	1	96,000,000
To increase accesses and reporting of biodiversity management and progress	Reporting the biodiversity management progress	More accessible and timely progress reporting		Develop and maintain data base on biodiversity management indicators	Conduct planning meetings	Facilitation allowance	250,000	30	1	4	30,000,000
		Developing shared goals by promoting broad engagement to inform, measure, and deliver progress			Develop stakeholder needs assessment tool	Consultation services	2,000,000	1	30	1	60,000,000
					Establish a technical working group	Meals	100,000	40	1	1	4,000,000
						Transport refund	4,000	5,100	1	1	20,400,000
						Perdiem	140,000	40	1	1	5,600,000
					Sub-total						**30,000,000**
					Design the database on biodiversity indicators	Consultation services	2,000,000	1	25	1	50,000,000
To evaluate the efficiency and effectiveness of biodiversity spending among all stakeholders	Government performance reporting	More accessible and transparent reporting of Government performance against its priorities		Present summary of government performance in the new Statement of Achievement	Hold dissemination meetings	Meals	100,000	450	1	1	45,000,000
To increase accessibility and transparent reporting of government performance against its priorities						Venue	4,000,000	1	1	1	4,000,000
						Stationery	50,000	450	1	1	22,500,000
						Perdiem	140,000	450	1	1	63,000,000
						Transport Refund	4,000	5,000	1	1	20,000,000
						Airtime	1,000,000	1	1	1	1,000,000
					Sub-total						**155,500,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
					Print and distribute reports	Printing	36,000,000	1	1	1	36,000,000
					Conduct quarterly performance reviews on biodiversity management		340,000	80	5	4	544,000,000
Strengthen the government's focus on sustainability and its visibility in public reports	Sustainability	Strengthen the government's focus on sustainability and its visibility in public reports		Reflect the dimensions of sustainability on the *Measuring our Progress* website	Develop a website for easy access and information sharing	Consultation services	2,000,000	1	50	1	100,000,000
					Update and maintenance of database (data collection, validation, entry and analysis and reporting)	Data collection	5,000,000	12	1	1	60,000,000
						Validation	180,000	12	1	1	2,160,000
						Entry and analysis	3,160,000	12	1	1	37,920,000
					Sub-total						**100,080,000**
					Train agencies on using the website	Facilitation allowances	400,000	4	100	2	320,000,000
				Report Triple Bottom Line Indicator Scorecard in agency Annual Reports	Design a score card on the performance of indicators	Facilitation allowances	340,000	1	80	5	136,000,000
2.0 To facilitate and build capacity for research, knowledge and information management and exchange on biodiversity											
Build capacity for research on biodiversity	Integration of research, Policy and practice	Increased capacity of governmental and MALGs to link research, policy and practice	Number of evidence based Policies	Review existing policies	Facilitate policy review, evaluation and analysis	Meals	100,000	50	3	1	15,000,000
						Venue	4,000,000	1	1	1	4,000,000
						Stationery	50,000	50	1	1	2,500,000
			Number of evidence-based development interventions	Implementation of development interventions		Perdiem	140,000	50	3	1	21,000,000
						Transport refund	4,000	3,000	1	1	12,000,000
						Airtime	1,000,000	1	1	1	1,000,000
					Sub-total 2.1						**55,500,000**
					Facilitate implementation of development interventions	Meals	100,000	50	3	1	15,000,000
						Venue	4,000,000	1	1	1	4,000,000
						Perdiem	50,000	50	1	1	2,500,000
						Airtime	140,000	50	3	1	21,000,000
						Transport refund	4,000	3,000	1	1	12,000,000
						Airtime	1,000,000	1	1	1	1,000,000
					Sub-total 2.2						**55,500,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Standard guidelines for governing biodiversity research	Improved national standards and LG regulatory frameworks for research governance on biodiversity	Research ethics standards put in place	Formulation of ethics standards	Issuing certification to organisations that meet the set standards	Facilitation	100,000	1	5	1	500,000
			System of accreditation and quality assurance standards for research institutions evaluation established	Develop guidelines for quality assurance standards							-
					Capacity building for institutions	Meals	100,000	70	2	1	14,000,000
						Venue	2,000,000	1	2	1	4,000,000
						Stationery	30,000	70	1	1	2,100,000
						Perdiem	140,000	70	2	1	19,600,000
						Transport refund	4,000	3,000	1	1	12,000,000
						Airtime	1,000,000	1	1	1	1,000,000
			Number of plans and policies to support research			Facilitation allowance	500,000	4	2	1	4,000,000
					Sub-total 2.2						**56,700,000**
					Facilitate development of guidelines for quality assurance standards	Consultation services	2,000,000	1	5	1	10,000,000
					Setting guidelines and standards	Facilitation allowance	500,000	1	10	2	10,000,000
	Government and development partners' commitment to support and fund biodiversity related research.	Increased capacity and commitment of government and development partners to support and fund research	Formation of scientific research committee that vets research proposals in an efficient and transparent manner	Establishment of scientific research committee	Scoping and selection of committee members	Facilitation allowance	500,000	1	2	1	1,000,000
					Committee meetings	Meals	100,000	20	1	2	4,000,000
						Venue	2,000,000	1	1	2	4,000,000
						Stationery	30,000	20	1	2	1,200,000
						Facilitation allowance	500,000	20	1	2	20,000,000
					Sub-total						**29,200,000**
			Competitive salaries of researchers set	Put in place a standard enumeration criteria	Formulation of budgets	Consultation services	2,000,000	1	15	1	30,000,000
											-
			Increased Level of funding of biodiversity research by government and development partners	Review government expenditure on biodiversity research	Identify funding gaps	Consultation services	2,000,000	1	10	1	20,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Manage, facilitate and sustain research	Increased capacity of MALGs to manage/ conduct the research	Level of financial sustainability for biodiversity research;	Facilitate process of proposal writing	Developing research proposals for funding	Facilitation allowance	500,000	10	10	1	50,000,000
				Provide seed funds to initiate and sustain research on biodiversity	Lobbing to increase funding towards biodiversity research	Facilitation allowance	500,000	10	4	1	20,000,000
			Registered research projects (number, funding level, funder spread);	Prioritise biodiversity research projects for funding	Proposal writing meetings	Meals	80,000	10	5	2	8,000,000
						Venue	2,000,000	1	1	2	4,000,000
				Facilitate capacity building for high education of staff		Stationery	10,000	10	1	2	200,000
						Perdiem	140,000	10	5	2	14,000,000
						Transport Refund	4,000	500	1	2	4,000,000
						Airtime	100,000	1	1	2	200,000
					Sub-total						**30,400,000**
					Capacity building for higher education of staff	Facilitation allowance	500,000	10	1	2	10,000,000
			Establishment of a unit dedicated to research management, researchers trained, quality of the organization according to national standards	Facilitate establishment of research unit	Developing research agenda with thematic areas of biodiversity	Facilitation allowance	500,000	2	30	1	30,000,000
					Develop a list of potential funders for biodiversity	Facilitation allowance	500,000	1	1	1	500,000
					In service training for research	Facilitation allowance	5,000,000	1	1	1	5,000,000
					Further studies	Tuition fees and up keep	10,000,000	5	1	5	250,000,000
	Collaborate on biodiversity research	Increased synergy between MALGs on biodiversity research	Number of collaborations with the public/ private/NGO sector	Facilitate formation of joint forums	Signing memorandums of understanding	Facilitation allowance	500,000	1	1	1	500,000
			Number of joint activities with other research Institutions ;	Operationalize partnerships	Joint stakeholder meetings	Meals	100,000	100	1	1	10,000,000
						Venue	4,000,000	1	1	1	4,000,000
						Stationery	50,000	100	1	1	5,000,000
			Number of formal partnerships with other research institutions;			Perdiem	140,000	100	1	1	14,000,000
						Transport Refund	4,000	3,000	1	1	12,000,000
						Airtime	1,000,000	1	1	1	1,000,000
											46,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Publish and share research findings	Increased capacity of MALGs to apply and share results of research	Number of joint scientific Publications	Operationalize partnerships	Joint authorship of scientific papers	Facilitation to write papers	1,500,000	5	1	1	7,500,000
			Number of conferences facilitated by the MALGs for staff to present research findings		Publication of research findings	Publication fees	3,000,000	5	1	1	15,000,000
	Capacity of staff to do research	Increased capacity to do research	Number of peer reviewed publications	Operationalize partnerships	Build capacity to conduct research	Meals	100,000	50	5	1	25,000,000
			Number of conference papers; level of career development; number of prizes, number of awards, type of awards	Facilitate research activities		Venue	2,000,000	1	1	1	2,000,000
						Stationery	10,000	50	1	1	500,000
						Perdiem	140,000	50	5	1	35,000,000
						Transport Refund	4,000	1,000	1	1	4,000,000
						Airtime	100,000	1	1	1	100,000
						Facilitation allowance	200,000	4	5	1	4,000,000
					Sub-total						**70,600,000**
	Capacity to manage research	Increased capacity to manage research	Number of competitive grants won per year individually or as team quality of plans and reports	Writing of grant proposals	Submission of grant proposals	Facilitation allowances	500,000	20	1	2	20,000,000
			Amount of funds obtained from other sources;	Establish review committee to ensure quality							-
			Number of approved research grants								-
	Capacity to share research findings	Increased capacity to apply and share results of research	Number of participation times in policy processes, Policy briefs	Engagement with policy makers and implementers	Through workshops to engage different stakeholders about biodiversity research	Dissemination workshop	50,000,000	2	1	1	100,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
			Number of consultancies (e.g. public, private, NGO sector);		Through writing policy briefs	Facilitation to write policy briefs	10,000,000	3	1	1	30,000,000
			Number of professional publications								
					Writing and authoring papers	Data collection	20,000,000	5	1	1	100,000,000
						Data entry & Cleaning	5,000,000	5	1	1	25,000,000
						Analysis & report writing	10,000,000	5	1	1	50,000,000
						Drafting of publication papers	5,000,000	5	1	1	25000000
					Sub-total						**200,000,000**
To establish and examine the existing information and knowledge packages on biodiversity management in Uganda.	Existence and generation of Information and knowledge on biodiversity	Improved generation and management of information among all stakeholders	Number of knowledge maps	Review of the existing biodiversity and ecosystems data, information and knowledge packages among the MALGs implementing biodiversity related projects	Establishing a review committee & committee meeting						-
			Knowledge and information review report			Meals	100,000	20	1	2	4,000,000
						Venue	4,000,000	1	1	2	8,000,000
						Perdiem	140,000	1	1	2	280,000
			Number of publications on biodiversity issues that exists			Transport Refund	4,000	500	1	2	4,000,000
					Sub-total						**16,280,000**
			List of biodiversity knowledge characterization developed	Carry out characterization of knowledge assets of the MALGs working on biodiversity and ecosystems issues among the stakeholders	Reviewing existing biodiversity and ecosystems data, information and knowledge packages among the MALGs implementing biodiversity related projects	Consultation services	2,000,000	2	25	1	100,000,000
					Report writing and dissemination of results	Dissemination workshops	130,000,000	1	1	1	130,000,000
					Development and authoring of working papers	Writing working papers	20,000,000	10	1	1	200,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
			Information, data and knowledge collection tools developed	Design of data collection tools to carry out data collection of biodiversity and ecosystems, information and knowledge packages across all biodiversity related projects	Hiring and facilitation of expert	Consultancy Fee	5,000,000	1	1	1	5,000,000
					Develop technical team		5,000,000	1	1	1	5,000,000
					Design data tool	Consultancy Fee	1,000,000	1	30	1	30,000,000
			Row data both quantitative and qualitative collected and captured in databases in various packages as proposed by the different stakeholders	Carry out data entry and analysis of collected data and information for knowledge mapping	Hiring and facilitation of expert	Consultancy Fee	5,000,000	1	1	1	5,000,000
					Capacity building on data entry	Meals	100,000	10	3	1	3,000,000
						Venue	4,000,000	1	1	1	4,000,000
						Stationery	50,000	10	1	1	500,000
						Perdiem	140,000	10	3	1	4,200,000
						Transport Refund	4,000	500	3	1	6,000,000
						Airtime	1,000,000	1	1	1	1,000,000
						Facilitation allowance	500,000	2	3	1	3,000,000
					Sub-total						**21,700,000**
					Acquire software and hardware		40,000,000	1	1	1	40,000,000
					Design database for data entry		10,000,000	1	1	1	10,000,000
To increase organizational effectiveness by enabling stakeholders to intuitively find, share and connect to relevant information and knowledge packages about biodiversity and ecosystems management and other related interventions.		Increased level of knowledge among the staff and stakeholders and general population about biodiversity and ecosystems management	Number of consultative meetings carried out	Carry out Consultative meetings and key informant interviews and focus group discussions among project staff, beneficiaries and policy makers.	Create technical working committee		6,000,000	1	1	1	6,000,000
					Facilitate data collection activities		100,000,000	1	1	1	100,000,000
					Identify stakeholders		10,000,000	1	1	1	10,000,000
			Database with clear metadata report on biodiversity information and knowledge packages	Create databases for information, data and knowledge products	Designing a database		20,000,000	1	1	1	20,000,000
					Developing guidelines for managing and updating data base		40,000,000	1	1	1	40,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
			Number of workshops conducted among the MALGs staff	Training of MALGs on how to access and use of water and environmental information and knowledge among all stakeholders	Conduct workshops on the use of water and environment information and knowledge management as way to disseminate among stakeholders		500,000	100	1	5	250,000,000
			Number of people attending the workshops aggregated by sex, disability, age and education level across all project areas.								
	Information and knowledge sharing and utilization	Improved information and knowledge sharing among the different stakeholders	Number of users accessing biodiversity related information and knowledge packages aggregated by sex, disability and age and education level	Formation of knowledge platforms as a way to improve the sharing and uptake of knowledge and information products	Monitoring and updating of biodiversity and ecosystems information	Coordination	150,000,000	1	1	1	150,000,000
		Increased level of knowledge among the staff and stakeholders and general population about biodiversity and ecosystems management	Number of publications and research originating from using the information and knowledge projects	Development of knowledge management plans among all stakeholders in biodiversity and ecosystems management	Development of network platforms for sharing of water and environmental knowledge and information across all stakeholders	Facilitate development of network platforms	80,000,000	1	1	1	80,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
			Number and membership to Network platforms formed for sharing of water and environmental knowledge and information across all stakeholders								
To aid the development of knowledge management strategy for biodiversity information issues and its initial implementation among stakeholders	Information and knowledge management strategy	Improved knowledge management systems for biodiversity management across all the stakeholders	Review report on knowledge management systems of the different organizations	Review the existing knowledge management systems among all MALGs involved in biodiversity conservation and management in Uganda	Reviewing existing information systems	Consultation services	2,000,000	1	50	1	100,000,000
			List of knowledge management officers per organization		Design a database on knowledge packages	Consultation services	2,000,000	1	5	1	10,000,000
			Number of people reached out with knowledge information	Establishing of information and knowledge management committee by identifying knowledge management persons in the different MALGs in Uganda	Scoping and selection of management committee	Facilitation allowances	500,000	10	2	1	10,000,000
			Design pilot projects for water and environmental information and Knowledge Management among the MALGs		Facilitate research activities to enhance information	Data collection analysis and report writing	200,000,000	1	1	1	200,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
				Conduct case studies to explore and learn about the experiences of organizations in the management of information and knowledge on biodiversity conservation and management in Uganda							
				Disseminate results among stakeholders through workshops, trainings and radio talk shows	Facilitate result sharing activities	Dissemination workshop	100,000,000	1	1	1	100,000,000
					Identify issues to be addressed						-
				Develop knowledge management strategy with clear goals and objectives in line with key result areas of biodiversity management							-
					Set up a planning team to develop strategies	Facilitation allowances	500,000	10	2	1	10,000,000
3.0 To reduce and manage negative impacts while enhancing positive impacts on biodiversity											
Support fast-tracking of establishment of an integrated monitoring and evaluation system that collects, stores, analyze and disseminate biodiversity impacts among stakeholders.	Effective monitoring	Improved monitoring and evaluation of biodiversity and ecosystems interventions	Report on the status of the current monitoring and evaluation systems	Review the current monitoring and Evaluation systems used by the MALGs	Stakeholder meetings	Meals	100,000	80	3	1	24,000,000
						Venue	4,000,000	1	3	1	12,000,000
						Stationery	50,000	80	1	1	4,000,000
						Perdiem	140,000	80	3	1	33,600,000
						Transport Refund	4,000	3,000	1	1	12,000,000
					Sub-total						**85,600,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
				Capacity building	Reviewing existing literature						
					Trainings	Meals	100,000	160	3	1	48,000,000
						Venue	4,000,000	1	1	1	4,000,000
						Stationery	50,000	160	1	1	8,000,000
						Perdiem	140,000	160	3	1	67,200,000
						Transport Refund	4,000	4200	1	1	16,800,000
						Facilitation allowance	500,000	4	3	1	6,000,000
					Sub-total						**150,000,000**
		Improved quality of data and frequency of collection	Needs assessment report indicating the existing gaps in monitoring and evaluating impacts on biodiversity	Conduct needs assessment among the staff of the MALGs on biodiversity and ecosystems information to effectively monitor and evaluate the impacts	Developing a data collection tool	Consultation services	1,000,000	1	180	1	180,000,000
					Data collection and analysis	Consultation services	1,000,000	2	20	1	40,000,000
					Report writing and dissemination of results	Consultation services	130,000,000	1	1	1	130,000,000
		Increased tracking of progress of negative and positive biodiversity impacts	Integrated tool that could be used to monitor impacts on biodiversity	Development of monitoring and Evaluation tools among the stakeholders	Stakeholder meetings	Meals	100,000	80	3	1	24,000,000
						Venue	4,000,000	1	1	1	4,000,000
						Stationery	50,000	80	1	1	4,000,000
						Perdiem	140,000	80	3	1	33,600,000
						Transport Refund	4,000	3000	1	1	12,000,000
					Sub-total						**77,600,000**
					Developing the tool						-
		Increased knowledge on drivers of biodiversity loss	M&E strategy with set targets for biodiversity impacts developed	Design strategy for capacity building on monitoring and evaluation of biodiversity impacts among stakeholders	Draft a strategy						-
					Consultation meetings	Meals	80,000	50	2	4	32,000,000
						Venue	2,000,000	1	2	4	16,000,000
						Stationery	10,000	50	2	4	4,000,000
						Perdiem	140,000	50	2	4	56,000,000
						Transport Refund	4,000	1000	2	4	32,000,000
											140,000,000
					Review of existing literatures						-

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
		Improved system of monitoring impacts on biodiversity	Guidelines for measuring different impacts on biodiversity during monitoring developed	Design guideline and training manuals and modules on monitoring and evaluation of biodiversity management interventions and indicators	Consultancy services	Consultancy Fee					-
		Increased knowledge on setting targets of indicators for negative and positive impacts on biodiversity	Number of training workshops	Training of MALGs through workshops, on development of output and outcome indicators for biodiversity management	Facilitate trainings and workshops	Meals	80,000	50	2	4	32,000,000
						Venue	2,000,000	1	2	4	16,000,000
						Stationery	10,000	50	2	4	4,000,000
						Perdiem	140,000	50	2	4	56,000,000
						Transport Refund	4,000	1000	2	4	32,000,000
			Number of staff trained			Airtime	100,000	2	1	1	200,000
						Facilitation allowance	200,000	4	2	4	6,400,000
						Printing	3,400,000	1	1	1	3,400,000
					Sub-total						**150,000,000**
Strengthen the enforcement of environmental laws and regulations by engaging communities in monitoring biodiversity and ecosystems	Reduce the impact of activities in the communities on ecosystems degradation	Reduced negative impacts on biodiversity and ecosystems	Sustainable monitoring model	Analyze the environmental data collected and make informed policy decision on the state of biodiversity in Uganda and develop a sustainable model for biodiversity and ecosystems monitoring	Awareness creation among the communities	Coordination	144,000,000	1	1	1	144,000,000
			Update report on status of biodiversity in the communities		Establishing community engagement platforms	Consultancy Fee	100,000,000	1	1	1	100,000,000
		Increased awareness of community about the negative impacts on biodiversity	Number of community members involved in protection of biodiversity and ecosystems		Strengthening community involvements through meetings, workshop	Consultancy Fee	100,000,000	1	1	1	100,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Community involvement in protecting biodiversity and ecosystems	Increased community involved in enforcement of environmental laws	Number of community monitors recruited and trained	Identify and recruit environmental community-based monitors who will be routinely monitoring and collecting data on activities in the communities and submit the data in a predesigned tool	Development of guidelines for recruitment	Consultation services	5,000,000	1	1	1	5,000,000
					Recruitment of environmental community-based monitors	Advertising, interviewing and Hiring	5,000,000	1	1	1	5,000,000
					Training	Meals	40,000	1,200	3	1	144,000,000
						Venue	2,000,000	1	1	1	2,000,000
						Stationery	10,000	1200	1	1	12,000,000
						Perdiem	140,000	1200	3	1	504,000,000
						Transport Refund	4,000	15000	1	1	60,000,000
						Facilitation allowance	200,000	24	3	1	14,400,000
					Sub-total						**736,400,000**
					Developing data collection tool	Consultation services	2,000,000	1	10	1	20,000,000
					Data collection	Field data collection	50,000,000	1	1	1	50,000,000
	Capacity of the community to monitor and protect biodiversity and ecosystems	Build capacity of the local communities to monitor and report human related activities that have potential to negatively affect biodiversity and ecosystems	Number of environmental community-based monitors trained	Train environmental community-based monitors and equip then with tools to be used for monitoring	Facilitate trainings		50,000,000	1	1	1	50,000,000
					Equip environmental community monitors with data collection equipment	Data collection equipment	120,000,000	1	1	1	120,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Employment creation through community based monitoring	Increased benefits for the community from conservation efforts	Amount of incentives allocated	Facilitate the community based monitors to periodically monitor and submit the data on the state of activities on identified ecosystems in their communities	Data collections	Coordination	120,000,000	1	1	1	120,000,000
					Data capture and storage	Field Nights	140,000	8	10	1	11,200,000
						Fuel	4,000	1000	10	1	40,000,000
						Stationery	10,000	8	1	1	80,000
						Airtime	100,000	4	1	1	400,000
					Sub-total						**51,680,000**
					Data analysis and dissemination	Facilitation allowance	200,000	4	5	1	4,000,000
Strengthen the enforcement of environmental laws and regulations by increasing number of times to monitor natural resources	Increased vigilance and operation-alisation of enforcement laws	Reduced pollution levels	Reduced incidence of airborne diseases	Facilitate collection and analysis of pollution data from industries and factories	Data collection tools		100,000	9,000	1	1	900,000,000
		Improved water, air and soil quality	Reduced incidences of water born diseases	Build capacity of monitors to collect and analyze the data to make informed decisions	Training						-
							1,500	20,000	1	5	150,000,000
											-
			Reduced incidences of vector borne diseases	Build capacity of the polluters to reduce the levels of pollution and their implications for the population	Engagement with MALGs	Coordination					-
			Increased number of institutions polluting to the set standards				400,000	10,000	1	1	4,000,000,000
					Capacity building	Meals	40,000	1,000	3	1	120,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
						Venue	2,000,000	1	1	1	2,000,000
						Stationery	10,000	1000	1	1	10,000,000
						Perdiem	110,000	1000	3	1	330,000,000
						Transport Refund	4,000	8000	1	1	32,000,000
To strengthen monitoring, conservation and management of biodiversity through reward systems	Use of incentives in conservation and management of biodiversity	Increased community participation in conservation and management of biodiversity	Number of households involved in community-based management of biodiversity	Facilitate the establishment of incentives/ reward system and their operations		Faciliation allowance	200,000	10	3	1	6,000,000
											500,000,000
											-
			Number of incentive mechanisms operating among the communities	Train community members on the reward system and its importance to conservation and livelihoods	Community meetings						-
							1,000,000	12	1	4	48,000,000
											-
											-
		Increased knowledge and value of biodiversity among the communities	Kinds of benefits to the community	Support government community partnerships/ engagements	Develop guidelines for incentives		50,000,000	1	1	1	50,000,000
			Number of MOUs signed for the conservation and management of communities based on the reward system		Facilitating operationalizing of reward systems		10,000,000	20	1	1	200,000,000
		Increased benefits from biodiversity to the communities			Signing of MoUs		5,000,000	1	1	1	5,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
To improve waste generation, disposal and management	Better waste management at generation	Improved waste management at point of generation	Categories of waste generated	Develop and implement guidelines on waste management at all levels	Develop waste management guidelines		30,000,000	1	1	1	30,000,000
			Number of waste collection bags for the different type of waste	Build capacity of the communities on waste management, waste segregation handling and disposal	Sensitization meetings		500,000	120	1	1	60,000,000
			Waste segregated and transport to the different points	Sensitize the communities on waste management practices and their implications	Training on waste handling and disposal.		150,000,000	1	1	1	150,000,000
		Increased use of waste as a raw material in manufacture of compost manure and liquid fertilizer	Volume of solid waste used for production of manure	Establish cheaper compost plants	Facilitate innovations		3,000,000	12	1	4	144,000,000
	Reduced volume of waste generated and disposed to the environment		Volume of wastewater used in the production of liquid fertilizers	Support innovative ways of making compost manure	Trainings communities in recycling of waste		50,000	1,000	1	2	100,000,000
		Increased use of animal waste in the production of clean energy Biogas	Volume and mass of annual waste used in the production of biogas	Build capacity of the communities in using wastewater in making fertilizers	Facilitate construction of biogas plants		2,000,000	100	1	2	400,000,000
	Raw material for product development		Mass of compost manure produced	Scale up the construction of biogas plants especially in rural areas and around fragile ecosystems	- do -		2,000,000	1,000	1	1	2,000,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
		Increased use of compost manure by farmers	Volume of liquid fertilizer produced	Facilitate and promote innovations to covert waste into useful products	Facilitate innovations		5,000,000	120	1	1	600,000,000
To increase the forest cover through promotion of agro-forest farming systems among the communities in Uganda	Increased forest cover through agricultural systems	Reduced agricultural expansion on forest land and	Number of farmers that have adopted agro-forest farming systems	Tree planting on private land	Sensitization meeting	Community engagement meetings	18,750,000	8	1	1	150,000,000
			Area under forest on private land	Establishment of seedling nurseries within the districts	area of forest planted	area of forest planted	2,500,000	120,000	1	1	300,000,000,000
		Increase forest cover through agro-forest farming system	Number of farmers trained	Training of farmers on agro-forestry farming systems	Facilitate nursery bed establishments	Coordination	500,000	500	1	2	500,000,000
			Number of sensitization meetings held in the communities	Sensitization of the people in the community	Facilitate trainings of farmers	Facilitation allowance	50,000	6000	1	1	300,000,000
				Mapping of areas where agro-forestry have been adopted	Undertake biomass survey	Data collection entry analysis & report writing	100,000,000	1	1	1	100,000,000
Improve the efficiency and effectiveness of the EIA system in reducing and minimizing negative impacts on biodiversity	Effective and efficient EIA system	Increased efficiency of the EIA system	Number of days to review EIA reports	Establishment of an integrated EIA system	Capacity building of practitioners	Meals	80,000	238	1	1	19,040,000
						Venue	2,000,000	1	1	1	2,000,000
					Sub-total						**21,040,000**
			Quality of the EIA reports	Support evidence based EIA system	Empowering local community to be involved in the EIAs		15,000,000	1	1	1	15,000,000
		Increased effectiveness of the EIA system	Capacity of reviewers in identifying impacts and follow the mitigation hierarchy	Strengthen institutional linkages	Capacity building on conducting environmental audits and enforcement	Meals	80,000	80	2	1	12,800,000
						Venue	2,000,000	1	1	1	2,000,000
						Perdiem	140,000	80	2	1	22,400,000
						Transport Refund	4,000	1000	1	1	4,000,000
					Sub-total						**41,200,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
			Number of interventions implemented that avoided fragile ecosystems	Political support and commitment in the implementation of EIA process	Empowering local community to be involved in the EIAs	Facilitation of political leaders to attend engagement meeting	500,000	120	2	1	120,000,000
				Local community involvement in EIA process	Encouragement of local communities in EIA processes	Facilitation of local leaders to attend meeting	50,000	500	4	1	100,000,000
Increased the area of fragile ecosystems and number of biodiversity species	Restoration of wetlands and forests and fragile ecosystem like river banks, lakeshores	Increased wetland cover	Number of management plans developed	· Facilitate the formation of management plans at district, sub-county and community	Area of wetland restored	Restoration of wetlands	9,000,000	7200	1	1	64,800,000,000
		Increased forest cover	Number of partnerships formed	· Facilitate the operational-isation of the community and district management committees	Develop guidelines for formation of management plans, area	Facilitation of community members in the development of guidelines	25,000	1,800	1	1	45,000,000
		Increased area of lakeshores restored	Community management plans developed	· Facilitate the demarcation and restoration through the communities by use of tree seedlings in communities rather than concrete poles	Formation of partnerships , area/length	Facilitation of partners in the restoration activities	250,000	200	1	1	50,000,000
		Increased area of river banks restored	District management plans developed and operationalised	· Facilitate the formation and operationalisa-tion of commu-nity monitoring committees for the natural resources within the communities	Developing by-laws and ordinances	Facilitation for Community meetings to develop by-laws	5,000,000	120	1	1	600,000,000
		Number of biodiversity species indentified and conserved	Number of community management committees formed		Formation of community management committees		100,000	20	1	2	4,000,000
			· Area of wetland cover restored and gazette		Facilitate establishment of tree nurseries		10,000,000	1	1	1	10,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
			· Number of tree seedlings and variety planted		Facilitate planting different varieties of trees		15,000,000	1	1	1	15,000,000
			· Area of forest cover planted		Facilitate establishment of tree nurseries		10,000,000	1	1	1	10,000,000
To promote establishment of offsets and woodlots among construction companies, schools, industries and households.	Increased commitment of the construction industry to participate in conservation efforts	Reduced negative impact of construction projects on biodiversity and environmental degradation in Uganda	· Number of offset sites established for schools, hotels, road constructions and woodlots for households	·Training of school's teachers, pupils' hotel staff and people in the construction industry	Sensitization workshops		2,000,000	5	1	2	20,000,000
			· Number of schools and hotels trained and sensitized	· Sensitization workshops for the people in the construction industry	Facilitating environmental clubs		500,000	20	1	1	10,000,000
		Increased budget allocations for offsets and other conservation work among the stakeholders in the construction industry	· Number of people trained	· Formation/ rejuvenation of environmental clubs among school pupils	Capacity building of stakeholders		100,000	500	1	1	50,000,000
				· Tree planting and monitoring			50,000	100	1	1	5,000,000
4.0 To promote the sustainable use and equitable sharing of costs and benefits of biodiversity											
To promote sustainable use of biodiversity	Enhancing livelihood	Optimise benefits from sustainable biodiversity	Increased efficient use of resources	Build skill through trainings, internship and volunteering and pilot activities	Training on quality improvement/maximization of resources	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Facilitation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
			Number of jobs created in the different sectors	Creation of employment opportunities	Capacity building on recycling/ reusability	Meals	40,000	140	5	1	28,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Facilitation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
			Number of people who shift to different sectors	Livelihood diversification	Facilitate development of artisan skills	Consultation services	2,000,000	1	5	1	10,000,000
			Number of enterprises created that doesn't depend directly on natural resources	Enterprise creation	Promotion of cooperatives	Consultation services	2,000,000	1	10	1	20,000,000
			Increase value captured from biodiversity use	Value addition	Facilitate provision of improved technologies	Facilitation for community meetings	5,000,000	2	1	1	10,000,000
				Industrialisation							-
	Efficient production of charcoal	Improved methods of charcoal production	Volume of charcoal	Capacity building on efficient charcoal production methods	Facilitate training on efficient charcoal production	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Facilitation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
		Increased volume of charcoal from the same input wood	Number of charcoal producers who have adopted improved technology	Promote efficient charcoal production technologies	Formation of Charcoal producer's associations	Community mobilization	5,000,000	1	1	1	5,000,000
			Number of charcoal producers trained.		Meetings	Facilitation of community meeting	5,000,000	1	1	1	5,000,000
	Efficient use of biomass energy	Reduced wastage	Number of households that have adopted energy saving technologies	Promote affordable energy saving technology	Screening energy options for biodiversity benefits	Research Asst. Cost	200,000	16	5	1	16,000,000
		Better energy saving technologies	Number of institutions that have adopted new technologies	Capacity building on energy saving technologies	Demonstrations on energy saving technologies	Facilitation	100,000	100	1	1	10,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Reduced dependency on charcoal and firewood	Alternative sources of cooking energy	Number of households using alternative sources of energy for cooking	Promote adoption of alternative energy for cooking	Demonstrations		5,000,000	3	1	1	15,000,000
			Types of energy used	Capacity building on alternative types of energy for cooking	Community engagements	Mobilization and facilitation of community members	10,000,000	6	1	1	60,000,000
			Volume of charcoal and firewood used	Attitude change	Capacity building/training for communities	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Facilitation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
			Change in attitude and perception on alternative sources of energy								
	Manage the forest resources	Improved Management of forest resources	Forest product accounts developed	Development of forest products accounts	Facilitate the development of the forest product accounts	Consultancy Fee	1,000,000	2	90	1	180,000,000
				Value addition	Integrating the information of the forest product accounts into policy	Consultancy Fee	2,000,000	2	30		120,000,000
				Capacity building on resource accounting		Facilitation for the training	30,000,000	2	1	2	120,000,000
Sustainable utilization of fisheries resource	Sustainable harvesting of fish	Improved fishing methods	Number of fisheries projects funded	Encourage fish farming	Research		2,000,000	1	65	1	130,000,000
			Number of trainings conducted for fish farming	Capacity building on efficient monitoring of fishing activities	Training and sensitization	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Facilitation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
					· Funding for start-up projects						-

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Efficient Management of fish stock	· Improved Management of fish resources	· Fisheries accounts developed	· Development of fisheries accounts	· Facilitate the development of the fish account.	Consultancy Fee	1,000,000	2	30	1	60,000,000
				· Value addition	· Integrating the information of the fish account into policy	Consultation services	2,000,000	1	60	1	120,000,000
				· Capacity building on resource accounting		Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Facilitation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
Sustainable utilisation of water	· Efficient utilisation of water resources	Increase in water reuse	Water reuse technologies adopted	Adopting water reuse technologies	Training on different ways of reusing water	Meals	40,000	70	5	1	14,000,000
						Venue	2,000,000	1	1	1	2,000,000
						Perdiem	140,000	70	5	1	17,500,000
				Capacity building		Transport Refund	50,000	70	5	1	70,000,000
				Sensitisation of masses on efficient utilisation of water		Facilitation allowance	200,000	16	5	1	16,000,000
					Sub-total						**119,500,000**
	Efficient management of water resource	Reduced wastage	· Volume of water	Adopting water management practices	Training on water management practices						-
	Efficient irrigation systems		· Records of trainings conducted	limprovement of water allocation among competing uses	Create awareness on the drought resistant crops and better farming methods.	Done during awareness campaigns	50,000,000	3	1	1	150,000,000
		· Improved irrigation systems	· Reduced pollution	Carrying out regular Water Resources Assessments	Training in water harvesting technologies.	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
			· Number of innovations adopted	Prevention strategies and new technologies that enhance existing natural water resources, reduce demand, and achieve higher efficiency	Create awareness on the drought resistant crops and better farming methods.	Mobilization and sensitezation of communities	50,000,000	4	1	1	200,000,000
			· Improved quality of water	· Encourage water reuse	· Facilitate establishment of water reservoirs	Meals	40,000	70	5	1	14,000,000
			.	· Drought resistant crops	· Facilitate the establishment of clean water sources.	Venue	2,000,000	1	1	1	2,000,000
				· Encourage better farming methods that don't need irrigation		Perdiem	140,000	70	5	1	17,500,000
				· Reduce water pollution		Transport Refund	50,000	70	5	1	70,000,000
				· Capacity building on water harvesting technologies		Faciliation allowance	200,000	16	5	1	16,000,000
					Sub-total						**119,500,000**
				· Rewarding system for water source protection.	Prevention strategies and new technologies that enhance existing natural water resources, reduce demand, and achieve higher efficiency	Consultation services	2,000,000	1	60	1	120,000,000
	Efficient Management of water resources	· Improved Management of water resources	· Water accounts developed	· Development of water accounts	· Facilitate the development of the water account.	Consultation services	2,000,000	1	40	1	80,000,000
				Value addition	· Integrating the information of the water account into policy	Consultation services	2,000,000	1	50	1	100,000,000
				Capacity building on resource accounting		Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Sustainable utilisation of clay	Efficient use of clay	· Records of trainings conducted	Promote certification	Trainings	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
		·	· Clay guidelines developed	· Adopting of efficient extraction skills	· Creating awareness on other alternative materials	Community mobilization and facilitation	50,000,000	2	1	1	100,000,000
			· Extraction skills adopted	· Encourage innovations which require less materials	·	Capacity building	2,000,000	1	5	1	10,000,000
				· Explore alternatives							-
				· Capacity building of extractors		Facilitation allowances	1,000,000	1	15	1	15,000,000
				· Develop guidelines for clay extraction.		Consultation services	2,000,000	1	10	1	20,000,000
				· Value addition							
		· Improved Management of clay resources	· Clay accounts developed	· Develop-ment of clay accounts	· Facilitate the development of the clay account.	Consultancy Fee	1,000,000	1	90	1	90,000,000
				· Value addition	· Integrating the information of the clay account into policy	Consultation services	2,000,000	1	60	1	120,000,000
				· Capacity building on resource accounting		Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
	Sustainable utilisation of sand	· Sand alternatives	· Sand alternatives adopted	· Encourage adoption of other alternatives for sand	· Trainings on use of other alternatives to sand through demonstrations						
						Meals	40,000	70	5	1	14,000,000
						Venue	2,000,000	1	1	1	2,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
						Perdiem	140,000	70	5	1	49,000,000
		· Efficient methods of extraction of sand	· Number of people trained	· Capacity building	· Workshops	Faciliation allowance	200,000	16	5	1	16,000,000
					Sub-total						**81,000,000**
			· Number of workshops conducted								
		· Improved Management of sand resources	· Sand accounts developed	· Development of sand accounts	· Facilitate the development of the sand account.	Consultancy Fee	1,000,000	1	90	1	90,000,000
				· Value addition	· Integrating the information of the sand account into policy	Consultancy Fee	2,000,000	1	60	1	120,000,000
				· Capacity building on resource accounting		Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
5.0 To enhance awareness and education on biodiversity issues among the various stakeholders											
Develop and implement stakeholder awareness programmes on biodiversity	Awareness creation among Policy maker/ implementers	Increased awareness	Number of meetings	Policy engagement	Develop Policy briefs	Procurement of printing firm	10,000	5,000	1	1	50,000,000
			Number of print and audio slots	Policy dialogues	Facilitate printing of development Brochures	Procurement of printing firm	2,000	5,000	1	1	10,000,000
				Meetings	Fact sheets	Procurement of printing firm	2,000	5,000	1	1	10,000,000
					Newspaper	Advertising	10,000,000	2	1	4	80,000,000
					Radio & TV	Advertising	100,000,000	1	1	1	100,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Awareness creation among Researchers/ Academia	Increased awareness among researcher / academia	Number of training workshops conducted	Facilitate Publications	Training workshops	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
			Number of ToTs recruited	Training of Trainers		Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
			Number of retreats and meetings	Retreats	Hold retreat	Meals	150,000	100	3	1	45,000,000
						Venue	**2,000,000**	**1**	**1**	**1**	**2,000,000**
						Transport Refund	4,000	2,000	1	1	8,000,000
					Sub-total						**55,000,000**
					Reports	Procurement of printing firm	10,000	500	1	1	5,000,000
	Awareness creation of Private sector, civil society and media	Increased participation of private sector, civil society and media in biodiversity programmes	Number of meetings conducted	Policy engagement	Policy briefs	Procurement of printing firm	10,000	5,000	1	1	50,000,000
			Number of print and audio slots	Policy dialogues	Facilitate production of Brochures	Procurement of printing firm	2,000	5,000	1	1	10,000,000
				Meetings	Fact sheets	Procurement of printing firm	2,000	5,000	1	1	10,000,000
				Multimedia approach (radio talk shows, TV shows, newspapers, documentaries)	Newspaper	Advertising	10,000,000	2	1	4	80,000,000
					Radio & TV	Advertising	100,000,000	1	1	1	100,000,000
	Create awareness in Schools (all levels)	Increased participation of schools in biodiversity programmes	Number of TOT workshops conducted	Workshops	Conduct workshop	Meals	80,000	200	3	1	48,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	200	3	1	84,000,000
						Faciliation allowance	500,000	4	3	1	6,000,000
					Sub-total						**142,000,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
			Number of environmental clubs	School clubs	Books	Procurement of printing firm	2,000	10,000	1	1	20,000,000
			Number of branded message material distributed	Develop branding messages	Branding items	Procurement of printing firm	5,000	100,000	1	1	500,000,000
				Clean up programmes	Cleaning of targeted community areas	Accessories	200,000,000	1	1	1	200,000,000
				demostration sites	Restoration of fragile ecosystems	Accessories					-
			Number of print and audio slots	Multimedia approach (radio talk shows, TV shows, newspapers, documentaries)	Support out reach programmes		100,000,000	1	1	1	100,000,000
	Awareness creation among indigenous people and local communities	Increased community engagement in biodiversity programmes	Number of meetings (barazas)	Community Meetings (barazas)	Facilitate Translation of:	Coordination					-
			Number of community engagement programmes	Clean up programmes	Cleaning of targeted community areas	Accessories	100000000	1	1	1	100,000,000
			Number of print and audio slots	Multimedia approach (radio talk shows, TV shows, newspapers, documentaries	TV documentaries	Advertising	50,000,000	1	1	1	50,000,000
					Flyers	Procurement of printing firm	1,000	5,000	1	1	5,000,000
					Banners	Procurement of printing firm	1,000	5,000	1	1	5,000,000
Enhancing education programmes on biodiversity issues	Education and attitude change among Policy maker/ implementers	Increased participation in biodiversity activities	Number of training workshops	Training Workshops	Facilitate production of Training materials	Training materials printing	10,000	2,500	1	1	25,000,000
		Informed decisions on biodiversity issues	Number of retreats	Retreats	Guidelines	Meals	150,000	100	3	1	45,000,000
						Venue	2,000,000	1	1	1	2,000,000
						Transport Refund	4,000	2,000	1	1	8,000,000
					Sub-total						**55,000,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
				Policy engagement	Policy briefs	Meals	150,000	90	3	1	40,500,000
						Venue	1,900,000	1	1	1	1,900,000
						Transport Refund	4,000	1,900	1	1	7,600,000
					Sub-total						**50,000,000**
				Dissemination workshops	Working papers	Meals	100,000	147	5	1	73,500,000
						Venue	1,800,000	2	1	1	3,600,000
						Perdiem	140,000	147	5	1	102,900,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**200,000,000**
	Education and attitude change among Researchers/ Academia	Increased participation of researchers/ academia	Number of workshops	Training workshops	Publications	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
			Number of research papers	Training of trainers	Facilitating TOTs Pamphlets Books Reports	Facilitating TOTs to conduct trainings	10,000,000	11	1	1	110,000,000
				Retreats		Meals	150,000	100	3	1	45,000,000
						Venue	2,000,000	1	1	1	2,000,000
						Transport Refund	4,000	2,000	1	1	8,000,000
					Sub-total						**55,000,000**
					Guidelines to disseminate research findings						-
	Education and attitude change Private sector, civil society and media	Increased participation of Private sector, civil society and media in biodiversity programmes	Number of agencies that are trained	Training Workshops	Facilitate Publications	Meals	40,000	140	5	1	28,000,000
				Training of trainers	Working papers	Venue	2,000,000	2	1	1	4,000,000
				Dissemination workshops	Pamphlets, books, reports	Perdiem	140,000	140	5	1	98,000,000
					Books	Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Education and attitude change Schools (all levels)	Increased Knowledge on biodiversity issues	Number of environmental education programmes	Environmental education programmes	Brochures	Production of brochures	1,000	10,000	1	1	10,000,000
		Improved attitude on biodiversity	Number of print and audio slots	(Debates, clean-up, restoration)	Books	Production of simple books about biodiversity	2,000	10,000	1	1	20,000,000
				Multimedia approach (radio talk shows, TV shows, newspapers, documentaries)	Pamphlets	Radio & TV talk shows about biodiversity	20,000,000	5	1	1	100,000,000
					Papers	Production of papers about biodiversity	500,000	10	1	1	5,000,000
				Develop working papers throughTraining of trainers (TOTs)	Publications	Meals	100,000	147	5	1	73,500,000
						Venue	1,800,000	2	1	1	3,600,000
						Perdiem	140,000	147	5	1	102,900,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**200,000,000**
					Message t-shirts		25,000	240	1	1	6,000,000
					Flyers		2,000	2,500	1	1	5,000,000
					Banners		500,000	10	1	1	5,000,000
					Guidelines to integrate environment education programmes into curriculum	Consultancy services	2,000,000	5	1	1	10,000,000
					Materials for clean-up and restoration	Facilitation	500,000	8	1	1	4,000,000
	Education and attitude change Indigenous people and local communities	Integration of indigenous with modern knowledge	Number of meetings	Meetings (barazas)	Facilitate Translated:	Facilitation	500,000	10	1	1	5,000,000
		Improved utilisation of biodiversity	Number of community engagement programmes	Community engagement programmes (clean-up and restoration)	Brochures	Facilitate the production and printing of materials	1,000	10,000	1	1	10,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
		Improved attitude	Number of branded message material distributed	Multimedia approach (radio talk shows, TV shows, newspapers, documentaries)	Branded message materials (t-shirts, caps)	Facilitate TV & Radio talk shows	20,000,000	25	1	1	500,000,000
			Number of print and audio slots		Flyers	Facilitate production of flyers on biodiversity	2,000	2,500	1	1	5,000,000
					Banners	Facilitate production of banners about biodiversity	500,000	10	1	1	5,000,000
STRATEGIC OBJECTIVE 6: To harness modern biotechnology for socio-economic development with adequate safety measures for human health and the environment											
Develop and apply biotechnology for socio-economic development	Crop pests control using biotechnology	Reduced incidences of pests	Number of biological pest controls technologies	Support innovative research	Conduct research on biological pest control technologies	Research preparations	5,000,000	2	1	1	10,000,000
						Data collection	10,000,000	2	1	1	20,000,000
						Data entry & Analysis	10,000,000	2	1	1	20,000,000
						Reporting & sharing	25,000,000	2	1	1	50,000,000
					Sub-total						**100,000,000**
			Number of farmers trained	Establishment of demonstrations farms Training farmers in biological pest control technologies	Training farmers in biological pest control technologies	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
			Number of farmers making and using biological pest control	Develop pest resistant crops	Awareness creation on biological pest control technologies	Facilitate awareness campaigns	20,000,000	5	1	1	100,000,000
			Number of farmers making and using organic pesticides	Promote use of organic pesticides	Traing farmers on use of organic pesticides	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Reduce storage grain/seed losses using biotechnol-ogies	Reduced grain/seed loss at storage	Number of farmers using biological pest control technologies during storage	Support inno-vative research	Conduct research on biological pest control technologies for storage.	Research preparations	5,000,000	2	1	1	10,000,000
						Data collection	10,000,000	2	1	1	20,000,000
						Data entry & Analysis	10,000,000	2	1	1	20,000,000
						Reporting & sharing	25,000,000	2	1	1	50,000,000
					Sub-total						**100,000,000**
				Train farmers on biological pest control technologies during storage	Training farmers	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
				Promote use of organic pesticides	Awareness creation on biological pest control technologies at storage	Facilitate awareness campaigns	20,000,000	5	1	1	100,000,000
	Reduced crop diseases using bio-technology	Reduced disease incidence	Number of biological disease controls technologies	Support innovative research for biological disease control technologies	Conduct research on biological disease control technologies	Research preparations	5,000,000	2	1	1	10,000,000
						Data collection	10,000,000	2	1	1	20,000,000
						Data entry & Analysis	10,000,000	2	1	1	20,000,000
						Reporting & sharing	25,000,000	2	1	1	50,000,000
					Sub-total						**100,000,000**
			Number of disease resistant varieties developed and released		Establishment of demonstrations farms	Facilitate establishment of demonstrations farms	20,000,000	10	1	1	200,000,000
			Number of farmers using biological disease control technologies	Develop and release disease resistant crop varieties	Awareness creation on biological disease control technologies	Facilitate awareness campaigns	20,000,000	5	1	1	100,000,000
			Number of farmers making and using organic herbicides	Promote use of organic herbicides	Training on use of organic herbicides	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Waste management	Reduced pollution	Number of waste treatment technologies developed	Promoting biological treatment of waste	Conduct research on waste treatment technologies	Research preparations	5,000,000	2	1	1	10,000,000
						Data collection	10,000,000	2	1	1	20,000,000
						Data entry & Analysis	10,000,000	2	1	1	20,000,000
						Reporting & sharing	25,000,000	2	1	1	50,000,000
					Sub-total						**100,000,000**
				Popularise waste treatment among the people	Trainings	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
					Conduct demonstrations	Facilitate establishment of demonstrations for waste management	10,000,000	20	1	1	200,000,000
	Management and control of Invasive species	Control and elimination of invasive species	Number of biological control technologies for invasive species developed	Support development of biological control technologies for invasive species	Conduct research on biological control agents	Research preparations	5,000,000	2	1	1	10,000,000
						Data collection	10,000,000	2	1	1	20,000,000
						Data entry & Analysis	10,000,000	2	1	1	20,000,000
						Reporting & sharing	25,000,000	2	1	1	50,000,000
					Sub-total						**100,000,000**
			Number of biological control technologies for invasive species adopted	Promote the use of biological control technologies for invasive species	Trainings	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
					Awareness creation on biological control agents	Facilitate awareness campaigns	10,000,000	10	1	1	100,000,000

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
STRATEGIC OBJECTIVE 7: To promote innovative and sustainable funding mechanisms to support NBSAP implementation											
Mobilize financial resources for biodiversity	Identify potential funders and funding priorities	Increased funding base	Database of potential funders and their priorities	Facilitate development and operationalization of database for potential funders	Conduct Research on the funders & updating of the list	Stakeholder identification	500,000	1	10	1	5,000,000
					Identify the funders priorities	Mapping and analysis	500,000	1	60	1	30,000,000
					Design the database	Faciliation allowance	500,000	1	20	1	10,000,000
					Populate the database						-
					Training on how to use the database	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
					Develop guidelines on how to use the database	Consultation services	500,000	1	20	1	10,000,000
	Build networks and partnerships for funding	Increased public private partnerships	Number of Partnerships developed	Strengthen Public private partnerships	Conduct awareness campaigns	Faciliation allowance	500,000	1	20	1	10,000,000
				Strengthen International relations							-
	Project proposal development	Increased number of funding proposals submitted	Number of funding proposals developed and submitted	Facilitate development of project proposals	Project proposal writing	Proposal writing workshop	8,000,000	1	1	1	8,000,000
			Number of proposals approved	Capacity building on project proposal writing	Training on project proposal writing	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**
			Number of grants approved		Submission of the project proposal						-

Specific objective	Focus	Outcome	Outputs	Actions	Activities	ITEM	UNIT COST	UNITS	DAYS	FREQ	TOTAL(UGX)
	Developing a biodiversity conservation program	Biodiversity conservation program developed	Number of biodiversity conservation programs developed	Support and develop a biodiversity conservation program	Facilitate development of the biodiversity conservation program						-
				Capacity building on biodiversity conservation program	Conduct Review of the biodiversity conservation program						-
					Support application of the biodiversity conservation program						-
					Training on biodiversity conservation program	Meals	40,000	140	5	1	28,000,000
						Venue	2,000,000	2	1	1	4,000,000
						Perdiem	140,000	140	5	1	98,000,000
						Faciliation allowance	500,000	8	5	1	20,000,000
					Sub-total						**150,000,000**

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