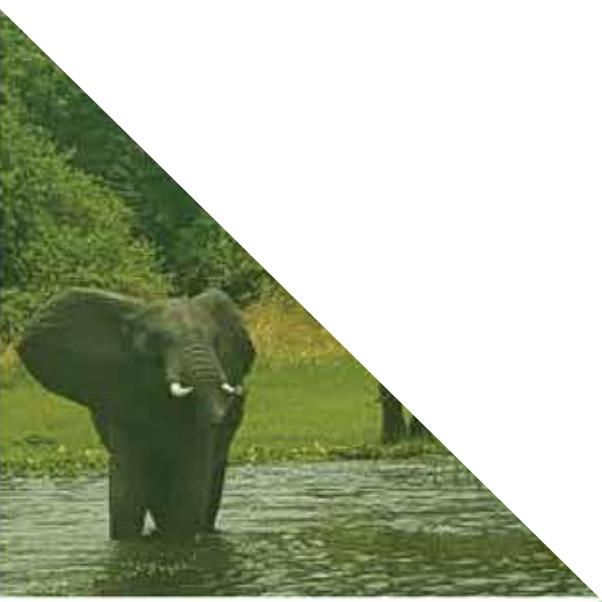
THE REPUBLIC OF UGANDA
MINISTRY OF WATER AND ENVIRONMENT



FOREST INVESTMENT PROGRAM FOR UGANDA

CLIMATE INVESTMENT FUNDS

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MINISTRY OF WATER AND ENVIRONMENT

FOREST INVESTMENT PROGRAM FOR UGANDA

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Abbreviations and Acronyms

AfDB	African Development Bank
CBD	The United Nations Convention on Biological Diversity
CCD	Climate Change Department (of Uganda's Ministry of Water and Environment)
CFM	Collaborative Forest Management
CFR	Central Forest Reserve
CIF	Climate Investment Fund
CITES	Convention on International Trade in Endangered Species
CRM	Collaborative Resources Management
CSO	Civil Society Organization
DAO	District Agricultural Officer
DEA	Directorate of Environment Affairs (of Uganda's Ministry of Water and Environment)
DESSS	Department of Environment Sector Support Services (of Uganda's Ministry of Water and Environment)
DFO	District Forest Officer
DFS	District Forest Service
DLG	District Local Government
DNRO	DNRO
ENR	Environment and Natural Resources
ENR-CSO	Environment and Natural Resources Civil Society Organizations (Network)
ENR-SWG	Environment and Natural Resources Sector Working Group
EU	European Union
FAO	United Nations Food and Agriculture Organization
FCPF	Forest Carbon Partnership Facility
FIP	Forest Investment Program
FLRM	Forest Landscape Restoration Mechanism
FPIC	Free, Prior and Informed Consent
FLEG	Forest Law Enforcement and Governance
FREL	Forest Reference Emissions Level
FSSD	Forest Sector Support Department (of Uganda's Ministry of Water and Environment)
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gases
IGAD	Inter-Governmental Authority on Development
INDC	Intended Nationally Determined Contributions

IPLC	Indigenous People and Local Communities
IUCN	International Union for Conservation of Nature and Natural Resources
LFR	Local Forest Reserve
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MEMD	Ministry of Energy and Mineral Development
MLHUD	Ministry of Lands, Housing and Urban Development
MoFPED	Ministry of Finance, Planning and Economic Development
MOU	Memorandum of Understanding
MRV	Monitoring, Reporting and Verification
MTWA	Ministry of Tourism, Wildlife and Antiquities
MWE	Ministry of Water and Environment
NCCAC	National Climate Change Advisory Committee
NaFORRI	National Forest Resources Research Institute
NARO	National Agriculture Research Organization
NDC	Nationally Determined Contributions
NDP	National Development Plan
NEMA	National Environment Management Authority
NFA	National Forestry Authority
NGO	Non-Governmental Organization
NORAD	Norwegian Agency for Development
NPA	National Planning Authority
NTC	National Technical Committee (for FIP formulation process)
PCE	Policy Committee on Environment (sub-committee of Cabinet)
PES	Payments for Ecosystem/Environmental Services
PPCR	Pilot Program for Climate Resilience
REDD+	Reducing Emissions from Deforestation and forest Degradation, and fostering conservation, sustainable management of forests and enhancement of forest carbon stocks
SES	Stakeholder Engagement Strategy (for FIP process)
SESA	Strategic Social and Environmental Assessment
SPCR	Strategic Program for Climate Resilience
SPGS	Sawlog Production Grant Scheme
THF	Tropical High Forest
UBOS	Uganda Bureau of Statistics
UFWG	Uganda Forestry Working Group
UGX	Uganda Shilling

UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
UNREDD	United Nations REDD+ Program
USAID	United States Agency for International Development
USD	United States Dollar
UWA	Uganda Wildlife Authority
WESWG	Water and Environment Sector Working Group
WDMP	Water Development and Management Project
WMD	Wetlands Management Department (of Uganda's Ministry of Water and Environment)
WMZ	Water Management Zone

FOREWORD

Uganda has sustained steady economic growth over the last two decades and achieved a growth rate of 5.0% in 2014/15. This economic performance is partly attributable to the country's natural resources base, which contributed 25% of GDP during 2011/2014. The total economic value of forests to the national economy has been estimated at UGX 593 billion, equivalent to 5.2% of GDP. The indirect benefits of forests are also high, valued at UGX 60.8 billion for watershed protection and UGX 56.4 billion for carbon sequestration, among others. Forestry supports 94% of household energy for cooking as well as generating tourism revenue, taxes, employment and household income, and supporting the growth of other sectors such as real estate, construction, energy generation and cottage forest-based enterprises. About 61% of Uganda's tourism income is generated by the forest-based national parks under the management of the Uganda Wildlife Authority. Forests also represent key cultural and livelihood assets for forest-dependent communities.

Uganda experiences high rates of forest cover loss. Natural forests outside protected areas reduced from 3.32 million hectares (ha) to 0.66 million ha, a fall of 80%, and from 1.53 to 1.07 million ha within protected areas, a smaller yet still worrying loss of 30%. Inventory data from 2015 indicated that approximately 38% of the remaining 1.73 million ha of natural forests were on private land and 62% under government ownership in Forest Reserves, National Parks and Wildlife Reserves. Uganda's plantation forest area meanwhile increased during the same period from 32,225 to 107,608 ha, with 63% of new planting in forest reserves and 27% on private land.

The loss of forest cover is attributed to i) expansion of commercial and subsistence agriculture, ii) unsustainable harvesting of tree products, mainly charcoal, firewood and timber, iii) expanding human settlements including growing numbers of refugees, iv) free-grazing livestock, v) wild fires, vi) artisanal mining operations and vii) oil exploration. The high rates of forest loss are underpinned by socio-economic factors including: i) high rates of population growth and ii) low levels of economic performance, resulting in high dependence on subsistence agriculture, natural resources and biomass energy, as well as competing economic returns from land that do not favour long term investments such as forestry. Other underlying causes include i) weak forestry governance, ii) weak policy implementation, iii) climate change effects and iv), land tenure systems.

Uganda's CO_2 emissions are low on a *per capita* basis and there is considerable scope for introducing low carbon approaches to industrialization and electricity generation. Improved management of forests, including with support from REDD+, has considerable potential for GHG abatement. As such, Uganda's forests play a key role in reducing vulnerability and increasing resilience to climate change by providing environmental goods and services from forests and protected watersheds, incomes and other forest resource-based livelihoods, and safety nets during extreme changes.

Uganda's FIP will promote the sustainable use of forest resources, protection of gazetted forests and creation of incentives for maintaining natural forests on private land and improve forestry policy performance. Pilot projects will provide proof of concept at landscape level for models that avoid deforestation and forest degradation, both within and outside protected forests, restore forest landscapes and biodiversity corridors, and contribute to socio-economic

development. Unlike most previous efforts that have tended to focus solely on the forest sector, the landscape-level investments proposed in the FIP will address the underlying drivers of forest loss and degradation in an integrated way in a selection of operational locations. Activities at the landscape level seek to build on approaches that have demonstrated success, for example in tackling land degradation, restoring forest cover and protecting conservation forests. These approaches recognize that local stakeholders are central in finding solutions to forest loss and degradation, and need to be engaged fully in the planning, implementation and monitoring of sustainable landscape management approaches.

FIP implementation will be led by three entities: (i) Ministry of Water and Environment (through National Forestry Authority, Forest Sector Support Department, Directorate of Water Resources Management and, Directorate of Water Development), (ii) Uganda Wildlife Authority for investment in forested National Parks, and, (iii) District Local Government for investment in local forest reserves and landscapes outside protected areas. Implementing entities will collaborate with Civil Society/Non-government Organizations, Private sector, Research and Academic institutions and other stakeholders.

The FIP combines projects implemented at national level which will improve/create enabling environment for sustainable forest management and forest conservation with investments implementing concrete activities on the ground targeting forest landscape restoration activities at landscape levels. The parallel implementation at different levels will ensure alignment of policy and on-the-ground actions, for example providing reality checks of any adjustments to policies and regulations through practical implementation.

Hon. Sam Cheptoris
Minister of Water and Environment

ACKNOWLEDGEMENTS

Uganda wishes to express gratitude for the support of the Climate Investment Funds, IBRD/World Bank and African Development Bank throughout the preparation of the Forest Investment Program (FIP), and to the many other stakeholders who contributed to this process, including non-governmental organizations, community-based organizations, private sector associations, local governments, academia and development partners. The process was led by the Government of Uganda and we acknowledge the contribution of various government ministries, departments and agencies, for their commitment, time and knowledge contributed during FIP development. Thanks go also to the multi-stakeholder National Climate Change and Advisory Committee, Technical Planning Committee and FIP Drafting Team in the REDD+ Secretariat. The contribution of these stakeholders and their active involvement in the FIP development process has ensured that the document is coherent, comprehensive and feasible, and in line with the country's development and forestry sector needs and priorities, and Uganda Vision 2040.

Uganda also expresses gratitude to the international and national consultants who have supported the FIP preparation process and to the staff of the Ministry of Water and Environment, Policy and Planning Department, National Forestry Authority, Forest Sector Support Department and Uganda Wildlife Authority for their hard work. Special thanks go to the World Bank and African Development Bank for supporting the process financially and to the United Nations Food and Agriculture Organization for additional technical support.

Uganda looks forward to working closely with all of you during the implementation of the Uganda Forest Investment Program.

Alfred Okot Okidi
Permanent Secretary
Ministry of Water and Environment
2nd May 2017

Uganda Forest Investment Program Summary

1. Funding request	FIP: USD 30 million PPCR: USD 31 million	
2. Other funding sources	Government of Uganda: USD 8.0 million GCF, GEF and Other Climate Funds: USD 75.0 million IDA: USD 50.0 million AfDB: USD 20.0 million Others (*to be identified)*: USD 20.0 million	
3. National Focal Point	Mr. Samuel Otuba Commissioner, Policy and Planning Department Ministry of Water and Environment P.O. Box 20026, Kampala Tel: +256 41 422 1234 Fax +256 41 450 5941 Cell: +256 782 480892 Email: samotuba@gmail.com Ms. Margaret Athieno Mwebesa Asst. Commissioner Forestry, Forestry Sector Support Department Ministry of Water and Environment P.O. Box 20026, Kampala Tel: +256 41 422 1234 Fax + 256 41 450 5941 Cell: +256 772 470023 Email: margathieno@gmail.com	
4. National Implementing Agency	Ministry of Water and Environment	
5. Involved MDBs	IBRD/World Bank African Development Bank	
6. MDB Focal Points	**IBRD/World Bank** FIP Focal Point Gerhard Dieterle, Forests Adviser Email: gdieterle@worldbank.org Task Team Leader Ross Hughes, Senior Natural Resources Management Specialist Email: rhughes@worldbank.org	**African Development Bank** Focal Point Gareth Philips, Chief Climate and Green Growth Officer Email: g.phillips@afdb.org Task Team Leader Ms. Siham Mohamed Ahmed, Principal Natural Resources Management Specialist Email: s.mohamedahmed@afdb.org

7. Description of the Investment Program

National Context

Uganda has sustained steady economic growth over the last two decades and achieved a growth rate of 5.0% in 2014/15[1]. This economic performance is partly attributable to the country's natural resources base, which contributed 25% of GDP during 2011/2014. The total economic value of forests to the national economy has been estimated at UGX 593 billion, equivalent to 5.2% of GDP. The indirect benefits of forests are also high, valued at UGX 60.8 billion for watershed protection and UGX 56.4 billion for carbon sequestration, among others. Further, forestry supports 94% of household energy for cooking as well as generating tourism revenue, taxes, employment and household income, and supporting the growth of other sectors such as real estate, construction, energy generation and cottage forest-based enterprises. About 61% of Uganda's tourism income is generated by the forest-based national parks under the management of the Uganda Wildlife Authority (UWA). Forests also represent key cultural and livelihood assets for forest-dependent communities.

Climate Change Vulnerability

Uganda's forests play a key role in reducing vulnerability and increasing resilience to climate change by providing environmental goods and services from forests and protected watersheds, incomes and other forest resource-based livelihoods, and safety nets during extreme changes.

Uganda has, in recent decades, witnessed numerous events associated with adverse impacts of climate change, such as landslides and floods in highlands areas of Mt Elgon, the Rwenzori and Kigezi, glacial melt in the Rwenzori, increased desertification across the cattle belt, shifts in wildlife distribution and migration patterns, land degradation and increased incidence of disease and pests affecting both humans and livestock. Those with least resilience and adaptive capacity are most at risk. Impacts are compounded by high levels of dependence on natural resources.

A combination of high exposure and high vulnerability makes Uganda one of the countries at greatest risk from the impacts of climate change. Predicted changes include increasing temperatures, increased frequency and intensity of rainfall, heat waves, droughts, floods and storms. Uganda's temperature is likely to increase on average by up to 1.5°C in the next 20 years and up to 4.3°C by the 2080s. Predictions indicate an increase in rainfall of 10–20% over most of the country, with a decrease expected in the semi-arid cattle corridor.

8. Uganda forestry resources and policy framework

Status of forests in Uganda

Uganda's forests are categorized into four types: Tropical High Forest (THF), well stocked (430,888 ha); THF, degraded (136,280 ha); woodland (1,161,610 ha); and plantation forest (107,608 ha). Natural forest cover reduced from 30% of land area in 1990 to approximately 10% in 2015, an average decline of 1.8% per year[2] (Figure 1).

[1] GoU (2015) *Statistical Abstract.* UBOS.
[2] MWE/FSS (2016) *Assessment of land vegetation cover: working report towards establishing Uganda's FERLs.*

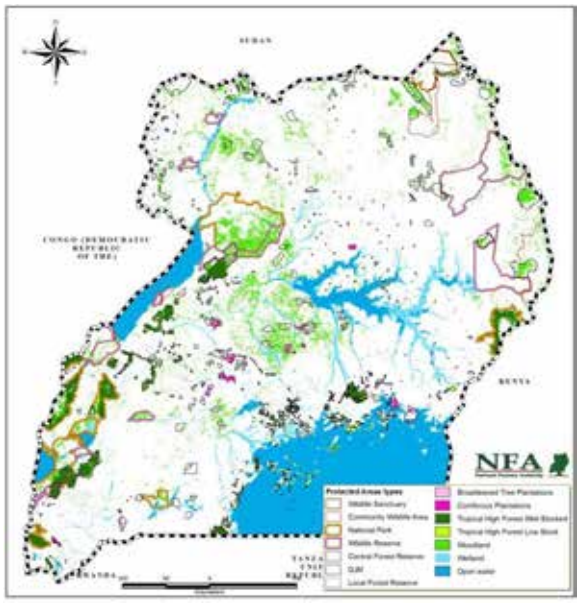


Figure 1: Status of forests in Uganda

Natural forests outside protected areas reduced from 3.32 million hectares (ha) to 0.66 million ha, a fall of 80%, and from 1.53 to 1.07 million ha within protected areas, a smaller yet still worrying loss of 30%. Inventory data from 2015 indicated that approximately 38% of the remaining 1.73 million ha of natural forests were on private land and 62% under government ownership in Forest Reserves, National Parks and Wildlife Reserves. Uganda's plantation forest area meanwhile increased during the same period from 32,225 to 107,608 ha, with 63% of new planting in forest reserves and 27% on private land.

Greenhouse gas (GHG) emissions

Uganda's CO_2 emissions are low on a *per capita* basis and there is considerable scope for introducing low carbon approaches to industrialization and electricity generation. Improved management of forests, including with support from REDD+, has considerable potential for GHG abatement. Uganda currently does not have sufficient data on non-CO_2 emissions such as methane (CH_4), carbon monoxide (CO) and nitrous oxide (N_2O)[3]. These gases are mostly attributable to wildfires in rangeland and wood formations. The Initial Submission of Uganda's Forest Emissions Reference Levels (FERL) 2017[4], using 2000 as the base year, estimated that agriculture, land-use, land use change and forestry together contributed 10,711 Gg[5] (91%) of the national (11,759 Gg) GHG emissions, with forestry contributing 7,360 Gg (Figure 2). GHG emissions from deforestation are ca. 8.15 million tCO_2/year, degradation is 821,415 tCO_2/year, conservation is -699,000 tCO_2/year and sustainable management of forests is -225,219 tCO_2/year.

[3] GoU (2017) *Uganda 1st Submission of FERL to UNFCCC*.
[4] Ibid. Table ES1 (p. 28).
[5] 1 Giga-gram (Gg) is equivalent to 1,000 metric tonnes (t).

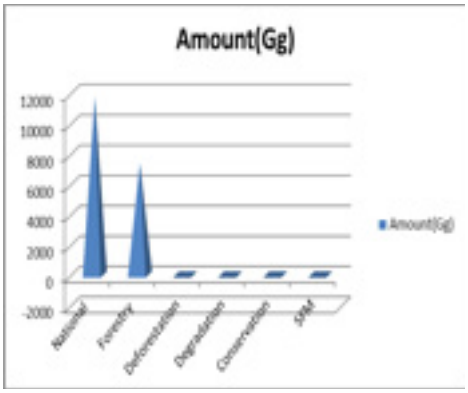


Figure 2. Sources of GHGs in Uganda

Drivers of deforestation and forest degradation and the National REDD+ Strategy

The key drivers of deforestation and forest degradation in Uganda are i) expansion of commercial and subsistence agriculture, ii) unsustainable harvesting of tree products, mainly charcoal, firewood and timber, iii) expanding human settlements including growing numbers of refugees, iv) free-grazing livestock, v) wild fires, vi) artisanal mining operations and vii) oil exploration[6].

These drivers are symptoms of underlying socio-economic factors including: i) high rates of population growth and ii) low levels of economic performance, resulting in high dependence on subsistence agriculture, natural resources and biomass energy[7], as well as competing economic returns from land that do not favour long term investments such as forestry. Other underlying causes include i) weak forestry governance, ii) weak policy implementation, iii) climate change effects and iv) land tenure systems.

Box 1: Uganda's REDD+ Strategy

Uganda is one of very few countries where payments for forest carbon under REDD+ mechanisms have been shown to work. Empirical analysis by Jayachandran *et al* (2016) showed that payments from voluntary carbon markets to forest-owning households in the Albertine Water Management Zone (WMZ) improved prospects for the retention of tree cover conservation – even when measured 5 years after the cessation of payments[1]. Cost-benefit analysis also showed that program costs were less than the social benefits of delayed CO_2 emissions. This study demonstrates that REDD+ has potential for success and Uganda is the only country in Africa where this evidence base exists, and where the results are positive.

Uganda's REDD+ Strategy will be largely in place by June 2017. This will include a Forest Reference Emissions Level (FREL), Monitoring Reporting and Verification (MRV) system, Strategic Social and Environmental Assessment (SESA) and a Feedback and Grievance Redress Mechanism (FGRM). Further refinement of the strategy will continue thereafter, and the emphasis will also switch to establishing emissions reductions programs that will be designed to access forest carbon funds and markets in support of sustainable forest management at scale. A range of options for inclusion in the REDD+ strategy and ER programs will be considered in an integrated way and at landscape level – including forest restoration, establishment of plantations, improved fire management, the scale-up of climate smart agriculture and sustainable wood biomass supply and use.

The Uganda Forest Investment Program (FIP) is part of the overall REDD+ process[8]. The proposed activities will contribute to the goal of the National Forest Policy (2001) that seeks to

[6] Oy Arbonaut Ltd (2016) *Draft REDD+ Options Assessment Report.*
[7] Baastel et al (2015) *Economic Assessment of the Impacts of Climate Change in Uganda.*
[8] General objectives of FIP are to support developing country efforts to reduce emissions from deforestation and forest degradation and promote sustainable forest management and enhancement of forest carbon stocks (REDD+), including: (i)

establish an integrated forest sector that achieves sustainable increases in the economic, social and environmental benefits from forests and trees by all the people of Uganda, especially the poor and vulnerable. The FIP Investment Projects (IPs) are designed to contribute to Uganda's achievement of its commitments under the NDC[9] and to meeting the country's commitment to the Bonn Challenge[10] and the AFR100 Initiative.

Uganda's FIP will also contribute to the implementation of national forest policy goals and the REDD+ strategy by identifying investment and financing priorities at landscape level that could help 'bridge-the-gap' between the REDD+ readiness process and results-based payments.

Policy and Institutional arrangements

Uganda has a well-developed policy and legal framework for the forest sector and for non-forest sector issues such as agriculture, water, energy, tourism, climate change, land and gender. These frameworks provide measures for regulation and enforcement within the forest sector at central and district levels, and for creating or fostering coordination and engagement with stakeholders and mainstreaming forestry issues into other sector policies. Likewise, Uganda has well established institutional structures and mandates for managing the forestry sector at central and district levels.

In spite of these policy and institutional arrangements, the implementation of forest policy has been extremely poor, as a result of inadequate institutional capacities, management systems and cross-sector coordination. Consequently, forest laws are weakly and unevenly enforced. Knowledge generation and information management is also rather poor, constraining the extent to which past experiences and lessons are used to improve forest policy and regulatory frameworks. In some situations, there have also been violations of rights during the eviction of encroachers and involuntary settlements.

9. The Forest Investment Program (FIP)

Transformational change

Uganda's FIP[11] will promote the sustainable use of forest resources, protection of gazetted forests and creation of incentives for maintaining natural forests on private land and improve forestry policy performance. Pilot projects will provide proof of concept at landscape level for models that avoid deforestation and forest degradation, both within and outside protected forests, restore forest landscapes and biodiversity corridors, and contribute to socio-economic development. Unlike most previous efforts that have tended to focus solely on the forest sector, the landscape-level investments proposed in the FIP will address the underlying drivers of forest loss and degradation in an integrated way in a selection of operational locations. Activities at the landscape level seek to build on approaches that have demonstrated success, for example in tackling land degradation, restoring forest cover and protecting conservation forests. These approaches recognize that local stakeholders are central in finding solutions to forest loss and

promoting forest mitigation efforts, including protecting forest ecosystem services; (ii) providing support outside of the forest sector to reduce pressure on forests; (iii) helping countries strengthen institutional capacity, forest governance, and forest-related knowledge; and (iii) mainstreaming climate resilience considerations and contribute to biodiversity conservation, protecting the rights of indigenous peoples and local communities, and poverty reduction through rural livelihoods enhancements.

[9] MWE (2015) *Uganda's Intended Nationally Determined Contribution.* Ministry of Water and Environment.

[10] Uganda pledged to restore 2,500,000 ha of deforested and degraded lands by 2020 under the Bonn Challenge

[11] Uganda's FIP has been designed alongside the PPCR/SPCR and will be jointly implemented.

degradation, and need to be engaged fully in the planning, implementation and monitoring of sustainable landscape management approaches.

The landscapes selected for inclusion in the FIP are aligned with Uganda's Water Management Zones (WMZs) and will address forest landscape management in three of the four WMZs: Lake Albert, Lake Kyoga and Upper Nile[12]. Specific catchments and sub-catchments will be targeted to explore synergies across the national and landscape levels, as well as across sectors, and to demonstrate how to scale up public, private and other resources and activities to achieve transformational change. The Lake Albert WMZ has been selected for FIP investment due to (i) high proportion of remaining natural forests with high potential for carbon abatement and conservation of forest biodiversity; (ii) high rates of loss of natural forests and tree cover; (iii) high vulnerability to effects of climate change (floods, landslides); (iv) high nature-based tourism potential; and (v) diverse agricultural and non-agriculture land uses interspersed with diverse forest types, which provide a sound basis for integrated landscape management. In addition, the Lake Albert WMZ currently lacks international donor support for WMZ institutional structures that bring together stakeholders and coordinate planning at catchment and sub-catchment level.

The Upper Nile and Lake Kyoga WMZs are also included because of: (i) high vulnerability to effects of climate change (floods, landslides and drought); (ii) diverse agricultural and non-agriculture land uses and diverse forest types, which provide a sound basis for integrated landscape management; and (iii) high rates of loss of natural vegetation cover. Parts of the Upper Nile WMZ also face a growing challenge from the impacts of refugee populations on woodland and water resources.

FIP Investments

Uganda's FIP projects will:

a. **Promote integrated and sustainable management of forest landscapes and catchments, defined by GoU's planning jurisdictions at the catchment and sub-catchment level.** This landscape-level approach is a response to a realization that the main drivers of forest loss usually originate outside the forest sector and therefore require a holistic approach that engages with a broader range of stakeholders.

b. **Strengthen institutional capacity for forest management at the landscape level**[13]. The FIP projects will differ from previous approaches that have operated mostly at national level, with an expectation that improved national capacity will result in improved forest management outcomes at local scale. The landscape level approaches will adopt a 'bottom-up' multi-stakeholder approach by identifying and addressing capacity needs at the local, sub-catchment and catchment levels, and exploring how institutional capacity at national levels can best support these needs.

c. **Seek to mobilize additional and new forms of financing to support improved forest management outcomes**. For example, the investment proposals will support value addition to forest wood products as well as development of nature-based tourism for

[12] Lake Victoria Basin WMZ benefits from support for the Ruizi project (funded by the German government) and from the Lake Victoria Environmental Management Project.

[13] Under Investment Project 3, institutional capacities for policy implementation and coordination, forest governance, regulation and information management are included.

increasing revenues available for management of natural forests, in particular those in forest protected areas. The FIP will encourage the use of conservation trust funds and biodiversity offsets to attract private sector revenues; and, through the development of Emissions Reductions Programs, promote access to international carbon markets based on successful pilots using forest carbon payments from voluntary carbon markets to protect forests.

d. **Encourage and finance the use of longer-term management plans for watersheds and forests.** These will provide the basis for longer-term integrated investments and for enhancing stakeholder engagement.

e. **Encourage investments by the formal private sector** in wood value addition, wood value chains and forest-based ecotourism, including support to farm forestry for diverse tree products such as biomass energy, and support training of skilled labour force for supporting value addition and value chains.

f. **Encourage and facilitate Civil Society Organizations (CSOs) and Non-Government Organizations (NGOs)** to support forestry governance and adherence to international safeguard standards, policy implementation and enhancement of forest ecosystem-based livelihoods.

g. **Facilitate generation and use of comprehensive and reliable forestry data** by policymakers, private investors and the general public, and for supporting performance-based REDD+ payments.

h. **Strengthen capacity for forest regulation of illegal forest utilization and trade in forest products**, increased forest revenue collection and management through streamlining procedures and licensing, adhering to the principle that simplification can enhance compliance.

Forest Investment Program Budget

The estimated cost of implementing Uganda's FIP is USD 234 million for the three investment projects (Annex 1). Uganda presents a funding request to the FIP (USD 30 million) and Pilot Program for Climate Resilience (USD 50 million). Uganda further requests the support of the MDBs to leverage funding of USD 153 million from other sources (Table 1).

Table 1: FIP Budget (million USD)

Components	GoU	FIP	PPCR	OTHERS indicative and scalable				TOTAL
				Climate Funds (GCF+ GEF+ Others)	WB	AFDB	Other	
IP1: Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Albertine Rift								
Component 1: Strengthening integrated water catchment management	0.2	2	3	8	0	0	0	13.2

Component 2: Strengthening forest conservation	0.4	10	4	23	30	0	0	67.4
Component 3: Restoring land, forest and other ecosystems in key sub-catchments	0.2	2.5	6	12	10	0	0	30.7
Component 4: Nature-based tourism development	0.1	3	1.5	2	10	0	0	16.6
Component 5: Project Monitoring and evaluation	0.1	0.5	0.5	0	0	0	0	1.1
SUB-TOTAL 1P1	**1**	**18**	**15**	**45**	**50**	**0**	**0**	**129**
IP2: Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Lake Kyoga and Upper Nile WMZ								
Component 1: Strengthening integrated water catchment management	1.5	1	1	4	0	2	0	9.5
Component 2: Strengthening forest conservation	1	2	1.5	5	0	2	0	11.5
Component 3: Restoring land, forest and other ecosystems in key sub-catchments	0.5	1	3	15	0	4	0	23.5
Component 4: Nature-based tourism development	0.5	1	1.5	2	0	3.5	0	8.5
Component 5: Provision of water for domestic use and agricultural production	1	7	8.5	3.5	0	8	0	28
Component 6: Project Monitoring and Evaluation	0.5	0	0.5	0.5	0	0.5	0	2
SUB-TOTAL IP2	**5**	**12**	**16**	**30**	**0**	**20**	**0**	**83**
IP 3: Strengthening capacity for forestry governance and policy implementation								
Component 1: Strengthening forest governance and institutional capacity	1.5	0	0	0	0	0	17.5	19
Component 2: Efficient and sustainable forest based industry	0.3	0	0	0	0	0	2	2.3
Component 3: Project monitoring and management	0.2	0	0	0	0	0	0.5	0.7
SUB-TOTAL IP3	2	0	0	0	0	0	20	22
OVER-ALL TOTAL	**8**	**30**	**31**	**75**	**50**	**20**	**20**	**234**

Synergies with PPCR

Uganda's FIP has been formulated alongside the Strategic Program for Climate Resilience (under the Pilot Program for Climate Resilience, PPCR), the objective of which is to mainstream climate change into Uganda's vulnerable catchments, urban areas and institutions through increased resilience of communities most exposed to climate variability and change. There will be joint FIP & PPCR investments at national level and selected landscapes within the three WMZs. National investments will strengthen institutional and policy performance, while joint investments at landscape level aim to (i) increase household resilience to climate change; (ii) increase tree cover in the landscape; iii) improve management and protection of catchment natural forests and biodiversity corridors; and (iv) promote a commercially and ecologically sustainable woodfuels industry.

Expected FIP Outcomes

The Outcome of FIP is (i) Increased direct management of forest resources by local communities and indigenous peoples, (ii) Improved enabling environment for REDD+ and sustainable management of forests, and (iii) access to predictable and adequate financial resources, including results-based incentives for REDD+ and income from sustainably managed forests. The overall transformational impact expected from the FIP in Uganda is reduced deforestation and forest degradation, well-coordinated and governed forestry resources contributing to improving resilience of rural livelihoods to climate change in the targeted landscapes.

FIP Outcomes will be met through two landscape Investment Projects (IPs) and one national policy level Investment Project:

a. **Investment Project 1 (IP1):** Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Albertine Rift.
b. **Investment Project 2 (IP2):** Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Lake Kyoga and Upper Nile WMZs.
c. **Investment Project 3 (IP3):** Strengthening capacity for forestry governance and policy implementation.

The FIP combines projects implemented at national level which will improve/create enabling environment for sustainable forest management and forest conservation (IP3) with investments implementing concrete activities on the ground targeting forest landscape restoration activities at landscape levels in three WMZs (IP1 and IP2). The parallel implementation at different levels will ensure alignment of policy and on-the-ground actions, for example providing reality checks of any adjustments to policies and regulations through practical implementation.

Co-benefits

Uganda's FIP will generate socio-economic co-benefits (livelihoods, employment, incomes, protection of cultural assets, etc.), environmental co-benefits (REDD+ incentives, biodiversity conservation), enhancement of ecosystem goods and services (water, energy, tourism) and improved governance of forestry resources.

Expected Results

The expected Results of Uganda's FIP are summarized in Table 2.

Table 2: FIP Results

Component	Indicator	Source of information
Impacts		
Reduced deforestation and forest degradation	♣ Million tonnes (Mt) of CO2 emissions reduced from deforestation and forest degradation relative to reference levels	MRV Reports
Well-coordinated and governed forestry resources	♣ Measures for stakeholder participation in forestry sector coordination and sustainable forest management ♣ Measures for integrating forestry on macro-economic policy and other sectors	Sector /institutional Reports Non-forestry Sector Investment Plans
Outcomes		
Enhanced forest and livelihoods resilience to climate change	♣ Climate change adaptation strategies and actions in the targeted landscapes ♣ Changes in quantities of water from protected catchments	Sector Reports
Improved enabling environment for sustainable management of forests	♣ No of policy reforms initiated/concluded ♣ Measures for forestry regulation	Sector reports
Access to predictable and adequate financial resources	♣ Size of area of forest benefitting/qualifying for results based payments	Sector reports
Key Results		
Reduced emissions from Deforestation and forest degradation	♣ Million tonnes (Mt) of CO_2 sequestered through natural regeneration, re- forestation, afforestation/restoration activities, and conservation relative to forest reference level in targeted WMZs	MRV Reports
Improved ecological integrity of targeted forest ecosystems	♣ Size of forest area restored ♣ Size of biodiversity corridors restored row hoe management has improved	MRV Reports Institutional Reports
Sustainable use of forest resources for livelihoods and economic development	♣ Size of forest estate under collaborative forest management arrangements ♣ Size of forest area managed as private commercial forests	Sector Reports Non-forestry Sector Investment Plans
Improved forest sector coordination and development	♣ Changes in institutional capacities for forestry sector coordination	Sector /institutional Reports
Improved Forest policy performance	♣ Changes in institutional capacities for forestry policy implementation	Sector /institutional Reports
High forest values and premiums for wood products	♣ % increase in private sector led investment in wood chains	Statistical Reports (Uganda Bureau of Statistics, UBOS)
Co-Benefits (Results)		
Forest sector contribution to the economy increased	♣ % increase in monetary contribution of forest to GDP ♣ % increase in value of ecotourism investments	Sector Reports Statistical Reports (UBOS)

Forest sector contribution to livelihoods and poverty reduction increased	♣ % increase in incomes at household level in targeted landscapes	Sector Reports Statistical Reports (Uganda Bureau of Statistics, UBOS
Status of forest biodiversity improved	♣ Size of forest area under improved biodiversity conservation practices	Biodiversity surveys/ monitoring reports Sector Reports

FIP implementation

FIP implementation will be led by three entities: (i) the Ministry of Water and Environment (MWE), through the National Forestry Authority (NFA), Forest Sector Support Department (FSSD) and Directorate of Water Resources Management (DWRM/WMZ); (ii) the Uganda Wildlife Authority (UWA) for investment in forests in National Parks and wildlife reserves, and (iii) District Local Governments (DLGs) for investment in local forest reserves (LFRs) and landscapes outside protected areas. Implementing entities will collaborate with CSOs, private sector, research and academic institutions and other stakeholders.

Partners in FIP design

Uganda's FIP is the result of an extensive participatory process involving government institutions (central and local), CSOs/NGOs, the private sector, academia, donors, technical agencies and indigenous people and local communities (IPLC). Specific forums for CSO and private sector and IPLC consultation were convened to ensure their effective and meaningful participation. Using Free, Prior and Informed consent (FPIC) principles, consultations with IPLCs also aimed to publicise the FIP and secure their views and contributions in the design of FIP investment priorities, to ensure that those priorities were understood, their likely implications on livelihoods and rights correctly assessed, and appropriate mitigation measures developed. The following IPLC groups were engaged: Teuso (around Mt. Murongole & Mt. Timu); Tepeth (around Mt. Moroto, Mt. Napak and Mt. Kadam); Benet (Ndorobos) (around Mt. Elgon); and Batwa (around Semliki, Bwindi and Mgahinga National Parks and Echuya Central Forest Reserve).

1. NATIONAL AND FORESTRY SECTOR CONTEXT

1.1 Country Context

1.1.1 Geography and climate

Uganda is a landlocked East African country with a land area of 200,523 sq.km[14], lying astride the equator between latitude 1^0 30' S and 4^0 N, and longitude 29^0 30' and 35^0 E (Figure 3).

Figure 3: Map of Uganda and location

Uganda enjoys an equatorial climate moderated by relatively high altitude, with mean annual temperatures between 16^0 and 30^0C. The northern and eastern regions experience higher temperatures, often exceeding 30^0C, while the wetter, higher south-west is cooler. Most of Uganda receives annual rainfall of 750 to 2,100 mm. The central, western and eastern regions have two rainy seasons while the north has one rainy season (April to October).

1.1.2 Demographics

Uganda's population was 34.9 million in 2014, with a rapid growth rate of 3.3% p.a. and a doubling time of 21 years[15] **(**Figure 4Error! Reference source not found.**).** Although Uganda has one of the fastest growing urban populations in the world[16], 72% of the population are still rural and rely for their livelihoods mainly on subsistence agriculture and harvesting of natural resources, including fisheries and forestry[17]. Despite a fall in the proportion of the population defined as poor from 24.5% to 19.7% between 2009/10 and 2012/13[18], high levels of poverty still persist, particularly in the north of the country (Figure 5).

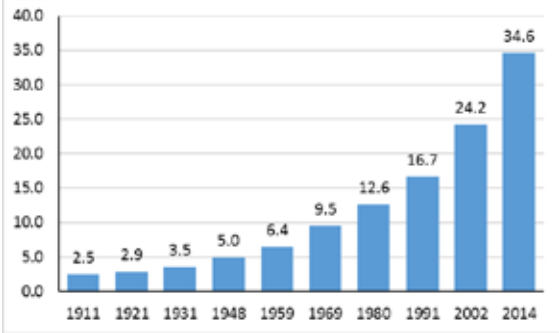


Figure 4: Uganda population (1911-2014)

[14] According to the 2015 Statistical Abstract, Uganda land area of 200,523km^2 represents 83.0% of total surface area
[15] GoU (2014) *National Population and Housing Census Report.*
[16] data.worldbank.org/indicator/SP.URB.GROW
[17] GoU (2015) *Statistical Abstract 2015. UBOS*
[18] Ibid.

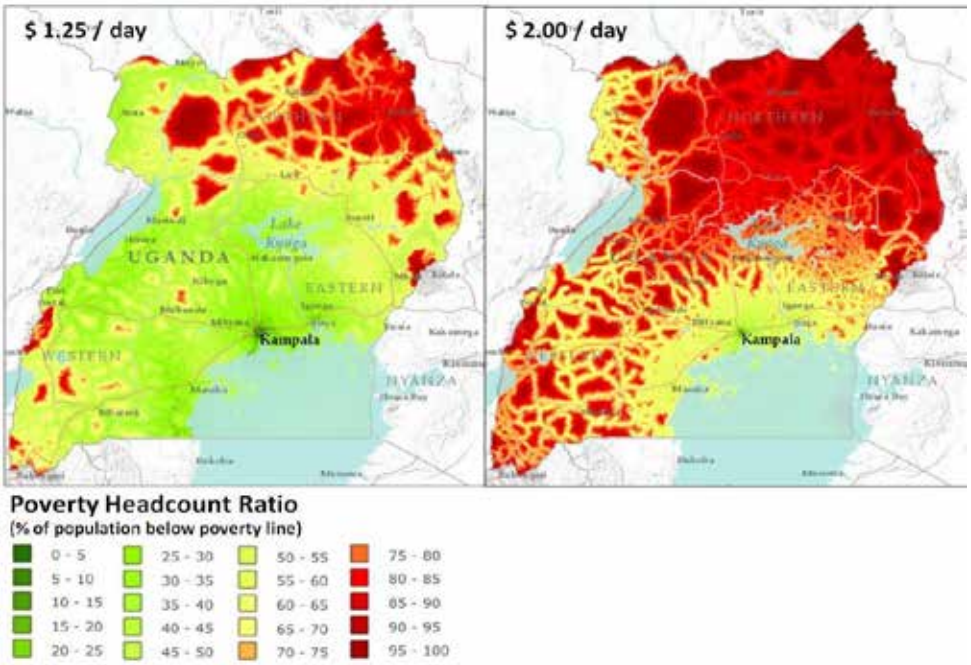


Figure 5: Poverty headcount ratio in Uganda[19]

Rapid population growth and high levels of poverty are exerting significant and growing pressure on Uganda's natural resources - including forests – mainly through subsistence agricultural expansion, over-exploitation and unplanned urbanisation. The growing population also requires more services linked to forests such as building materials, energy and water, while land fragmentation has reduced the holdings available for long-term investments such as forestry. These trends have adverse implications, especially for vulnerable groups. For example, declining forestry-dependent services such as energy, water and reduced land productivity impact more on women, youth and other vulnerable groups because their livelihoods options, including employment, continue to be curtailed. There is a pressing need to invest in forestry development and management for supporting both individual livelihoods and the wider economy.

1.1.3 Economic context

Uganda has sustained steady economic growth over the last two decades and achieved a growth rate of 5.0% in 2014/15[20]. Natural resources make a vital contribution to this growth. For instance, in the period 2011 to 2014, 25% of GDP was attributed to natural resources, with forestry contributing 3.7%[21] (Box 2).

[19] World Bank (2015) *Uganda Strategic Climate Diagnostic*.
[20] GoU (2015) *Statistical Abstract 2015.* UBOS.
[21] Ibid.

Box 2: Forestry and the national economy

Forestry as a percentage of Uganda's GDP has averaged 4% over the last 5 years, of which 79.8% is constituted by the monetary sub-sector while the informal sub-sector accounts for 20.2%. Its growth rate has been 4.8% p.a., slightly higher than the national GDP growth rate of 4.5% p.a.. Further, forestry supports 94% of household energy for cooking as well as tourism revenue, taxes, employment and household income, and supports the growth of other sectors like real estate, construction, energy generation and cottage forest-based enterprises. About 61% of Uganda's tourism income is generated by the forest-based national parks managed by UWA. In 2014 alone, the total economic value of forests was been estimated at UGX 593 billion, equivalent to 5.2% of GDP at that time. The indirect benefits of forests are equally high, valued at UGX 60.8 billion for watershed protection and UGX 56.4 billion for carbon sequestration, among others (Kazora *,2017).*

Forests and woodlands also make a vital contribution to Uganda's energy supply. Extrapolated figures from the National Biomass Energy Strategy[22] suggest that annual demand for woody biomass is 610 peta joules (PJ) or 56 Mt in fuelwood equivalent[23], which represents 90% of national energy demand[24] [25] (Figure 6).

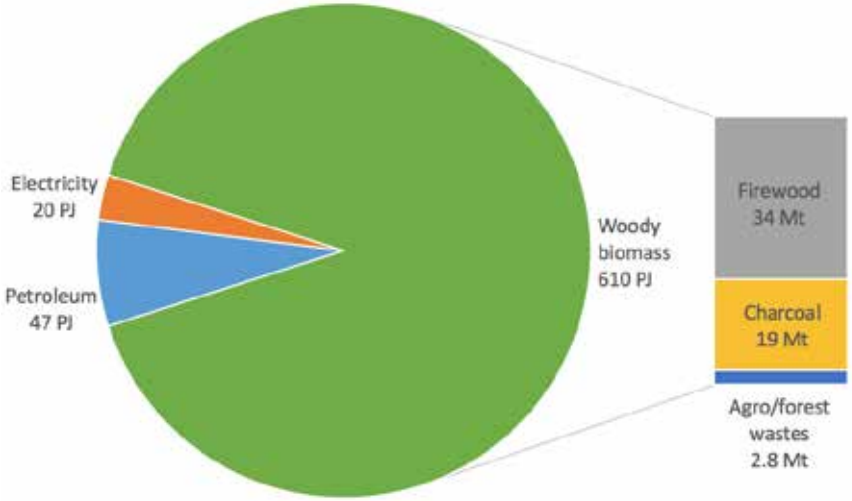


Figure 6: Primary energy demand in Uganda (2016)

Note: Units for main breakdown are PJ while units for solid biomass are million tonnes (Mt) of firewood equivalent.

[22] GoU (2013) *Uganda Biomass Energy Strategy (BEST).* Ministry of Energy & Mineral Development, Kampala.

[23] Fuelwood equivalent refers to air dry wood (15% moisture content) before conversion to any other form. Data errors were corrected and 2013 figures extrapolated to 2016. For details See Owen M (2016) *Review of Experiences from the Woodfuel Sector to Inform FIP Investment Priorities.*

[24] GoU (2012) *National Report on Progress on the Implementation of the Rio Commitments on Sustainable Development in Uganda.* Prepared for Rio+20 UN Conference on Sustainable Development, Rio de Janeiro, Brazil, 15-22 June 2012. National Environment Management Authority, Kampala.

[25] Other sources provide similar figures. For example, woodfuel demand in 2010 is quoted as 464 PJ by the market intelligence portal GIObserver http://globserver.cn/en/uganda/energy and said to account for 92% of total demand. This can be extrapolated to 675 PJ in 2016 if it is assumed that demand rises at double the rate of population growth (Kakuru, W 2014, *Study to assess the local fuel wood demand and the feasibility of supplying fuel wood from dedicated bio-energy plantations.* Sawlog Production Grant Scheme, Ministry of Water & Environment, Kampala) and that growth averages 3.22% p.a. (UN Dept. of Economic & Social Affairs, Population Division, 2014, *World Urbanization Prospects: The 2014 Revision.* http://esa.un.org/unpd/wup/DataQuery/).

Most woodfuel (77% in firewood equivalent) is used in the household sector, while industry and the commercial sector account for 19% and institutions for 4%[26].

With one of the world's fastest rates of population growth (3.6% p.a.), Uganda's mid-2016 population of 40.6 million is expected to surpass 80 million by 2040[27]. The urban population of 6.9 million (17%) is growing at 5.3% p.a. and 27% of Ugandans will live in towns and cities by 2040[28]. This is significant in energy terms because urbanization is accompanied by a shift from fuelwood to charcoal as the main domestic fuel, with associated implications for wood inputs. While the contribution of woody biomass may slowly decline as a percentage of total energy consumption, demand for woody biomass for fuel can be expected to rise three- to five-fold by 2040 (Figure 9).

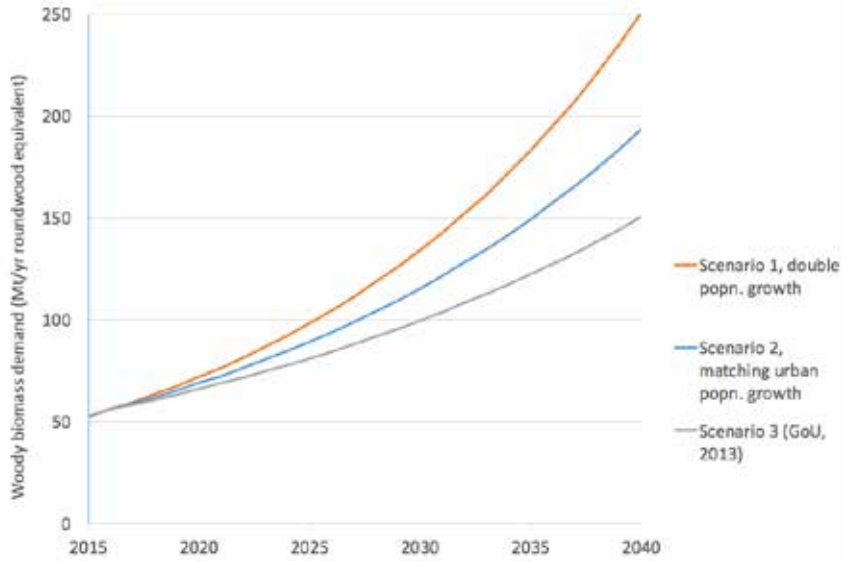


Figure 7: Projected demand for woody biomass energy in Uganda, 2015-2040[29]

The annual value of traded woodfuels in Uganda may be USD 850 million (UGX 2.9 trillion), comprising 1.8 Mt of charcoal worth USD 520 million and 5.1 Mt of fuelwood worth USD 330 million[30]. Many people are attracted to the woodfuels industry by the significant and fast-growing market opportunity, low entry costs, ease of access to weakly regulated resources and lack of options for formal employment or alternative livelihoods. Uganda's woodfuels industry may employ 640,000 people on a full-time equivalent basis (260,000 in the commercial fuelwood sector and 380,000 in the charcoal sector)[31]. Many of these 'jobs' are not in fact full-time, and the actual number of people engaged on a part-time or seasonal basis is much higher. The figures exclude unpaid labor for gathering fuelwood for personal use.

[26] GoU (2013) *Uganda Biomass Energy Strategy (BEST).* Ministry of Energy & Mineral Development, Kampala.
[27] UN Dept. of Economic & Social Affairs, Population Division (2014) *World Urbanization Prospects: The 2014 Revision.* http://esa.un.org/unpd/wup/DataQuery/).
[28] Ibid.
[29] Owen M (2016) *Review of Experiences from the Woodfuel Sector to Inform FIP Investment Priorities.*
[30] Ibid.
[31] Assumes one person works 300 days/yr.

Up to 60% of employment and value from traded woodfuels in Sub-Saharan African countries is likely to be generated in rural areas[32], and in Uganda this employment will be concentrated in the main source districts for charcoal in the Cattle Corridor: Hoima, Kayunga, Kibaale, Kiboga, Masindi, Nakasongola, Luwero and Apac[33].

Despite the scale of Uganda's woodfuel industry, it is difficult to determine how much of its value is captured by the government. Private taxes on the industry could be worth USD 150 million/yr, which may be smaller or greater than the official fees not remitted[34].

As well as delivering direct financial benefits, forests modulate the weather, mitigate flood and drought risk, and protect water catchments. The indirect benefits of forests are valued at UGX 60.8 billion (USD 17.4M) for watershed protection and UGX 56.4 billion (USD 16.1M) for carbon sequestration alone[35]. Forestry will continue to be one of the primary sub-sectors driving the growth of the economy. Forests also represent key cultural and livelihood assets for forest-dependent communities.

1.1.4 Vulnerability to climate change[36,37]

Uganda has, in recent decades, witnessed numerous events associated with adverse impacts of climate change, such as landslides and floods in highlands areas of Mt Elgon, the Rwenzori and Kigezi, glacial melt in the Rwenzori, increased desertification across the cattle belt, shifts in wildlife distribution and migration patterns, land degradation and increased incidence of diseases and pests affecting both humans and livestock. Those with least resilience and adaptive capacity are most at risk (Figure 8). Impacts are compounded by high levels of dependence on natural resources.

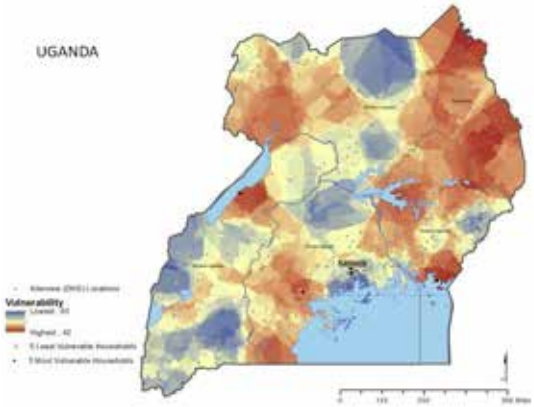


Figure 8: Household vulnerability to climate change in Uganda

Given the role of forests in modulating climatic conditions and sustaining Uganda's predominantly rain-fed agricultural systems, forestry is a priority area for climate change mitigation under the National Climate Change Policy[38] and a priority sector for enabling Uganda

[32] MARGE (2009) *Malawi Biomass Energy Strategy*. Dept. of Energy Affairs, Lilongwe.
[33] Bagabo S, Jjumba JN & Kaboggoza J (2008) *The charcoal technical analysis assignment.* Report for UNDP GEF Sustainable Land Management project, Ministry of Agriculture, Animal Industry & Fisheries, Kampala.
[34] Owen M (2016) *Review of Experiences from the Woodfuel Sector to Inform FIP Investment Priorities.*
[35] Kazora (2017) *Reviewing forest sector expenditure and investment in Uganda (2011-2016).*
[36] USAID (2013) *Uganda Climate Change vulnerability.*
[37] GoU (2014) *Uganda Second National Communication to the UNFCCC.*
[38] GoU (2013) *National Climate Change Policy.*

to realise its Nationally Determined Contributions (NDC) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in 2015 (Box 3). FIP will therefore be supporting Uganda's mitigation and resilience actions, contributing to its commitments under the UNFCCC, the Bonn Challenge and AFR100 (the African Landscape Restoration Initiative).

Box 3: Forestry in Uganda's NDC

Forestry adaptation priorities

a. Promoting intensified and sustained forest restoration efforts (afforestation and reforestation. Programs, including in urban areas).
b. Promoting biodiversity & watershed conservation (including re-establishment of wildlife corridors).
c. Promoting biodiversity & watershed conservation (including re-establishment of wildlife corridors).
d. Encouraging efficient biomass energy production and utilization technologies.

Forestry policy priorities

a. Development of enabling environment for forestry management, including: Community forest management groups; Forest law enforcement and governance, and strengthening forest institutions responsible for forest management and development.
b. Reverse deforestation trend to increase forest cover to 21% in 2030, from approximately 14% in 2013, through forest protection, afforestation and sustainable biomass production measures.

Commitment to Bonn Challenge and AFR100

a. Restore 2M ha of degraded forest lands and 0.5M ha of agricultural lands to forest by 2020.

1.2 Uganda's forestry sector

1.2.1 Governance context

Uganda has a well-developed policy and legal framework for the forest sector. Implementation of policies, regulations and standards has been poor, however, with low rates of compliance, weak sector and stakeholder coordination, and a lack of reliable information about forestry and sector performance. Collectively, these factors have contributed to high rates of deforestation[39] (Box 4). In response, FIP investments will focus on improving governance, institutional capacity and technical capacity.

Box 4: Factors influencing forest governance[40]

Unsatisfactory forest law enforcement and governance (FLEG), and institutional failures emerged in FIP design as the main causes of poor performance of the forestry sector (accounting for 54% and 32% of reasons given by stakeholders). Inadequacies in FLEG include flouting of policies, laws and plans, inadequate stakeholder participation in implementation of the NFP and insufficient attention to natural forest management. Institutional failures mainly concern insufficient attention to District Forest Departments, which are responsible for forests outside protected areas, and the Forestry Sector Support Department, which is responsible for coordinating forestry policy implementation across sectors.

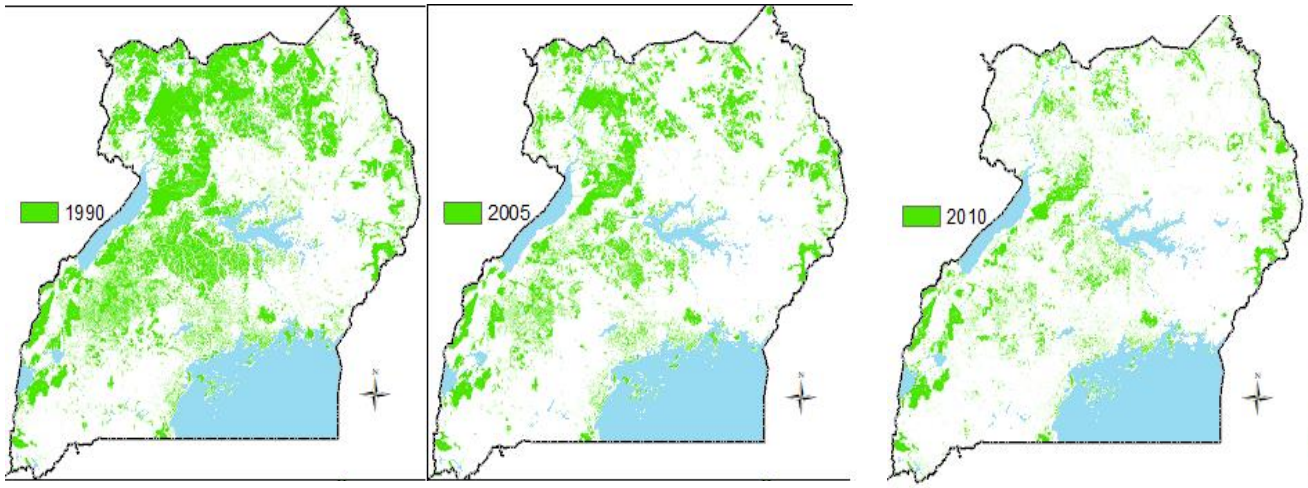
1.2.2 Forest types and trends

Uganda's forests may be categorized into **four broad types**: well-stocked Tropical High Forests (THF) (430,888 ha); degraded THF (136,280 ha); woodland (including montane) (1,161,610 ha); and plantation forest (107,608 ha), together covering 1.84 million ha, approximately 10% of the country's land area[41]. Well-stocked THF is found mainly in Central Forest Reserves (CFRs) in the west (Bugoma, Budongo, Kalinzu-Maramagambo, Katsyoha-Kitomi) and National Parks (Bwindi

[39] MWE/FSS (2016) *Assessment of land vegetation cover. Working report towards establishing Uganda's FERLs.*
[40] Extract from National Forest Plan (2011/12 – 2021/22)
[41] MWE/FSS (2016) *Assessment of land vegetation cover: working report towards establishing Uganda's FERLs.*

Impenetrable, Mgahinga, Mt. Rwenzori, Mt. Elgon, Kibale and Semuliki). Low-stocked THF is found around the shores and islands of Lake Victoria, while woodland is found mainly in the northern, central and western regions. The eastern part of the country is largely forest-poor, except for Mt. Elgon.

Natural forest cover reduced from 30% of land area in 1990 to approximately 10% in 2015, an average decline of 1.8% per year[42] (Figure 9).

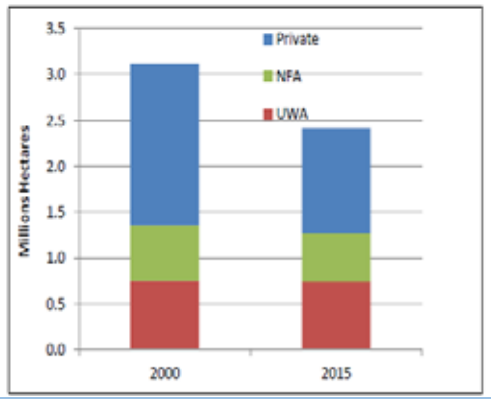


Tenure	Forest Type	Coverage/size in hectares				
		1990	2000	2005	2010	2015
Private	Tropical High Forests Well Stocked	172,274	127,022	79,789	50,662	20,439
	Degraded Tropical High Forest	175,052	160,883	149,008	50,423	35,400
	Woodland (including montane)	2,971,763	2,258,873	1,948,534	945,221	605,146
	Sub Total	**3,319,090**	**2,546,778**	**2,177,331**	**1,046,306**	**660,986**
Protected	Tropical High Forests Well Stocked	419,456	549,140	419,972	431,259	410,449
	Degraded Tropical High Forest	83,911	57,792	36,536	55,160	100,880
	Woodland (including montane)	1,028,027	842,756	907,752	703,113	556,464
	Sub Total	**1,531,394**	**1,449,688**	**1,364,260**	**1,189,532**	**1,067,793**
	Grand Total	**4,850,484**	**3,996,466**	**3,541,591**	**2,235,837**	**1,728,778**

The area of natural forests outside protected areas reduced from 3.32 to 0.66 M ha over the same period, a fall of 80%, and from 1.53 to 1.07 M ha within protected areas, a smaller yet still worrying loss of 30% (Figure 10). Forest inventory data from 2015 indicates that approximately 38% of the remaining 1.73 million ha of natural forests is on private land and 62% under government ownership in Forest Reserves, National Parks and Wildlife Reserves.

[42] Ibid.

Changes in vegetation cover according to management categories	Changes in vegetation cover within and outside protected areas



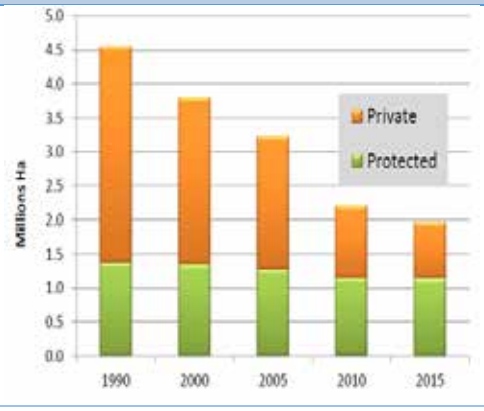


Figure 10: Changes in vegetation cover according to forest management categories

The area under planted forest meanwhile *increased* by 234% from 32, 225 ha in 1990 to 107, 608 ha in 2015[43]. 63% of the new plantations were established in forest reserves and 27% on private land. Despite this encouraging development, the area planted between 2004 and 2014 represents only 60% of the area of natural forests lost annually. The increase in plantation forests represents commercial tree growing in forest reserves leased from NFA as well as on private land, which has benefited from grants and other incentives mainly by the Sawlog Production Grant Scheme (SPGS) since 2004. There is concern among plantation owners that returns may be lower than anticipated because of market distortion from unfair competition, inefficient utilisation technologies and management challenges such as fires and disease. In order to sustain investment in plantation forestry to ensure a supply of quality wood products, FIP will support the private sector to invest in technologies for wood conversion, value addition and durable markets for timber and other plantation products, including commercial woodfuel (firewood, charcoal and residues) as a by-product of other plantation outputs.

1.2.3 Drivers of deforestation and forest degradation

The key **drivers** of deforestation and forest degradation in Uganda[44] are i) expansion of subsistence agriculture, ii) unsustainable harvesting of tree products, mainly for charcoal, firewood and timber, iii) expanding settlements and impacts of refugees, iv) free-grazing livestock, v) wild fires, vi) artisanal mining operations and vii) oil exploration activities[45].

The **underlying causes** include i) high rates of population growth and ii) high dependence on subsistence agriculture, natural resources and biomass energy[46], as well as competing economic returns from land that disfavour long-term investments such as forestry. Other underlying causes include i) weak forestry governance, ii) weak policy implementation, iii) climate change

[43] MWE/FSS (2016) *Assessment of land vegetation cover. Working report towards establishing Uganda's FERLs.*
[44] Oy Arbonaut Ltd (2016) *Draft REDD+ Options Assessment Report.*
[45] Drivers of deforestation and forest degradation will be ranked in order of severity or significance once an on-going assessment is complete.
[46] Baastel et al (2015) *Economic Assessment of the Impacts of Climate Change in Uganda.*

effects and, iv), land tenure systems[47]. The underlying causes of deforestation and degradation are thus numerous and their interconnections are complex[48] as illustrated in Annex 5.

Based on the analysis in the draft National REDD+ Strategy, FIP investment will address agricultural expansion in forested lands, wood utilisation, unsustainable harvesting and consumption of wood, tenure of forests on private land, wildfires, livestock encroachment and forests on private land in the Lake Albert, Lake Kyoga and Upper Nile WMZs[49]. FIP will also invest in addressing poor forestry governance and weak policy implementation to create an enabling environment for tackling the priority drivers in the target landscapes.

1.3 Forest Investment Program for Uganda

The Uganda FIP is a government-led Program that has been developed through a multi-stakeholder engagement process led by the Ministry of Water and Environment (MWE). Preparation of the FIP has been supported by the World Bank (WB) and African Development Bank (AfDB) under the Climate Investment Funds, with additional technical support from the United Nations Food and Agricultural Organization (FAO).

The Objective of the FIP is to reduce GHG emissions from deforestation and forest degradation, and to enhance forest carbon stocks through investments that aim to reduce pressure on natural forests, enhance forest ecosystem services, improve coordination and governance in the forestry sector and ensure a vibrant forest industry in Uganda. It aims to trigger a transformative change in the forestry sector towards low-carbon, sustainable development.

The FIP combines projects implemented at national level which will create or improve the enabling environment for sustainable forest management and forest conservation (IP3), with investments implementing concrete activities on the ground targeting forest landscape restoration activities at selected landscapes in three WMZs (IP1 and IP2). The parallel implementation at different levels will ensure alignment of policy and on-the-ground actions, for example in the form of reality checks of any adjustments to policies and regulations.

The FIP is aligned with Uganda´s second National Development Plan (NDP II) and National Forest Plan (2013), and provides a framework for implementation of the REDD+ Strategy (due to be completed by June 2017[50]). FIP will address several of the REDD+ priorities, as illustrated in Table 3.

[47] Four tenure systems operate in Uganda: customary, freehold, *Mailo*, and leasehold (see Annex F for details). Insecure tenure on *Mailo* and customary land is often linked with high rates of forest loss and degradation, while secure tenure (including leased public land) promotes long-term investments, including forestry. Natural forest cover is nevertheless reducing across *all* tenure systems as trees are cleared in favour of more economically attractive opportunities.
[48] Ibid.
[49] MWE (2013)
[50] The REDD+ process is well underway. The draft REDD Strategy Options, Benefit Sharing Arrangements and a Feedback Grievance Redress Mechanism have been prepared. Uganda has made its first submission of FREL to UNFCCC, while work on a National Forestry Information System and MRV is at an advanced stage. Work on SESA will be complete by June 2017.

Table 3: FIP contributions to draft REDD+ Strategy

Provisional REDD+ Strategic Option	FIP support	Joint FIP &PPCR support
SO 1: Climate smart agriculture		IP2
SO 2: Livestock management		IP2
SO 3: Sustainable fuel wood & (commercial) charcoal use	IP1	IP2
SO 4: Large-scale commercial timber plantations	IP1	IP2
SO 5: Rehabilitation of natural forests in the landscape	IP1	IP2
SO 6: Rural electrification & renewable energy solutions		IP2
SO 7: Energy efficient cooking stoves		IP2
SO 8: Integrated wildfire management	IP1	

Uganda's FIP also aligns with the Global FIP Core Program areas, namely a) institutional capacity, forest governance and information; b) forest mitigation measures, including forest ecosystem services; and c) non-forest sectors which create pressures on the forest sector.

1.4 Forestry and National Development

1.4.1 Policy commitments

Uganda's Vision 2040 has a target of restoring forest cover to 24% of Uganda's land area by 2040[51], while NDP II proposes the restoration of forest cover to 18% by 2020[52]. The development of the forestry sector is clearly seen as a national priority. Specific policy commitments are presented in Table 4.

Table 4: National commitments to the forestry sector

Policy level commitments to forestry sector	
	National Development Plan II
a.	Develop a National REDD+ Strategy and costed action plan.
b.	Develop a Forest Emissions Reference Level and a Forest Reference Level.
c.	Develop a robust and functional National Forest Monitoring System for the monitoring and reporting of the REDD+ activities included in the REDD+ Strategy.
	National Forestry Policy
a.	The permanent forest estate …. Protected and managed sustainably (forestry on government land).
b.	The development and sustainable management of natural forests on private land will be promoted.
c.	Profitable and productive forest plantation businesses will be promoted.
d.	A modern, competitive, efficient and well-regulated wood and non-wood processing industry will be promoted in the private sector.
e.	Collaborative partnerships with rural communities will be developed for the sustainable management of forests.
f.	Tree-growing on farms will be promoted in all farming systems, and innovative mechanisms for the delivery of forestry extension and advisory services will be developed.
g.	Uganda's forest biodiversity will be conserved and managed in support of local and national socio-economic development and international obligations.
h.	Watershed protection forests will be established, rehabilitated and conserved.
i.	Urban forestry will be promoted.
j.	The government will support sustainable forest sector development through appropriate education, training and research.
k.	Innovative mechanisms for the supply of high quality tree seed and improved planting stock will be developed.
	National Forest Plan (2013)

[51] GoU (2010) *Vision 2040.*
[52] GoU (2014) *National Development Plan II.*

a. Program 3: Restoration and conservation of natural forests.
b. Program 4: Forest product processing and value addition.
c. Program5: Promotion of Urban Forestry.
d. Program 6: ICT in forest management and advisory services.
e. Program 7: Forestry Education and Training.
f. Program 9: Supply of quality tree seeds and planting materials.
g. Program 10: Forest sector institutional development and coordination.
h. Program 11: Forest law enforcement and forest governance.
i. Program 12: Forest financing and resource mobilization.
j. Program 13: Forest certification.

1.4.2 Lessons from other forestry Programs

Several Programs in Uganda have supported forest protection, forestry development, integrated land management, decentralized forestry management, participatory forestry management and support for forest-based industries and enterprises. To increase the chances of success in the FIP, lessons from such interventions in the past were applied in Program design and will inform implementation. Some of the relevant experiences and lessons for FIP are summarised in Box 5.

Box 5: Lessons for FIP from past/on-going forestry Programs

1. Managing large scale landscapes

The Farm Income Enhancement and Forestry Conservation Project (supported by AfDB), Water Development and Management Project (supported by IBRD/WB) and River Rwizi Catchment Project (supported by GIZ) all provide useful lessons for FIP:

a. **Coordination and planning:** Successful implementation relies on many partners within a complex project structure. This can be time-consuming and occasionally overwhelming for the project coordination unit (PCU). Implementation through local government requires close supervision and guidance, because work plans are usually prepared by the districts, meaning that local priorities are not always well reflected and stakeholders lack ownership.

b. **Complementarity of activities:** While individual projects may be intended to build complementarities between components, implementation tends to be dispersed and expected synergies become difficult to organize because of competing institutional mandates and poor harmonisation of activity schedules.

c. **Communication:** Although projects have the potential to generate valuable lessons for up-scaling, in the Programs mentioned there were inadequate communication strategies to take up this opportunity.

2. Promoting wood biomass for energy

The use of biomass for energy constitutes the biggest demand for forest products by quantity[53]. Woodfuels are mostly produced from open access woodlands where resource costs are minimal. Biomass from plantations is currently used at very limited scale, owing to the higher costs for the resource and transactional costs avoided by actors in informal value chains.

Past projects have focused on promoting efficient conversion technologies, incentives for compliance with energy policies and the development of woodfuel plantations, with varying degrees of success. The performance of these initiatives has been affected by cost and viability of new technologies as well weaknesses in regulating biomass energy generation and utilization. In short, improved charcoal kilns and woodlots for growing woodfuel have not been effective solutions.

[53] Unique Forestry and Landuse GmbH (2016). *Sustainable production and use of woody biomass for energy in Uganda. Pre-feasibility study for a GCF funding proposal.* Owen M (2016). *Review of Experiences from the Woodfuel Sector to Inform FIP Investment Priorities. For the Forest Investment Program, Uganda*.

3. Providing Incentives for increasing investment in forestry

The Sawlog Production Grant Scheme (SPGS) supports commercial tree planting by providing technical assistance and financial incentives. By 2014, 48,000 ha of timber plantations had been established with SPGS support, with an estimated additional 30,000 ha planted independently as investors gained confidence in forestry. The following lessons from SPGS can inform FIP design:

a. **Sustainability of investments:** SPGS demonstrates that working with the private sector ensures sustainability of the profit-driven actions. Private tree farmers have successfully replicated SPGS standards and scaled up plantation establishment. The SPGS grants have provided a stimulus for investment in forestry.

b. **Business management model:** SPGS has been managed like a private sector entity. It is responsive and supportive of client needs (e.g. better support to value chains in Phase 3).

4. Decentralised forestry management

Since 2004, forestry resources in Uganda have been managed under a two-tier system: central management of CFRs by NFA and forests in wildlife conservation areas by UWA, alongside management of local forest reserves and community forests by DLGs. Experiences from this management structure include:

a. **Mandate over forestry resources has remained fragmented, resulting in avoidable forest loss.** DLGs have no specific role in the management of CFRs in their districts, so their potential contribution to law enforcement and governance of CFRs has been under-utilized. At the same time, the NFA has not supported the protection of local forest reserves as they are seen as the responsibility of DLGs. Forests have suffered as a result.

b. **Conflicting institutional mandates over forest land:** There are many conflicting mandates but the most notable arises from the National Forestry and Tree Planting Act (2003), which gives NFA and DLGs the mandate to manage central and local forest reserves, respectively, while Article 239 of the Constitution of Uganda and Section 49 of the Land Act empower the Uganda Land Commission to manage all government land. In this contradictory governance environment, the Uganda Land Commission has given away forest land against the will of NFA and DLGs.

c. **Political interference in forestry institutions:** Political interference has negatively affected forestry management at all levels, with populist decisions sometimes over-riding best technical practice.

5. Markets and value chains

There is growing interest in the establishment of tree plantations on government and private land in response to market demand for tree products for construction (sawn timber, poles, scaffold, furniture) and energy (firewood and charcoal for homes, institutions and small businesses such as bakeries and brick burners). Unstable wood and timber markets with unpredictable prices can make forestry a risky investment for private land owners, however. **Stable markets and predictable incomes** from forestry are vital in attracting investment from commercial tree farmers.

1.5 Synergies with REDD+ process and strategies

Uganda's REDD+ process is well underway and the key elements of REDD Readiness will be completed by June 2017. These include the National REDD+ Strategy and Action Plan, Reference Scenario, FERL[54], System for Measurement, Reporting and Verification (MRV), as well as REDD+ implementation tools (Environmental and Social Management Frameworks, Feedback and Grievances Redress Mechanism, and Benefit-Sharing Arrangements). The process is being supported by the Forest Carbon Partnership Facility (USD 3.6M), Austrian Development Cooperation (USD 890,000) and the UN-REDD National Program (USD 1.8M), with government

[54] Uganda made the first submission to UNFCCC in January 2017.

co-funding of USD 1.1M[55]. A request for an additional USD 3.75M from the FCPF Readiness Fund was approved in May 2016.

Uganda's FIP has been designed to provide support to early actions in REDD+ implementation, bridging the gap between the REDD+ readiness process and results-based payments.

1.6 Synergies with Pilot Program for Climate Resilience

FIP has been designed concurrently by MWE with Uganda's Pilot Program for Climate Resilience (PPCR). The objective of PPCR is to mainstream climate change into Uganda's vulnerable catchments, urban areas and institutions through increased resilience of communities most exposed to climate variability and change. PPCR will focus on: i) catalyzing investments for improved rural resilience and food security; ii) improving resilience of urban communities and infrastructure; and iii) strengthening the capacity to manage climate variability and change.

Joint FIP & PPCR investments at national level aim to strengthen institutional and policy performance, creating an environment for supporting landscape investment actions, while joint investments at landscape level aim to i) reduce emissions from deforestation and forest degradation through rehabilitation, restoration and protection of targeted natural forest ecosystems and water catchments; ii) support ecotourism and value addition to products of forest based livelihoods enterprises; and iii) promote integrated catchment management approaches to build resilience of ecosystems and livelihoods to climate change.

1.7 Stakeholders engaged during FIP preparation

A Stakeholder Engagement Strategy (SES) was designed for the FIP design process[56]. The Strategy ensured that forestry resources stakeholders effectively contributed to the formulation of the FIP by facilitating their participation at all levels and across sectors and objectively listening to their views and inputs. The SES provided MWE, stakeholders and partners in forestry an effective structure for engagement, recognizing that such involvement is critical for strengthening ownership and relevance of FIP investments.

The SES identified the stakeholders and suggested engagement approaches. They were then engaged through face to face meetings, focus group discussions, dialogue platforms and workshops (at local, district and national levels), and via electronic communications at successive stages of the design process. Information generated from Regional stakeholder workshops may be found at www.mwe.org; *Reports on Stakeholder Consultations forums (meetings, workshops*)

Stakeholders were engaged at various stages including:

a. **Preparation of Uganda's Expression of Interest.** The Expression of Interest was endorsed by the National Climate Change Advisory Committee (NCCAC) in March 2015. Its preparation involved lead institutions in the forest sector and development planning: FSSD, the Directorate of Environment Affairs (DEA), Climate Change Department (CCD) at MWE, NFA and Ministry of Finance, Planning and Economic Development (MoFPED).

[55] GoU (2016): *REDD+ Annual Report to FCPF (July 2015-June 2016).*
[56] www.mwe.org: FIP Stakeholder Engagement Strategy

b. **Joint Missions**: These included a joint FIP and PPCR Formulation Mission (October 2015), FIP and PPCR Technical Mission (March 2016); Joint FIP and PPCR Missions (June and October 2016; March 2017) involving WB, AfDB, FAO, government ministries and agencies, private sector, NGOs/CSOs and special interest groups. From these missions, the Government of Uganda and the MDBs agreed on FIP priority themes and investment areas, as detailed in the mission Aide Memoires.

c. **Identification of FIP priorities**: Consultations on FIP priorities involved:
   i. Lead ministries and agencies: MWE, FSSD, Ministry of Energy and Minerals Development (MEMD), Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), Ministry of Lands, Housing and Urban Development (MLHUD), NFA, UWA, National Planning Authority (NPA);
   ii. Local governments and forestry sector players in Lake Albert, Lake Kyoga and Upper Nile WMZs, as well as stakeholders in Central Region/Kampala;
   iii. Private sector representatives and national NGOs/CSOs;
   iv. Forest-dependent people around Mgahinga, Bwindi, Semuliki and Mt. Elgon National Parks and Echuya and Mt. Kadam, Napak CFRs; and
   v. CSO fraternity convened by Environmental Alert (an NGO).

d. **Due diligence and approvals**: Four meetings of the National Technical Planning Committee and three meetings of the NCCAC provided technical and policy guidance and endorsement of the FIP document.

The FIP formulation process engaged with 879 individuals in total[57], comprising 127 (14.5%) from central government Ministries, Agencies and Departments, 329 (37.5%) from Local Governments, 87 (9.9%) from CSOs/ and the private sector, and 334 (38%) IPLCs. 222 (25%) were females. Annex 9.

Stakeholders recommended three priority areas for FIP investment:

a) Forest governance and institutional capacities;
b) Integrated landscape management; and
c) Forest utilization.

These priorities have been elaborated into the three Investment Projects (IPs) presented in section 6 and elaborated in more detail in Annex 1.

[57] www.mwe.org Reports on Stakeholder Consultations forums (meetings, workshops)

2. POLICY AND INSTITUTIONAL FRAMEWORK

2.1 International policy regimes, conventions and commitments

Conventions and international commitments: Uganda is a signatory to the following conventions applicable to forestry: Paris Climate Change Agreement, Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species (CITES), UN Convention to Combat Desertification and UNFCCC.

Fulfilling national obligations to both regional and international commitments could be enhanced by i) strengthening institutional capacity to engage in regional and global forums and processes, ii) strengthening coordination of programs and initiatives supported by the respective conventions and regional initiatives, and iii) financing Uganda's obligations to regional initiatives and international conventions.

Regional Initiatives: Uganda participates in regional initiatives under the auspices of East African Community, Inter-Government Authority on Development, Greater Virunga Trans-boundary Cooperation and Nile Basin Initiative, among others. These initiatives tend to focus on trans-boundary natural resources management, law enforcement, trade in natural resources products, production standards and information management. Through these programs, forestry resources feature among the targeted areas for regional collaboration. Uganda has expressed commitments under the Bonn Challenge and AFR 100 (Section 1.1.4). There are concerns about limited financial and technical capacities to effectively engage in these processes.

Priorities: FIP investments seek to strengthen the capacity of focal institutions to adhere to the terms of these conventions as a means to enhance Uganda's performance in international and regional forums and processes.

2.2 Forestry Policy, Legislation and Related Regulatory Frameworks

Uganda has well developed legal and policy frameworks governing the forestry sector:

a. **National policy:** The Constitution of Uganda (amended 2005) is the supreme framework legislation for forest management. The Constitution recognises forests as natural assets for protection.

b. **Forestry policy and legislation**: The National Forestry Policy (2001), National Forestry and Tree Planting Act (2003) and National Forest Regulations (2014) provide the principal policy and legal framework for protection, sustainable use and development of forestry resources.

c. **Subsidiary legislation:** Other laws that relate to forestry management include the Wildlife Act (cap 200), Local Government Act (1998), Land Act (cap 227) and the National Environment Act (cap 153).

The relevant policy and legal provisions enshrined in these instruments are highlighted in Annex 7. They provide an adequate foundation for FIP implementation and articulate institutional mandates at national and district levels, while supporting stakeholder engagement in forestry governance and forestry resource development and utilisation.

The following challenges have nevertheless been identified with respect to policy and regulatory provisions:

a. Weak enforcement and compliance with forestry policies, laws and regulations.
b. Poor forestry governance and coordination among different sectors and stakeholders.
c. Difficulties harmonizing decentralised mandates with forestry management needs.
d. Inadequate financing of the forest sector.
e. Competing policies for economic uses of forest resources and forest land.
f. Inadequacies of policy and legal provisions for addressing emerging forestry issues, e.g. carbon rights, benefit sharing under REDD+.

In response to these challenges, FIP prioritises forestry policy governance and performance through investments that seek to strengthen policy implementation and regulation, forestry governance and sector coordination, generate reliable data and information on forestry, develop a National Chart of Accounts for forestry and promote development of technical forestry skills.

2.3 Institutional mandates, roles and responsibilities in forestry sector

Mandated institutions: The mandate for management and development of Uganda's forests and forest resources falls to MWE, through its FSSD, which is responsible for formulating policies, legislation and standards. The NFA manages CFRs, while forests lying within wildlife conservation areas are managed by UWA. DLGs manage Local Forest Reserves through District Forestry Services (DFS) and also provide advisory services to the owners of private forests.

Other ministries, departments and agencies with roles related to forests include the National Environment Management Authority (NEMA), Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), Ministry of Energy and Mineral Development (MEMD), Ministry of Land, Housing and Urban Development (MLHUD), Ministry of Finance, Planning and Economic Development (MoFPED), Ministry of Tourism, Wildlife and Antiquities (MTWA), Ministry of Local Government (MoLG) and universities, training and research institutions. Highlights of institutional mandates are presented in Annex 7. Although institutional mandates are well defined within the forestry policy, coordination is not adequate and synergies are not optimized.

Other stakeholders: There are many diverse stakeholders within the forestry sector, including international/regional/national and local NGOs and CSOs, private sector players and land owners and communities. NGOs/CSOs at landscape level are engaged in rural development, sustainable agriculture, soil and water conservation, sustainable land management, forest conservation, energy conservation, promotion of renewable and alternative energy, biodiversity-based enterprises and ecotourism development. Some also engage in advocacy and lobbying for good governance and policy reform.

Institutional mandates, roles and responsibilities during FIP formulation and implementation: FIP formulation has been led by MWE and coordinated and supported by existing planning and coordination structures, including the NCCAC, the Joint Sector Review and the Environment and Natural Resources Sector Working Group (ENR-SWG). Diverse stakeholders at national and subnational levels (including forest-dependent people and local communities) have contributed (section 1.7). Implementation arrangements are detailed in section 6 and Annex 1.

Challenges: The institutional landscape for forestry resources management in Uganda is strong, save for the private sector. However, weak institutional capacities (due to inadequate human resources and skills, budgets, management procedures and systems, inter-institutional collaboration and partnerships) undermine the performance of mandated institutions and effective participation by stakeholder institutions.

Priorities: FIP investments will build on on-going forestry programs, sector coordination processes and initiatives, and will focus on i) strengthening forestry governance, ii) strengthening institutional capacities for policy implementation and coordination, iii) strengthening capacity for training and skilling manpower at 'technical level', iv) developing an efficient and sustainable forest industry, and v) developing new markets for products from sustainably managed forests.

2.4 Assessment of sector performance and constraints

Performance: The overall performance of the forestry sector has been weak[58]. The mandate to protect, develop and regulate the utilization and trade in forest resources, as well as to coordinate the numerous stakeholders active in forestry and provide extension services, has been poorly delivered. This is attributed to low institutional capacities due to inadequate funding, staffing levels and skills, management systems and political processes, at both central and district levels.[59]

Priorities: FIP investments will improve forestry sector performance by strengthening governance (policies, laws, regulations, enforcement, forest protection, stakeholder engagement and sector coordination) and by skilling technicians to support wood value chains and value addition. The other priorities regarding institutional capacities are addressed in section 6.

[58] Forestry resources management under Wildlife Policy/Wildlife Protected Areas has performed better.
[59] MWE (2014) *Assessment of Capacity for NFA and FSSD.*

3. OPPORTUNITIES FOR GREENHOUSE GAS ABATEMENT

3.1 Uganda's Vulnerability to Climate Change[60]

Vulnerability: A combination of high exposure and high vulnerability makes Uganda one of the countries at highest risk from the impacts of climate change[61]. The anticipated changes include increasing temperatures, increased frequency and intensity of rainfall, heatwaves, droughts, floods and storms. Uganda's temperature is likely to increase on average by up to 1.5°C in the next 20 years and up to 4.3°C by the 2080s. Predictions indicate an increase in rainfall of 10–20% over most of the country, with a decrease expected in the semi-arid cattle corridor. Uganda's CO_2 emissions are low, however, offering opportunities for green approaches to industrialization, electricity generation and REDD+ that have potential for GHG abatement

GHG Emissions: Uganda lacks data on non-CO_2 emissions such as methane (CH_4), carbon monoxide (CO) and nitrous oxide (N_2O)[62]. Emissions of these gases are mostly attributable to wildfires in rangeland and woodland formations.

The GHG inventory[63] for Uganda, using 2000 as the base year, estimated that agriculture, land-use, land use change and forestry together contributed 10,711 Gg (91%) of national (11,759 Gg) GHG emissions, with forestry contributing 7,360 Gg. GHG emissions are 8.15 million tCO_2/year from deforestation and 821,415 tCO_2/year from degradation, alongside a gain of 699,000 tCO_2/year from conservation and 225,219 tCO_2/year from sustainable management of forests (Figure 11).

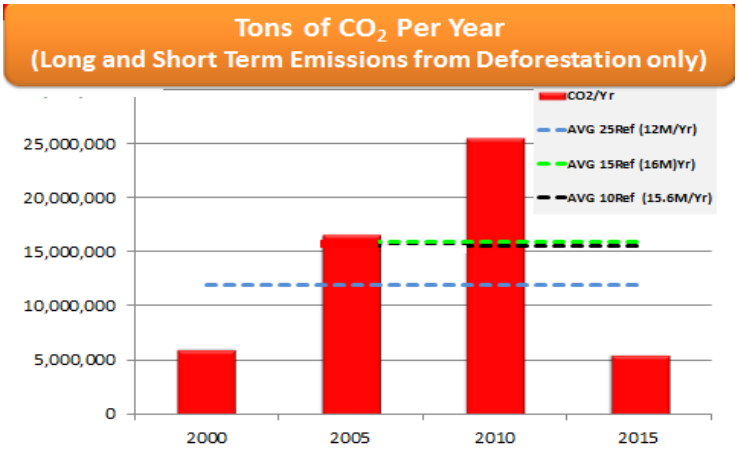


Figure 11: Sources of CO_2 Emissions in Uganda

3.2 NDC contribution to emission reductions or avoidance / enhancement of carbon stocks[64]

Uganda's NDC makes forestry one of its pillars for both adaptation and mitigation (Box 3).

[60] Uganda Second National Communication to the UNFCCC (Oct 2014).
[61] World Bank (2013) *Report No. 101173-UG.*
[62] Uganda 1st Submission of FERL to UNFCCC (January 2017)
[63] Ibid. Table ES1 (p.28).
[64] MWE (2015) *Uganda's Intended Nationally Determined Contribution.*

3.3 REDD+ priority options that will contribute to emission reductions or avoidance / enhancement of carbon stocks and NDCs

FIP Approach: Uganda's approach to FIP is to address drivers of deforestation and forest degradation; and to remove barriers to conservation of forest carbon stocks, sustainable forest management and enhancement of forest carbon stocks at a scale that creates transformation for target beneficiaries and landscapes, while delivering significant GHG emission reductions or avoidance / enhancement of carbon stocks and sustaining the sector's contribution to national development.

Since agriculture, land-use and land use change together contribute 91% of national GHG emissions, the sector provides opportunities for significant emission reductions. Uganda's NDC states that "Forestry[65]…… *measures will reverse the trend of deforestation and convert the Land Use and Forestry sector from a source of net emissions (approximately 8 $MtCO_2e$ in 2030 under business-as-usual) to a source of net removals (approximately 11.7 $MtCO_2e$ in 2030 under the NDC). The estimated range of net emission reductions compared to business-as-usual in 2030 is between 16.9 and 22.2 $MtCO_2e$ / yr".*

REDD+ Options: Uganda is currently consulting on a number of strategic options for addressing the drivers of deforestation and forest degradation, including opportunities for avoiding emissions and sequestering carbon through sustainable management of forests, conservation of forest stocks and enhancement of forest carbon stocks (Annex 4). The draft REDD+ Strategy Options Assessment makes the following observations with regard to the drivers of deforestation and forest degradation:

a. When excluding livestock free-grazing (huge emissions) from the calculations, wildfires constitute the biggest part of annual carbon emissions in 2015. Roundwood harvesting and wood energy extraction from natural forests is the third and fourth largest individual drivers of deforestation and forest degradation, before small-holder agriculture and large-scale commercial farmland.

b. Each strategic option will add to the mitigation capacity in its own manner, but the main idea is to stop use of wood coming from natural forests and to replace it with wood coming from plantations, improve the efficiency of wood use, promote renewable forms of energy and reduce wildfires. The draft strategic options were developed so that they all have negative marginal abatement cost coefficients. This means that these options will be financially viable and the beneficiaries will need carbon financing to catalyse their investments – especially on start-up capital. Some of the sub-options have low initial investment needs (i.e. below USD 100 for households), while the cost for the most expensive sub-option to establish goes up to USD 1,500. The sub-options with the lowest initial investments could potentially be targeted at all rural households.

Uganda is also discussing how to remove gaps in the policy and legal framework to allow full and effective implementation of measures and actions to adequately address the drivers of deforestation and forest degradation. Based on the policy, legal, regulatory and institutional gaps identified, the following proposals are being considered:

[65] Uganda's Intended NDC, p. 18.

a. Ensure full and effective implementation of current policies and laws.
b. Introduce specific legal provisions that define carbon rights and elaborate procedures for their registration.
c. Amend the National Forestry and Tree Planting Act to introduce legal provisions for the role of local governments in the management of forestry resources.
d. Introduce legal provisions on REDD+ Benefit Sharing Arrangements.
e. Amend legislation to provide for the application of Collaborative Forest Management (CFM) to all forest types including private and community forests.
f. Amend the land law to remove recognition of competing interests over the same piece of land[66].
g. Revise the National Environment Act to ensure that REDD+ disputes are included on the list of disputes that may be handled by the Environmental Tribunal.
h. Operationalize Forestry Committees established under the National Forestry and Tree Planting Act.

3.3.1 Opportunities for reducing emissions from deforestation

Deforestation is a significant GHG source for Uganda. Initial assessments[67] indicate that annual GHG emissions from deforestation are in the range of 12 to 17 $MtCO_2e$. Because carbon stocks per hectare in forests are high compared to farm land or other land uses, avoided deforestation achieves the maximum mitigation per hectare compared to any other intervention.

3.3.2 Opportunities for reducing emissions from forest degradation

Although national levels of forest degradation are still being assessed, 35.6 $MtCO_2e$ have been estimated to have resulted from timber harvesting, charcoal and firewood production, fires and peat burning (wetlands and forested wetlands) between 2001 and 2013. This figure compares well with the 6.3 $MtCO_2e$ in 2000 from land remaining as forest but degraded to lower stock biomass categories[68]. The potential for reducing emissions by reducing forest degradation is nearly twice that offered by reducing deforestation, and investments in addressing drivers of forest degradation can also foster significant sustainable development benefits.

Reducing forest degradation must address both protected areas and privately owned forests, though the latter offer the greatest opportunity to contribute to livelihoods. Interventions would include addressing aspects of fire management, compliance with management plans of protected areas and wood and charcoal value chains, allowing for participation of both government (especially local government) and the private sector (which at the production stage is synonymous with community) in these value chains.

3.3.3 Opportunities for emission avoidance or sequestration

There are considerable opportunities for GHG emission avoidance and/or sequestration through sustainable management of forests, conservation of forest stocks and enhancement of forest carbon stocks. In this sub-category, protected areas offer the greatest opportunities, with a potential of 13.6 $MtCO_2e$ (compared to 7.9 $MtCO_2e$ on private lands). Priority actions include:

[66] The Land Act recognizes competing interests of lawful/bona fide occupants and registered land owners on the same piece of land which, if not handled well, has the potential to trigger conflicts and grievances.
[67] NFA (2016).
[68] Uganda Second National Communication to the UNFCCC.

a. Management for conservation of 570,000 ha of central and local forest reserves and forested national parks[69], with the potential to sequester 1.3 $MtCO_2e$ annually.
b. Strict sustainable management of 3.5M ha of forested national parks, central and local forest reserves, by implementing functional management plans[70].
c. Natural regeneration of 500,000 ha of forested national parks, central and local forest reserves[71], with the potential to sequester 450,000 tCO_2e annually.
d. Assisted natural regeneration of 1.8M ha of forested national parks, central and local forest reserves[72], with potential to sequester 800,000 tCO_2e annually.
e. Afforestation and reforestation of 450,000 ha of central and local forest reserves[73], with potential to sequester 9.6 $MtCO_2e$ annually.
f. Maintenance of 62,000 ha central and local forest reserves already restored as plantation[74], with the potential to sequester 1.3 $MtCO_2e$ annually.

There are also significant opportunities for tree cover restoration on agricultural land:

a. 12.98M ha[75] of agricultural land restored through agro-forestry, with potential to sequester 4.8 $MtCO_2e$ annually.
b. 3.2M ha[76] of agricultural land restored through agro-silvo-pastoral practices, with potential to sequester 1.2 $MtCO_2e$ annually.
c. 45,000 ha[77] of plantations on private land, with potential to sequester 1.9 $MtCO_2e$ annually.

Through sustainable management of forests, the following opportunities are envisaged:

a. Positive stock changes in the short to medium term resulting from implementing sustainability plans for all protected areas, and to a lesser extent for forested areas outside protected areas.

[69] For UWA this corresponds generally with the land cover class 'Tropical High Forest', but for NFA and local governments it also includes areas where other objectives of management are being considered but whose objectives allow for the mandatory water catchment objectives. 0.63 Mg/ha was used as the mean rate of increase (considering only above-ground biomass) from: Taylor D, Hamilton AC, Lewis SL & Nantale G (2008) *38 years of change in a tropical forest: Plot data from Mpanga Forest Reserve, Uganda*. The assumption is that the THFs in this category are above 20 yrs (which is the case).
[70] This potential is subject to availability of functional management plans and refers to areas under NFA and UWA that would qualify for being managed sustainably. However, some areas under NFA are also managed by UWA under the joint management arrangement (and need to be subtracted from the total so that there is no double counting).
[71] Represented by the land-use cover 'woodland'.
[72] Represented as 25% of the land-use cover 'non-forest'.
[73] Represented by the land-use cover 'non-forest'. To understand it well, one needs to consider all the other land categories (grassland, bush land) that are not directly sub-divided. For NFA, this area qualifies to a large extent as area that could potentially be subject to afforestation / reforestation. But it could also include wetlands, water and impediments (which should be found and subtracted).
[74] Corresponds with the existing plantation areas.
[75] Corresponds with land-use cover 'farmland/subsistence/commercial farmland' but they are currently included as part of the 'non-forest'. To separate it from other categories of non-forest, we use a proportion 80% agricultural land and 20% bushland. Emission factor from FREL team estimate (Vesa L, Begumana J, Tumwebaze SB, Nteza D, Tavani R (2016) *Forest Emission Factors calculations and preliminary results using historical datasets - the National Forest Inventory in Uganda*) which is lower (by a factor of 4) than the global average for agroforestry systems. Values for the mean annual rate of increase for the carbon are partly obtained from: Zomer RJ, Neufeldt H, Xu J, Ahrends A, Bossio DA, Trabucco A, van Noordwijk M, Wang M (2016) *Global Tree Cover and Biomass Carbon on Agricultural Land: The contribution of agroforestry to global and national carbon budgets.* Scientific Reports 6, 29987. Geospatial data available online via: www.worldagroforestry.org/global-tree-cover/index.html
[76] Ibid.
[77] This corresponds with the existing plantation areas.

b. Improvements in human well-being which will increase the demand for harvested wood products and their value chains, and will benefit productive forests (including for natural wood products). A conducive incentive regime will favour sustainable production and conversion of this biomass[78] into a range of products and energy. Benefits will result from contributions to GDP, mitigation and employment.

[78] Unique Forestry and Landuse GmbH and Climate Focus (2016). *Harnessing the Potential of Productive Forests and Timber Value Chains for Climate Change Mitigation & Green Growth: Opportunities for Private Sector*. In preparation.

4. CO-BENEFITS FROM FIP INVESTMENTS

4.1 Socio-economic co-benefits

A: Livelihoods

FIP investments **linking forestry and livelihoods** (IP1 and IP2) at landscape level include sustainable forest production processes, forest watershed/landscape management and restoration and sustainable catchment management. These investments will ensure sustained provision of forestry goods and services to support livelihoods in the targeted landscapes. These investments will result in increased access and use of forest resources by forest-dependent people and local communities in a sustainable manner, increased opportunities for income from non-timber forest goods and services, and reduced vulnerability of rural communities, women, youth and vulnerable people from the effects of climate change (floods, soil erosion and water scarcity, among others).

FIP investments in **sustainable use of forest resources and conservation of priority areas** will also promote eco-tourism, which contributes to livelihood improvements through income generated from employment and community-based eco-tourism enterprises.[79]

FIP investments in **forest governance and participatory forest management practices**, including for indigenous peoples, will create an enabling environment for sustainable and secure access to and use of forest resources by all, including women.

There is a close **relationship between livelihoods and forest-resources**. An estimated 24 million people in Uganda are classified as 'forest-dependent', relying on forests to support their basic needs and livelihoods[80]. The forestry sector provides resources that support the national economy and sustain the livelihoods of the majority of rural Ugandans in the form of energy resources (charcoal and firewood), timber and employment in forestry industries, forest-based tourism, forest product value chains, wild foods and medicines.[81]

The forest sector is an **important employer**, especially in rural areas. The GoU estimates that the forest sector employs about 1 million people, 100,000 of them in the formal sector[82]. During the period 2004-2007, 21,000 ha of plantation were established leading to an additional 10,000 permanent jobs and another 15,000 part-time jobs, which translates into an economic value of UGX 20 billion (USD 12.1M).[83] Reducing deforestation and forest degradation will greatly benefit the sector by providing new employment opportunities and improving access to forest resources. It could also reduce the amount of time needed to collect forest resources, freeing up time for women to participate in other labour activities and for children to attend school.

[79] Ahebwa, M. et al. (2015). *Bridging community livelihoods and cultural conservation through tourism: Case study of Kabaka heritage trail in Uganda.*
[80] The World Bank (2012). *Uganda Country Environmental Analysis*.
[81] Kazora (2017). *Reviewing forest sector expenditure and investment in Uganda, 2011-2016.* A 2013 study commissioned by FAO commissioned values forests at more than USD 4 billion per year, almost USD 146 per person. Of this, 72% is used domestically and 29% is cash derived from sales. For an average household, the value of forest products breaks down into USD 290 from fuel, USD 180 from building materials, USD 135 from forest foods, USD 60 from fibre, USD 35 from herbal medicines and USD 30 from timber.
[82] GoU (2001). *Forest Policy.*
[83] Ibid.

Tourism is another sector of growing in importance that provides key employment opportunities. By enhancing forest conservation, reducing deforestation and forest degradation new opportunities can be provided in the tourism sector and provide communities with livelihood alternatives that promote the sustainable use of forest resources, especially where communities are able to participate in and benefit from eco-tourism[84].

Forests house key **cultural and livelihood assets** especially for forest-dependent indigenous people and neighbouring communities. Forests are also important for providing livelihoods for vulnerable groups including landless communities, minority ethnic groups and poor women[85]. Forests also provide key ecosystem services, including water security, climate regulation and resilience and soil erosion control. These services provide important benefits for other key economic sectors and industries, including agriculture and hydropower generation.

As stated in Section 1.2, forest resources are becoming increasingly scarce in some parts of the country due to deforestation and forest degradation, which greatly impacts the livelihoods of forest-dependent people, especially vulnerable groups. This leads to decreasing access and quality of forest resources for both subsistence and income generation. Woodfuel resource are now scarce in some regions, increasing the distance that people have to travel to obtain basic energy. For instance, the average distance travelled to collect firewood increased from 0.73 km to over 1 km between 2000 and 2007[86]. Since women and children are often responsible for the collection of firewood, this has substantial implications on their ability to participate in other labour (both paid and unpaid labour) or to remain in formal education. Deforestation and forest degradation are also having major impacts on several of the main economic sectors in the country, which in turn has a negative impact on livelihoods.

4.2 Environmental co-benefits

A: Promoting REDD+

Many smallholder farmers are faced with declining soil productivity and are susceptible to climate change through increased variability in precipitation patterns and the increasing occurrence of extreme climatic events[87]. Deforestation can exacerbate communities´ vulnerability to climate change and lead to increased food insecurity. By reducing deforestation and forest degradation there are substantial opportunities for enhancing both the quality and quantity of water available for subsistence and productive activities, promoting soil conservation, increasing communities´ resilience to climate change and extreme climatic events and supporting climate modulation. Agroforestry systems can also be promoted which not only support REDD+, but also provide income diversification opportunities to enhance livelihoods.

B: Biodiversity

FIP investment in strengthening forestry policy performance, forest governance, sustainable forest management, forest protection and integrated land and watershed management will contribute address some of the key drivers of biodiversity loss, whilst improving the status of forest biodiversity in the targeted landscapes. FIP investment in the protection and

[84] Ahebwa M et al (2015) *Bridging community livelihoods and cultural conservation through tourism: Case study of Kabaka heritage trail in Uganda.*
[85] Wildlife Conservation Society (2004) *The Value of Uganda´s Forests: A livelihoods and ecosystems approach.*
[86] GoU (2013) *National Forest Plan.*
[87] IISD (2005) *Connecting poverty & ecosystem services – Focus on Uganda.*

management of biodiversity corridors will maintain much-needed connectivity for species dispersal and movements, which are instrumental to their survival.

Status: Uganda is one of the most bio-diverse countries in Africa, containing more than half of Africa's bird species and a wide range of vegetation types including semi-arid woodlands, montane forest and lowland forest. Uganda's tropical forests house 1,259 species of trees and shrubs, 1,011 species of birds, 75 species of rodents, 12 species of diurnal primates and 71 species of butterfly.[88] Four species of primates, two other mammals' species, six bird species and two butterfly species are listed in the IUCN Red Data List[89] as critically endangered[90]. Four species of mammals (Chimpanzee, l'Hoest monkey, elephant, leopard), one species of bird (Grauer's rush warbler) and one species of butterfly (Cream-banded swallowtail butterfly) are listed as "vulnerable". Four species of forest birds (Nahan's francolin, African green Broadbill, Flycatcher and Forest ground thrush) are classified as "rare".[91] There is no complete record of biodiversity status within Uganda's agricultural landscapes.

Trends: There is concern over the downward trends of Uganda's biodiversity. The number of animal species recorded on the IUCN Red List is already high. The rate of biodiversity loss was calculated in 2004 to be 10-11% per decade[92]. On the positive side, some taxa seem to be recovering. For example, populations of chimpanzees, mountain gorillas and elephants have all increased. Mountain gorillas increased from 320 individuals in 2002 to more than 340 in 2014[93]. Since leisure tourism in Uganda is largely nature-based, enhancing biodiversity has strong synergies with the growth of the tourism sector. There are clear incentives to promote the conservation and enhancement of biodiversity in Uganda to boost the tourism sector and the wider economy.

Management concerns: There are concerns regarding biodiversity management in Uganda. These include declining species abundance, whereby some species are becoming less abundant due to over-use (for instance, mahogany tree species), shrinking habitats (for example, wetlands and natural forests) and overall degradation, especially in non-protected ecosystems. Reduced abundance is attributed to unsustainable use of biodiversity resources, habitat loss due to conversion into other commercial uses, and habitat degradation. Additional concerns include local extinctions, proliferation of invasive species, increasing human-wildlife conflict, inadequate data about Uganda's biological resources, as well as weak institutional collaboration among the lead agencies and other stakeholders.

Biodiversity priorities: Given the great value and importance of biodiversity in Uganda, NDP II prioritizes investments in research into the economic, environmental and socio-cultural values of biodiversity, promoting the sustainable use and conservation of key ecosystems, including establishing tourism/green zones/corridors in biodiversity conservation priority areas[94]. The National Biodiversity Strategy and Action Plan II (2015-2025) provide concrete targets[95] which

[88] NFA (2011). *Status of forest biodiversity in Uganda*.
[89] IUCN (2008). *IUCN Red List* of Threatened Species.
[90] NFA (2011). *Status of forest biodiversity in Uganda.*
[91] Ibid.
[92] Ibid.
[93] UWA (2014). *Annual Report.*
[94] GoU (2014); NDP II
[95] NEMA (2016); National Biodiversity Strategy and Action Plan

support NDP II, as well as Uganda´s commitments under the CBD supporting the Aichi Biodiversity Targets.

4.3 Ecosystem co-benefits

A. Forest Governance: FIP investments in Integrated Catchment Management and in **forest governance** (IP1 and IP2) will result in sustained supply of water from targeted landscapes. They will also reduce erosion and siltation which will be valuable for improving the water quality for downstream users, including communities, fisheries and hydropower installations. FIP investment in operationalizing WMZs will also support processes for stakeholder contribution to the management of catchments and water resources. Furthermore, FIP investments will be aligned with on-going national processes such as the Payment for Ecosystem Services (PES) Fund to help target effective investments, and share key information and experiences related to the advancement of PES in forested catchment areas.

B. Water: The majority of major watersheds and catchment areas in Uganda are forested landscapes. Protecting these landscapes therefore provides enormous co-benefits in terms of water for domestic use, industry, irrigation, fisheries/aquaculture, hydropower generation, tourism, water transport and recreation. However, the economic contribution of goods and services towards these sectors is poorly known or weakly assessed. A review is required of current sector statistics and integrating them into natural capital accounting (forest, forest ecosystem accounts) to consistently and systematically link sector assets and flow of benefits to the economic statistics and national accounts.

One study from 2004 conservatively estimates that the total economic value of Uganda´s forests in providing watershed benefits, focusing on soil conservation and water consumption, exceeds USD 17.3M[96]. This is likely to be a significant under-estimate since it excludes other ecosystem services such as erosion and siltation control, and the prevention of eutrophication in downstream fisheries. There is a need not only to update studies on the valuation of ecosystem services in watersheds, but also to value other key ecosystem services in the country such as biodiversity and soil conservation. The role of forests in providing erosion control and in reducing siltation will be of special interest for hydropower generation, as these services are vital for sustaining electricity generating infrastructure. Many countries developing PES are specifically focusing on the provision of these services in hydropower catchment areas. PES programs have been piloted in Uganda[97], notably in the Albertine Rift, and in 2016 the country launched a PES Fund designed to promote conservation and the restoration of natural resources[98].

C. Energy: Uganda´s energy balance is comprised primarily of biomass (92%), followed by fossil fuels (7%) and electricity (1%)[99]. Most of the biomass energy is consumed in the form of charcoal and firewood. The electricity consumed in the country is generated from hydropower (84%), cogeneration from bagasse (4%) and thermal power (12%).[100] The low level of access to

[96] Wildlife Conservation Society (2004): *The Value of Uganda´s Forests: A livelihoods and ecosystems approach.*
[97] Jayachandran et al. (2016): *Cash for Carbon: A randomized controlled trial of payments for ecosystem services to reduce deforestation*
[98] Uganda Biodiversity Trust Fund.
[99] GoU (2015). *Second National Development Plan 2015/16 - 2019/20.*
[100] MEMD (2014) *Energy and Minerals Sector Investment Plan.*

electricity, high tariffs and low generation capacity are among the reasons why most Ugandans use biomass as a source of energy. NDP II has emphasized the need to invest in reliable renewable energy sources to meet the growing demand, and to increase access to electricity. There is a need to improve power generation, transmission and distribution in addition to increasing access to modern sources of energy, including renewable sources[101]. Uganda's energy dependence on woody biomass will continue for the foreseeable future due to population growth, urbanization and an absence of affordable alternatives. Fuel switching is unlikely to take place for the majority of Uganda. Therefore, there is need to increase investments in forest management to sustain essential energy supplies to homes, businesses and industries, and to make the provision of woodfuels an attractive and profitable enterprise for producers, traders and users alike, that becomes part of the mainstream formal economy rather than a quasi-legal informal trade. FIP investment in the protection of catchment forests and integrated land and watershed management also aims to ensure sustained supply of water for hydropower generation. Uganda has an estimated biomass co-generation potential of 1,650 MW[102].

D. Tourism: FIP investment in ecotourism (IP1 and IP2) will strengthen the performance of nature-based tourism and demonstrate the economic value of forests to the economy, and increase benefits to communities participating in (eco-) tourism businesses.

Tourism is an important industry in Uganda, employing over 200,000 people and generating USD 1.7 billion per year in revenue, accounting for approximately 9% of GDP[103]. For each USD 1 spent by a foreign tourist, an average of USD 2.5 of GDP is generated, a greater multiplier than traditional exports[104]. The sector has great potential for further development and has been identified as a priority sector under NDP II. Tourism in Uganda is largely nature-based, with wildlife safaris, gorilla viewing and adventure tourism making up 81% of leisure tourists[105]. The prime destinations are forested landscapes. Six out of Uganda's ten national parks (Mgahinga, Bwindi, Rwenzori, Semuliki, Kibale and Mt. Elgon) are forested and significant portions of the other four are forest habitats. Together with CFRs such as Mabira, Budongo, Bugoma, Echuya and Kasyoha-Kitomi, these represent key tourist destinations for gorilla and chimpanzee tracking, bird watching and mountaineering. These destinations account for a significant portion of tourism revenues from protected areas in Uganda. For example, Bwindi Impenetrable National Park generated over USD 350 million in 2014/15[106].The sector still needs to continue investing in the country´s natural assets. With limited prior investment in protected areas and nature-based tourism, there are needs to improve infrastructure and staff capacities as well as enhance the protection and management of wildlife and ecosystems[107].

4.4 Forest sector governance and institutional capacity benefits

The FIP investment plan is linked to key targets in the National Forest Plan. FIP investment in strengthening policy implementation and coordination, regulation, sector coordination, stakeholder engagement and information management will result in improved governance of

[101] GoU (2015) *NDP II*
[102] Ibid.
[103] Ibid.
[104] World Bank (2013) *Economic and Statistical Analysis of Tourism in Uganda.*
[105] Ibid.
[106] UWA (2014/5) *Annual Report.*
[107] World Bank (2013) *Economic and Statistical Analysis of Tourism in Uganda.*

the forestry sector and improved policy implementation. FIP investments will also build capacities and knowledge through project implementation, providing key insights and experiences on the sustainable use of forest resources and forest landscape restoration in practice. These experiences will be important for informing future policy development, and will support further replication and upscaling of viable investment models.

As stated in Section 2, Uganda has made significant progress in enhancing forest governance and policy in recent years. However, key challenges remain in improving policy implementation and forest law enforcement. This includes the need to strengthen capacities at multiple levels of government on the institutional framework and on the sustainable use of forest resources. These challenges have been identified in the revised National Forest Plan (2011-2021), which aims to overcome these challenges and support a transition in the forest sector towards the sustainable use of forest resources[108].

[108] GoU (2013). National Forest Plan

5. COLLABORATION WITH PARTNERS

5.1 Multilateral Development Banks and other development partners

Uganda's forest sector enjoys support from bilateral and multilateral donors as well as directly-funded Programs through universities, research institutions, NGOs/CSOs and the private sector. Within the forest sector, there are various bilateral donors including the European Union (EU), Austrian Development Cooperation, United States Agency for International Development (USAID), Norwegian Agency for Development (NORAD) and Swedish International Development Agency, as well as multilateral agencies and Programs such as the Global Environment Facility (GEF), United Nations Development Program (UNDP), United Nations Environment Program and United Nations Food and Agriculture Organization (FAO), among others.

Donor support has significantly contributed to the forest sector in form of infrastructure development, institutional development, research and technology development, biodiversity conservation, forest based industries, reforestation and afforestation Programs. Furthermore, donor support is supporting the government's efforts towards sustainable development by supporting activities aligned with NDP II and relevant sectoral strategies.

Donors have developed mechanisms for coordinating their support such as Donor Group on the Environment and Natural Resources and the Joint Partnership Fund under the Environment and Natural Resources Sector. Whilst current cooperation mechanisms are working well, not all donors participate and there is growing concern over fragmentation and the potential for duplication or missed synergies[109].

The FIP investment plan will build on the success of past and current forestry programs, and seek to leverage the on-going and planned programs related to the FIP investments. In this sense, the FIP will help create an enabling environment for the engagement of diverse donors and actors with the planning and scaling up of the activities implemented within the framework of the FIP. The Government of Uganda (GoU) will mobilize financial and technical resources to support the FIP thus requiring stronger institutional mechanisms for coordination which will be supported under IP3 (Annex 1).

5.2 Civil Society

International, national and local NGOs and CSOs are key players in the forest sector, mainly supporting activities constrained by low government funding or not suitable for government agencies. They have tended to focus on research, training, pro-poor approaches, governance, climate change and promoting forestry in the context of socio-economic development.

There is an emergence of NGOs/CSOs networks and alliances at national and local levels that are mainly engaged in promoting forest governance and pro-poor approaches. The Environment and Natural Resources Civil Society Organizations (ENR-CSO) Network and Uganda Forest Working Group are recognized national level platforms for CSO engagement, representing the voice of CSOs in decision-making processes. The capacity of CSOs is often limited by the financial and technical resources available to them at a given time, and by weak coordination mechanisms with other organizations and with government institutions.

[109] Nunnenkamp et al. (2015). *Aid Fragmentation and Donor Coordination in Uganda: A District-level analysis.*

Based on their long-standing experience with pro-poor approaches and forest governance, NGOs and CSOs will play an active role in FIP implementation[110] on aspects of forest governance, forest protection, sustainable forest management and forest-based livelihoods (IP1, IP2, and, IP3). Specific to forest governance, CSOs/NGOs will champion Forest Law Enforcement and Governance (FLEG), and accountability of government institutions and private sector.

5.3 Private Sector

Formal private sector involvement in the forest sector has focused primarily on commercial plantation forestry, mainly for the production of timber and poles, and on nature-based tourism. A study conducted in 2009[111] found that 71% of private sector actors worked with plantation forests, 19% with seedling raising, 5% natural forest management, 4% bee-keeping, 1% ecotourism, 1% medicinal plant production and 1% other activities[112]. The formal private sector is regulated through licences, permits and other legally binding arrangements by the lead government agencies and by authorities responsible for trade and tourism. Broadly, the major challenges faced by the private sector include access to long-term financing in forestry resources development, inadequate incentives to invest in forestry due to perceived or real low returns, and, unfair business competition due to corruption and poorly regulated trade that floods the market with illegal timber, depressing prices.

There is, meanwhile, a massive informal and largely unrecognized engagement by the private sector in Uganda's woodfuels industry. Due to weak enforcement of regulations for the harvesting, processing and transporting of woodfuels, especially charcoal, the industry operates largely outside the official tax net. Yet this forest-based industry is essential in sustaining energy supplies to the country's households, institutions and businesses. An industry that makes such a significant contribution to the national economy and is growing so fast must at some point be brought into the formal economy, and the FIP will support this process of legitimization and formalization through interventions designed to bring sections of the commercial production and trade in woodfuels out of the informal sector and into the mainstream economy. While dedicated plantations for the production of woodfuels have been shown to be economically uncompetitive with other forestry configurations, wood energy can still be a valuable by-product of other land use systems (such as commercial forestry for timber and poles). There are also opportunities to integrate large-scale industrial users of biomass energy into reliable value chains supplied by sustainable forestry operations, from which they can source firewood, charcoal, wood chip or other residues from forestry operations.

Private sector actors generally operate as individual business entities, although private sector associations such as the Uganda Timber Growers Association, Charcoal Dealers and Transporters Association and Timber Dealers Association have been formed around specific areas of interest. These associations aim to increase the collective negotiation on behalf of their members, enhance networking and increase connectivity in the respective value chains and industry-specific knowledge and information.

[110] www.mwe.org: CSO Consultations report (by Environmental Alert)
[111] Global Mechanism (2009). *The challenges of Mobilising Forest Finance in Heavily Indebted Poor Country: Case Study of Uganda.*
[112] ibid

FIP investments in the private sector include private sector-led tourism, development of an efficient and sustainable forest industry[113] promoting development of new markets for forest products and market research and development (IP1, 1P2 and 1P3 – Annex 1).

5.4 Community participation

Forest and other natural resources sector policies set the foundation for community participation in forest development and management. Specifically, they provide the framework for ensuring community participation in the planning and management of protected forests, access to forest resources in protected areas and tree farming. These policies have been implemented through negotiated agreements between communities and UWA (Collaborative Resources Management Agreements, CRM) or NFA (Collaborative Forest Management Agreements, CFM) or local governments at District level. Forest legislation recognizes 'Community Forests' on communal lands. In spite of on-going initiatives such as CRM and CFM, genuine community participation is still viewed as inadequate. Where it has been practiced, the initiative is undermined by weak incentives or inadequate returns for meaningful participation. Lead agencies also lack adequate capacity to promote community participation in all forests countrywide.

FIP investment will build on on-going initiatives with the aim to consolidate or scale up meaningful collaboration between UWA, NFA and DLG in forestry management with communities. FIP will support capacity building efforts for UWA, NFA and DLG and communities to enhance their knowledge and capacities pro-poor and community approaches to the management of forest resources and forest landscape restoration.

[113] Assessment of private sector engagement in FIP investments is on-going. The information generated will strengthen this section.

6. IDENTIFICATION AND RATIONALE FOR PROJECTS TO BE CO-FINANCED BY FIP

6.1 Rationale for FIP

The on-going assessment of strategies for addressing emission from deforestation and forest degradation has identified key drivers and underlying causes for deforestation and forest degradation, as well as related GHG emissions. According to Uganda's first submission of FERL to UNFCCC, deforestation and forest degradation are greatest in woodlands with an average deforestation rate of 100,000ha/yr[114] and less in THF due to uncontrolled harvest of wood in natural forests for firewood and charcoal production, agricultural expansion and pasture improvement for livestock during the period from 1990-2015. Uganda's large tracts of THF are mainly found in the south and south-western part of the country managed as forest reserves and wildlife conservation areas.

Forest-to-farmland conversion is estimated to generate emissions of ca. 800,000 tCO_2per annum. Emissions from deforestation and degradation of THF constitute approximately half of this, emphasizing the need to protect both THF and woodlands better. Doing so will require addressing the primary drivers: agricultural expansion and unsustainable harvesting of woody biomass for energy, as well as the underlying causes: low agricultural productivity, large and fast-growing rural population with no alternative income opportunities, and strong reliance on woody biomass by households and industries.

Vulnerability to climate change and variability of the rural population is high, relying mainly on subsistence rain-fed agriculture for their livelihoods. Vulnerability posed by climate risks is further exacerbated in the semi-arid north-east of Uganda, where the population is particularly poor and thus less resilient to the effects of climate change and variability.

Uganda is predicted to face a **severe shortage of wood in the future**, despite the estimated 90,000 ha of commercial forest plantations existing today. Estimates by NFA indicate that upwards of 20,000 ha of commercial forests will have to be established each year to secure a sustainable supply of industrial wood products. Aided mainly by the SPGS, many medium- and large-sized commercial plantations were established by the private sector. Phase II of the project is estimated to have leveraged approx. USD 25M from private sector for plantation establishment from 2010-2014 over grant funding of approx. USD 9.5M. While investments focus on the provision of logs for sawn timber and poles for construction and transmission, they also produce large quantities of biomass from thinnings and harvesting residue – to date a largely untapped resource. The resource base can be greatly expanded by mobilizing smallholder farmers as providers of sustainable biomass for both woodfuel and industrial roundwood, recognising and legitimising these sources of supply by easing the level of regulatory compliance and providing them with the necessary material and technical support to maximise productivity and returns. Linking smallholder farmers to viable markets poses challenges in changing attitudes and approaches, however, especially among enforcement agents in NFA and DLGs. Investments in production forests therefore need to be accompanied by simplification of regulations to enhance compliance (rather than avoidance) and new

[114] Uganda FERL (1st Submission of FERL to UNFCCC, January 2017)

incentive structures for revenue collection (e.g. by out-sourcing fee collection to private agents). This is predicated on a significant change in attitudes and practice on the part of MWE and its subordinate agencies to accept the legitimacy of owners of farm-grown trees in the supply of wood-based energy, and to accept that past approaches based on increasingly stringent enforcement of complex regulations have not been effective and that new approaches are required.

Over the past two decades Uganda has designed good land and natural resources **policies and regulations** (in particular land, agriculture, forestry, wildlife and water), renewable energy and last but not least, climate change. However, these policies and regulations are often poorly implemented due technical and financial capacity gaps. Strengthening of institutional capacity as well as cross-sectoral and vertical coordination will therefore be central to the investment plan, as will a revision and simplification of regulations to ensure workability and enforceability, given the limited resources of government at district level.

6.2 FIP Objectives, outcomes and approach

6.2.1 FIP Objectives

The core **Objectives** of FIP are to **reduce GHG emissions from deforestation and forest degradation, enhance forest carbon stocks and strengthen forestry governance.** Co-benefit objectives are to (i) reduce poverty through improved quality of life of forest de-pendent indigenous peoples and local communities, (ii) reduce biodiversity loss and increase resilience of forest ecosystems to climate variability and change, and (iii) improve governance of forestry resources.

In line with global objectives and the CIF-FIP target catalytic outcomes, Uganda has defined the **Goal** of the Uganda FIP as: **A low carbon and climate resilient development in the land use**. Uganda's FIP is expected to generate the following impacts: i) reduced deforestation and forest degradation; ii) well-coordinated and governed forestry resources contributing to improving resilience of rural livelihoods and ecosystems to climate change in the targeted landscapes.

6.2.2 FIP Outcomes

The **Outcome** of FIP is (i) Increased direct management of forest resources by local communities and indigenous peoples, (ii) Improved enabling environment for REDD+ and sustainable management of forests, and (iii) access to predictable and adequate financial resources, including, results-based incentives for REDD+ and income from sustainably managed forests.

The FIP has three investment projects towards the delivery of these impacts:

a. **Investment Project 1 (IP1):** Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Albertine Rift.

b. **Investment Project 2 (IP2):** Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Lake Kyoga and Upper Nile WMZ.

c. **Investment Project 3 (IP3):** Strengthening capacity for forestry governance and policy implementation.

6.2.3 FIP Approach

Uganda FIP will be implemented through the following approaches:

a. Joint implementation of FIP and SPCR – delivery of climate change mitigation and adaptation

The FIP and Uganda's SPCR were developed together, reflecting the need to address both climate change mitigation (FIP) and adaptation (SPCR) at the same time. The FIP and SPCR investments have common themes: (i) building institutional and technical capacity, (ii) delivering public goods through integrated landscape management, and (iii) improving livelihoods and resilience to climate change. Furthermore, in order to address two of the key drivers of deforestation and forest degradation (agricultural expansion and the unsustainable use of wood for energy) FIP and PPCR investment targets these drivers and players outside the forest sector. Strategic pillar 1 of the SPCR "Catalyzing investments for improved rural resilience and food security" includes measures aiming at sustainable agriculture and rangeland management, and watershed protection. To strengthen the complementarity of the two programs, IP2 will be implemented jointly, combining forestry and agriculture components, embedded in land use planning and management at watershed level. The FIP and SPCR investments have common themes: (i) building institutional and technical capacity, (ii) delivering public goods through integrated landscape management, and (iii) improving livelihoods and resilience

b. National level investments and investments within landscapes complementing each other

The FIP combines projects implemented at national level which will improve/create the enabling environment for sustainable forest management and forest conservation in Uganda (IP3) with investments implementing concrete activities on the ground targeting forest landscape restoration (IP1 and IP2) at landscape levels. The parallel implementation at different levels will ensure alignment of policy and on-the-ground actions, e.g. in the form of reality checks of any adjustments to policies and regulations through the landscape projects.

c. Focus on private sector and implementation in public-private partnership

Formal private sector and smallholder farmers / communities have been recognized as being very important to the up-scaling of sustainable natural forest management and implementation of commercial forestry on non-public lands. Applying Public-Private Partnership PP approaches, (IP1 and IP2) will focus on the development of wood product markets and value chains (including wood-based energy) starting with formal businesses, and the mobilization of smallholder farmers and communities by linking them to viable forest value chains.

d. Landscape focus

IP1 and IP2 will be implemented in selected landscapes. These landscapes encompass different ecosystems, socio-economic environments and challenges, combinations of which can be found elsewhere in Uganda. Thus they are well suited to design and pilot the implementation of comprehensive sets of activities covering the different land cover and use types, and land tenure and management. Such a comprehensive set of interventions, involving many stakeholders and crossing administrative boundaries requires a high degree of coordination by an institution with regional structures. Thus, the two landscape pilot projects will be implemented through the corresponding WMZ.

e. Incorporation of cross-cutting issues

Secure land tenure and/or forest user rights by communities and smallholder farmers are understood as a pre-condition for investments into sustainable land management including forestry. Accordingly, the landscape projects aspects of land tenure/use rights and gender equality and inclusiveness. Clearly the rural communities will be the main actors in reversing current deforestation and forest degradation trends, therefore this will require that the FIP and REDD+ adopt a people centred approach. People-centred approaches will be critical in private lands as well as protected areas and reserves for long-term sustainability of the protection and restoration efforts.

6.3 Investment projects and transformational changes

The FIP aims to catalyse sustainable use of forest resources, protection of gazetted forests and creating incentives for maintaining natural forest on private land. Pilot projects implemented in the framework of (IP1 and IP2) will help to develop/provide proof of concepts for models that avoid deforestation and forest degradation both within and outside protected forests, restore forest landscapes and biodiversity corridors and contribute to the economy as well as socio-economic development of the people.

The description for each IP includes an overview of the expected transformational changes which will help to prepare the country for results based payment as contribution to the implementation of REDD+. The detailed concept notes are provided in Annex 3.

6.3.1 IP1 (Investment Project 1) and IP2 (Investment Project 2): Landscape Projects

The objective of IP1 and IP2 is to pioneer a more holistic approach to integrating forestry resources development and catchment protection within land management plans and practices at land scape. The two landscape projects will combine investments focusing on climate change mitigation (reducing emissions from deforestation and forest degradation) with investments focusing on climate change adaptation, i.e. increasing resilience of the largely rural population deriving their livelihoods from agriculture and forests in the landscape projects. This combined approach will also help to address two key drivers of deforestation and degradation which are (partly) outside the forest sector: agricultural expansion and unsustainable use of forests for energy. IP1 and IP2 will be implemented jointly under the FIP and SPCR. The combination of measures is seen as a cost effective means to implement REDD+ in Uganda.

A landscape- and people-centred approach is deemed crucial to the successful implementation of REDD+ and FIP in Uganda. Unless the drivers of deforestation (in particular agriculture, fuel wood and charcoal production) can be addressed within the landscape, forests on private land and protected areas will continue to be degraded and deforested to meet the demand for food, incomes and energy resources for the majority rural population. Successful implementation of landscape level planning and management will require the engagement and coordination of multilevel stakeholders and stakeholder groups. The offices of the targeted WMZs will coordinate the implementation of the project. The WMZ structures were established by MWE to implement Catchment Based Water Resources Management approaches and advance IWRM. These structures combine environment and natural resources management mandates and processes for water, forestry, wetlands, rangelands under one structure for ease of combination and complementarity. The WMZ structures operate at local level and catchment levels while having a direct link to national authorities and institutions.

Geographical scope

The landscape projects will be implemented in the Lake Albert, Lake Kyoga and Upper Nile WMZs (Figure 12). These three WMZs were selected for the following reasons:

a. Diverse agricultural and non-agriculture land uses and diverse forest types, which provide a sound basis for integrated landscape management.

b. High potential for carbon abatement and conservation of forest biodiversity.

c. High rates of loss of natural forests and tree cover.

d. High vulnerability to effects of climate change (floods, landslides, drought).

e. Less funded programmes and initiatives (c.f, Lake Victoria Water Management Zone).

The selected landscapes (Figure 12) are briefly described in the following sections. The boundaries of the individual project landscapes will be refined further during project design, taking into account the available budget, forest landscape restoration priorities[115] as well as those priorities identified in various studies[116] commissioned by MWE, and planned or on-going interventions in these landscapes at the conclusion of designing individual projects.

Selected landscapes: Albertine Rift (1) in Lake Albert WMZ, Murchison-E.Madi-Nimule (2) and Kidepo-Agoro Agu (3) in Upper Nile WMZ, Mt. Elgon (4) in Lake Kyoga WMZ. The headquarters of the WMZ zones are in Fort Portal, Lira and Mbale.

Figure 12: Targeted landscapes within the WMZs

[115] GoU/MWE (2015). *Assessment of FRL opportunities for Uganda* IUCN and FAO.
[116] Study topics include Assessment of sites and opportunities for catchment-level investments for adaptation to and mitigation of climate change

A: Lake Albert WMZ

The IP1 will focus on landscapes and catchments within/adjacent to the Uganda portion of the Albertine Rift stretching from Mgahinga to Lake Albert (Figure 13). The Mt. Rwenzori and Virunga mountains and the many lakes are defining features of this landscape in Uganda. The Albertine Rift is considered as one of the global hotspots of biodiversity with many intact areas of THF remaining, but under high pressure. The area has a dense network of national parks, wildlife reserves and forest reserves (natural forest).[117] The proposed boundary of the targeted landscapes aligns with the Albertine Rift Valley. The Rift presents landscapes with diverse agricultural and non-agriculture land uses and diverse forest types, which provide a sound basis for integrated landscape management, high potential for carbon abatement and conservation of forest biodiversity, high rates of loss of natural forests and tree cover and high vulnerability to effects of climate change (floods, landslides) in the highlands areas.

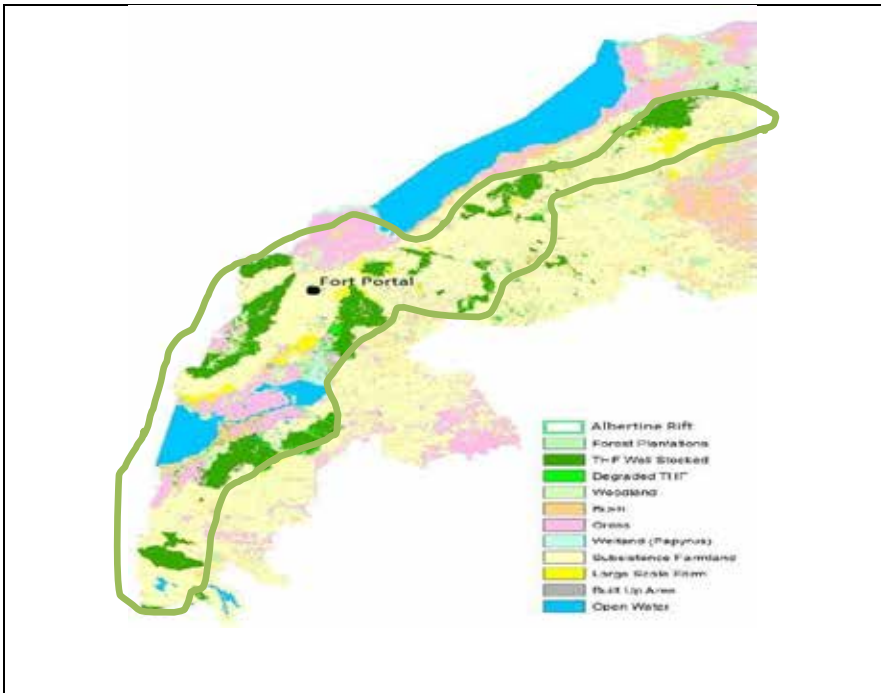


Figure 13: Network of THF in Albertine Rift

There are several on-going conservation Programs of government, local, national and international NGOs working with communities, private sector, local authorities and protected area authorities to protect these high conservation value areas. Nonetheless, the area has some of the highest deforestation rates of THF in Uganda, including in CFRs. The majority of the region has soils and climate favourable for intensive agriculture, but also includes some of the country's most densely populated districts[118].

Climate change vulnerability is comparatively low in the region, with the exception of communities in Hoima where vulnerability is high. Climate-related disasters are heavy, prolonged rains causing landslides in the mountainous areas converted to agriculture.

The region experiences significant economic growth related to the developing oil sector and large scale hydropower projects under development and proposed. These projects are both a

[117] MWE/NFA (2016).
[118] GoU (2015): *National Population and Housing Census 2014.*

threat – economic development resulting in higher pressure on natural resources – as well as an opportunity related to compensation measures and Payment for Ecosystem/Environmental Services (PES). The region hosts high numbers of refugees from DR Congo who put additional strain on natural resource management. In contrary to the other WMZs, no bilateral funding agreements are in place for the development of the Albert Nile WMZ structures.

B: Upper Nile WMZ

The IP2 will focus on the Kidepo-Agoro Agu and Murchison-East Madi-Nimule landscapes in the Upper Nile WMZ This WMZ, which stretches across northern Uganda, contains a large share of Uganda's woodlands which are increasingly threatened by unsustainable use, uncontrolled conversion to farm and rangeland, and frequent fires. The Agoro Agu mountain range bordering South Sudan connecting to Kidepo WR (South Sudan) and NP (Uganda) and the protected areas in the north-west Uganda connecting Murchison via East Madi to Nimule NP in South Sudan are important sanctuaries for biodiversity but are increasingly fragmented by human activities. Figure 14[119] shows conservation and natural resource management options in northern Uganda and indicates the two landscapes to be targeted by IP2. Large parts of the northern Uganda were marked by civil conflict until recently, leading to a recovery of forests in many areas. However, with peace and stability this trend has been reversed and woodlands are now being converted to agricultural and rangeland at an alarming rate. Uncontrolled fires also play an important role in woodland degradation in the region. Despite the increased security and on-going economic development, over 75% of people remain below the poverty line[120]. In combination with the more erratic climate patterns and frequent droughts common to northern Uganda, household vulnerability to climate change is high, in particular in Karamoja (east) and West Nile (west). The two landscapes are also the areas with the lowest rainfall and highest temperatures in the WMZ (semi-arid zones[121]). The eruption of civil war in South Sudan has had negative impacts for the border regions, limiting trade and resulting in a renewed influx of refugees.

[119] Adapted from Nampindo S, Phillips GP and Plumptre A (2005) *The impact of conflict in Northern Uganda on the environment and natural resource management.*
[120] UBOS (2015) *Statistical Abstract 2015.*
[121] MWE (2013) *Water Resources Assessment Report.*

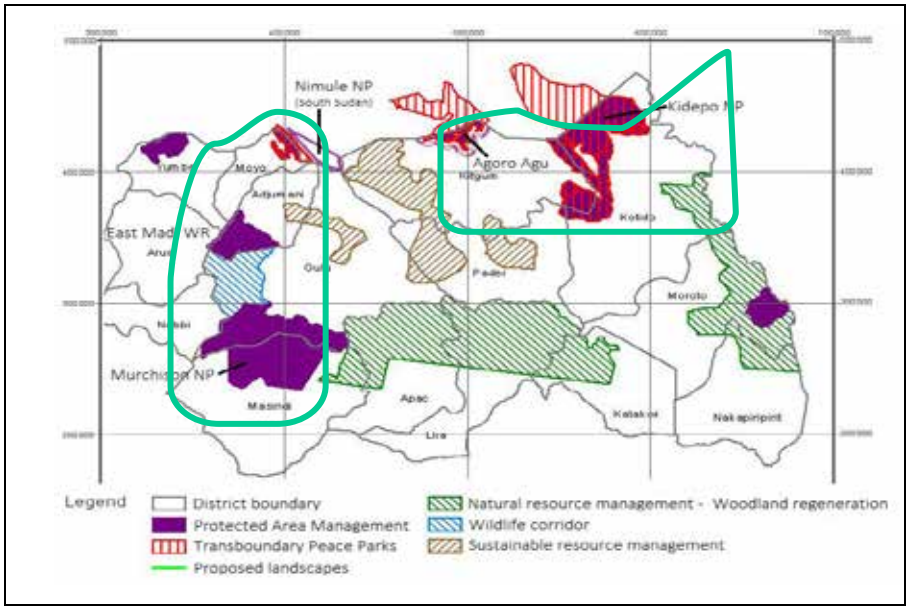
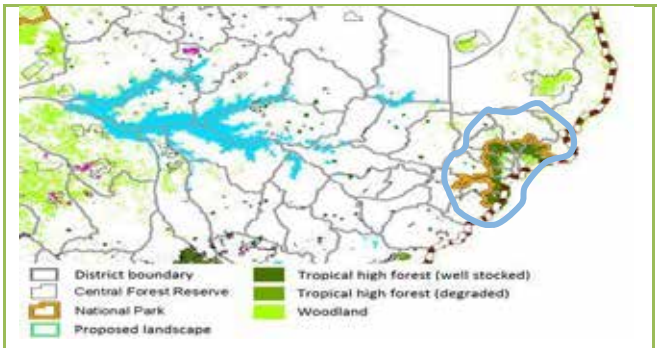


Figure 14: Protected areas and potential landscapes in Northern Uganda/Upper Nile WMZ[122]

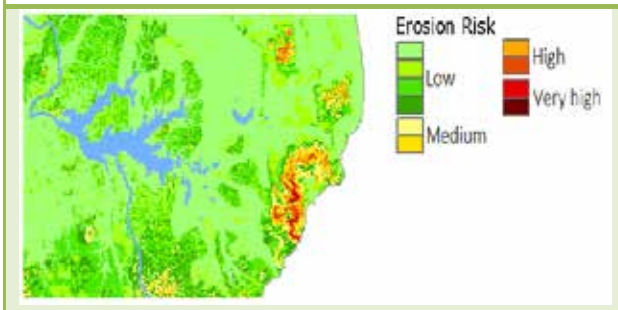
C: Lake Kyoga WMZ

The IP2 will focus on Mt. Elgon landscape. The outstanding geographic feature of the Lake Kyoga WMZ is the many wetlands discharging into Lake Kyoga (Figure 15). The remaining mountainous forest lands, largely in protected areas (Mt. Elgon NP and Namatala CFR), constitute important shelters for biodiversity, and are very important for the replenishment of water resources in lower areas of the watersheds. In the area surrounding Mt. Elgon forest cover is very low resulting in high pressure on the remaining forests within the gazetted areas (Mt. Elgon NP and Namatala CFR). The rough terrain in combination with limited permanent vegetation cover/intensive agricultural use in the densely populated landscape results in high erosion levels. Large, very destructive landslides have occurred several times in recent years. The National Water Resources Assessment (2013) highlights the potential for investments into commercial irrigation schemes and small-scale hydropower plants. However, for either to be sustainable landscape level land use planning is needed, taking into consideration climate change and hazards, the high population pressure, and the important functions of intact wetlands – many of which have already been drained and converted to agricultural uses without planning. Similar to the Albertine Rift trans-boundary efforts to protect and manage resources sustainably are in place such as the Mt. Elgon Regional Ecosystem Conservation Programme under the Lake Victoria Basin Commission of the East African Community. The Programme set up processes and pilots for landscape approach towards restoration and REDD+. These pilots will be up-scaled by this investment project.

[122] Adapted from Nampindo S, Phillips GP and Plumptre A (2005) T*he impact of conflict in Northern Uganda on the environment and natural resource management.*



Potential boundary of a landscape around Mt. Elgon including part of the surrounding lowlands (left).



The risk of erosion and landslides is high on Mt. Elgon (middle). Such risks must be addressed by appropriate land management before investments into infrastructure (hydropower and irrigation, bottom) can be made.

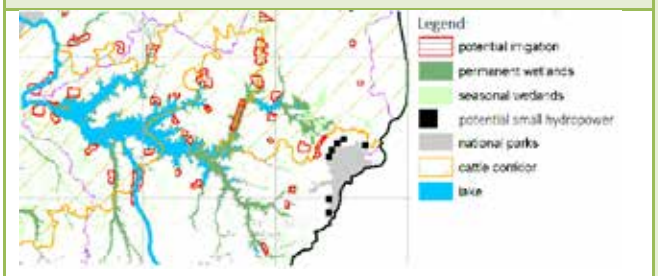


Figure 15: Features of the Mt. Elgon landscape, Lake Kyoga WMZ

6.3.2 IP3: Strengthening capacity for forestry governance and policy implementation

Uganda has a well-developed policy and legal framework for the forest sector and non-forest sector issues such as agriculture, water, energy, tourism, climate change, land and gender, among others. These frameworks provide measures for regulation and enforcement within the forest sector and central and district levels, and for creating or fostering coordination and engagement with stakeholders and mainstreaming forestry issues into other sector policies. Likewise, Uganda has well established institutional structures and mandates for managing the forestry sector at central and district levels.

However, in spite of these policy and institutional arrangements, forestry sector performance remains weak partly due to inadequate institutional capacities in form of manpower deployment and skills, weak management systems and procedures, weak sector and cross-sector coordination and regulations that are often too complex to be enforced by the responsible agencies. As a consequence, there are weaknesses in law enforcement, regulation and compliance, coordination among the lead agencies and between the centre and districts and with stakeholders outside the forestry sector. There are serious under-capacities for knowledge generation and information management. In some situations, there have been violations of rights during eviction of encroachers and involuntary settlements.

Uganda's aspirations for forestry sector development continue to be undermined by these weaknesses and short-comings. Current efforts of ensuring better policy performance, coordination and service delivery within the forestry sector continue to the face challenges in form of capacities for coordination within the sector and between the sector and non-sector institutions and mandates, policy implementation and monitoring policy performance, mobilizing and engaging stakeholders as well as creating enabling environment for private sector contribution to the sector growth and management.

The objective of IP3 is to strengthen the enabling environment for forestry governance, enhanced forest sector performance as well as for development of an efficient and sustainable forest-based industry. Within this investment project a range of issues within the forest sector related to governance (policy implementation, sector and cross-sector coordination and stakeholder engagement), institutional capacity (management systems and facilities, information management, skills and human resources) and policy measures for ensuring efficient forest industry are addressed. Accordingly, the project has the following three components:

Component 1: Strengthening forestry governance and institutional capacity: This component will strengthen forestry sector and cross-sector coordination between national and local government levels. Forest governance platforms at national level will be supported to improve performance in the sector. Reforms to strengthen the engagement of civil society, private sector and indigenous communities will be initiated or supported, particularly at national level. Through these platforms, FLEG and resource tenure issues, as well as the integration of international social and environmental safeguards into forestry management, policies, legislation and processes, will be addressed.

Component 1 will also address institutional capacity deficits (management/administrative systems and facilities, skills and human resources) in mandated government institutions both within and outside the forestry sector. The priority institutional capacities are: i) collecting, managing and increasing access to forestry data and information about the forest sector within and outside the sector at national and district levels (including more reliable data on wood energy consumption and supply); ii) regulating and monitoring forest utilization, trade and forest revenue collection and management (including regulatory simplification concerning charcoal production and transportation); and, iii), equipping NFA, FSSD, DEA, DLOG and UWA with skills necessary to apply social and environmental safeguards The implementation of this component will be linked to IP1 and IP2, i.e. institutional capacity building in the districts covered by the landscape pilot projects.

Component 1 will address the current shortage of a skilled labour force for supporting value chain and value addition (wood product development and processing). This effort will be supported in form of supporting provision of training infrastructure, facilities and trainers through the government owned Nyabyeya Forest College and private sector led training initiatives. It is envisaged that the support will benefit short term, tailor made training modules. The curricula of the Nyabyeya Forest College do not provide adequate focus on technical levels training in wood processing, wood science and product engineering.

Component 2: Development of an efficient and sustainable forest-based industry: Under this component, FIP investment will focus on promoting private sector-led investments into appropriate technologies for the utilization of large and small dimension timber as well as

promoting the development of new markets for forest products produced from sustainably managed forests and diversified forest products. There will be specific support to private forest investors to develop wood energy supply as a by-product of integrated farm forestry systems, both to supply industrial consumers with reliable and sustainably source energy, and to explore value-added markets for legally sourced charcoal from farm-grown trees.

6.4 Project components and transformational change

6.4.1 IP1: Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Albertine Rift

The IP1 has three content=related components which will be implemented in all landscapes. However, the weighting of each component in a given landscape will be determined during project design, based on the landscape characteristics and needs of its population.

IP1 aims to address the needs of communities for climate resilient livelihoods and the need for ecosystem protection concurrently. Broadly, it will protect environmental services and maintain and enhance resilience to climate change, establishing sustainable resource management strategies in the Albertine Rift, operating under the Lake Albert WMZ. Community-based models to reduce natural resource degradation, promote land, forest and wetland restoration and rehabilitation, and protect ecosystems and water catchments will be developed and supported.

The project will work with stakeholders at community, land owner, local government, sub-catchment and WMZ levels, and engage the management bodies of forests, wildlife areas and wetlands. Investments in nature-based tourism will focus on revenue generation and on re-investment in communities and management and will be defined with management authorities and private sector tourism operators. The project will enhance, demonstrate and strengthen the synergies between mitigation and resilience by both FIP and PPCR investments in Uganda. Both FIP and PPCR funding will support activities targeting stakeholders at community and local government levels as well as management of forest reserves, wetlands and forested wildlife protected areas.

The project will demonstrate and enhance synergies between climate change mitigation and resilience investments of FIP and PPCR in the same landscapes. Sub-catchments will be selected on their potential to: i) reduce CO2 emissions from deforestation and forest degradation; ii) demonstrate climate change mitigation and adaptation/resilience; iii) achieve biodiversity conservation; iv) enhance livelihoods; v) existing and planned interventions.

Monitoring and learning, and the communication of lessons learnt: will be a very important aspect of the landscape project, laying the foundation for successful up scaling of landscape level approaches across Uganda and within the region.

The Transformation: IP1 will reduce pressure on natural forest resources through improvements in land use and demonstration of the ecological and aesthetic values to the economy and livelihoods (Table 5) Working with Government, NGOs/CSO, Communities, land owners and private sector players, capacities for forest management, catchment management and engaging multi-stakeholder processes will be strengthened and utilized to scale up integrated landscape and catchment management processes across the WMZ and Uganda as a whole.

Table 5: FIP Outcomes IP1

Project activities	Project outcomes	Transformational change
Component 1: Strengthening integrated water catchment management		
▪ Mapping, analysis and geospatial support at WMZ and catchment level ▪ Development and implementation of catchment management plans[123] ▪ Establishment and operations of WMZ stakeholder forums ▪ Establishment and operations of sub-catchment management committees ▪ Support national and WMZ institutions and local stakeholders to deliver integrated water catchment management interventions	▪ The selected WMZs Offices have the capacity to design, plan and coordinate land management projects at landscape level ▪ Districts have capacity for forests sector coordination, forestry resources management and forest revenue management. ▪ Roles and responsibilities for implementation of plans are clear and finance to implement them is available or has been identified ▪ Availability of data and information on water resources. ▪ Catchment based Water resources management processes (IWRM) adequately addressing land based interventions • Increased knowledge on water resources potential in the targeted sub catchments • Increased funding /funding opportunities for Catchment management plans	▪ Reduced pressure on natural forest resources through improvements in land use, restoration of forest lands and corridors. ▪ Demonstration of the ecological and aesthetic values to the economy and livelihoods. ▪ Capacities and processes for forest management and catchment management within and among Government, NGOs/CSO, Communities, land owners and private sector players ▪ Multi-stakeholder processes supporting integrated landscape and catchment management processes across the WMZ
Component 2: Strengthening forest conservation		
• Management of five forested national parks • Biodiversity and ecological data collection and analysis and management • Conservation and restoration of forest/biodiversity corridors • Establishment and operations of multi-stakeholder processes for forestry governance • Up scaling collaborative management and benefit sharing initiatives between UWA and NFA, and communities • Supporting management of central and local forest reserves • Strengthening sustainable use of forest resources • Capitalization of the Uganda Biodiversity Fund • Combatting wildlife crimes	▪ Business models for the rehabilitation of natural forests, SFM and sustainable use of timber and non-timber forest resources from natural forests have been developed and implemented in pilot projects ▪ Degraded and sensitive areas on private land have been reforested by land owners/users alone or in public-private partnership. ▪ Availability of data and information on forests, wildlife resources. ▪ Degraded forest areas within PAs have been restored. ▪ Markets for diversified and improved forest products, including green charcoal ▪ CFM and CRM is in place and functional in the selected gazetted areas ▪ Stakeholders engaged in management of targeted forest reserves (participatory forest management processes) ▪ Enhanced resilience of ecosystems and status of biodiversity ▪ Reduced GHG emission from deforestation and forest degradation. ▪ Reduced threats to forested national parks	

[123] Include agriculture based interventions that address land productivity and agriculture resilience to climate change

and timber theft • Promoting forest resources-based livelihoods • Improved efficiency in use of biomass fuel • Strengthening wood and wood fuel value chains	▪ Increased contribution of forest resources to national economy and livelihoods ▪ Increased incomes from forest/wood products. ▪ Increased biodiversity funding opportunities	
Component 3: Restoring land, forest and other ecosystems in key sub-catchments		
▪ Up scaling successful forest and land restoration pilots ▪ Incentives for production forestry within forest reserves and on private land ▪ Incentives for maintaining natural forest on private land ▪ Restoring forests and other critical ecosystems in key biodiversity corridors ▪ Promoting and developing resource management agreements, on-farm tree-agriculture based production systems	▪ Restored forest lands and forest and biodiversity corridors ▪ Private land with natural forests ▪ Production forest in PAs and on private land ▪ Enhanced resilience of ecosystems and livelihoods to effects of climate change. ▪ Improved livelihoods of the households in the project areas.	
Component 4: Nature-based tourism development		
▪ Marketing and promotion of Uganda's nature-based tourism ▪ Wildlife and forest based (eco) tourism concession management ▪ Investments in key infrastructure to 'unlock' wildlife and nature based tourism potential ▪ Support to increase community participation in nature-based tourism ▪ Strengthening effectiveness of revenue sharing schemes	▪ Increased contribution of tourism to national economy and livelihoods ▪ Increased incomes from tourism to private sector and PA agencies	
Component 5: Project monitoring and management		
▪ Project management and implementation team ▪ Program operations ▪ Monitoring, evaluation and reporting	▪ Effectively managed IP	

6.4.2 Investment Project 2: The Lake Kyoga and Upper Nile Landscape Project

IP2 addresses the needs of communities for climate resilient livelihoods and the need for ecosystem protection concurrently. Broadly, it will protect environmental services and maintain and enhance resilience to climate change, establishing sustainable resource management strategies in the Lake Kyoga and Upper Nile WMZs. Community-based models to reduce natural

resource degradation, promote land, forest and wetland restoration and rehabilitation, and protect ecosystems and water catchments will be developed and supported. Further, the project will enhance, demonstrate and strengthen the synergies between mitigation and resilience by both FIP and PPCR investments in Uganda. Both FIP and PPCR funding will support activities in the same landscapes targeting stakeholders at community and local government levels as well as management of forest reserves, wetlands, rangelands and wildlife protected areas.

The project will work with stakeholders at community, land owner, local government, sub-catchment and WMZ levels, and engage the management bodies of forests, wildlife areas and wetlands. Investments in nature-based tourism will focus on revenue generation and on re-investment in communities and management and will be defined with management authorities and private sector tourism operators.

The project will demonstrate and enhance synergies between climate change mitigation and resilience investments of FIP and PPCR in the same landscapes. Sub-catchments will be selected on their potential to: i) reduce CO_2 emissions from deforestation and forest degradation; ii) demonstrate climate change mitigation and adaptation/resilience; iii) achieve biodiversity conservation; iv) enhance livelihoods; v) existing and planned interventions.

Transformational change: IP2 will reduce pressure on natural forest resources and wetlands and build resilience forest and wetland ecosystems and livelihoods to climate change through improvements in land use, energy use, increase access to water for domestic and agricultural production and demonstration of the ecological and aesthetic values to the economy and livelihoods (Table 6). Working with Government, NGOs/CSOs, communities, land owners and private sector players, capacities for forest management, catchment management and engaging multi-stakeholder processes will be strengthened and utilized to scale up integrated landscape and catchment management processes across the WMZ and Uganda as a whole.

Table 6: FIP outcome 1P2

Project activities	Project outcomes	Transformational change
Component 1: Strengthening integrated water catchment management		▪ Reduced pressure on forest resources through improvements in land use, restoration of forest lands and corridors. ▪ Demonstration of the ecological and aesthetic values to the economy and livelihoods. ▪ Capacities and processes for forest management and catchment management within and among Government, NGOs/CSO, Communities, land owners and private sector players ▪ Multi-stakeholder processes supporting integrated landscape and catchment management processes across the WMZ ▪ Capacities and processes for integrated land and watershed management
▪ Mapping, analysis and geospatial support at WMZ and catchment level ▪ Development and implementation of catchment management plans[124] ▪ Establishment and operations of WMZ stakeholder forums ▪ Establishment and operations of sub-catchment management committees ▪ Support national and WMZ institutions and local stakeholders to deliver integrated water catchment management interventions	▪ The selected WMZs Offices have the capacity to design, plan and coordinate land management projects at landscape level ▪ Districts have capacity for forests sector coordination, forestry resources management and forest revenue management. ▪ Roles and responsibilities for implementation of plans are clear and finance to implement them is available or has been identified ▪ Availability of data and information on water resources. ▪ Catchment based Water resources management processes (IWRM) adequately addressing land based interventions • Increased knowledge on water resources potential in the targeted sub catchments • Increased funding /funding opportunities for Catchment management plans	
Component 2: Strengthening forest conservation		
• Management of five forested national parks • Biodiversity and ecological data collection and analysis and management • Conservation and restoration of forest/biodiversity corridors • Establishment and operations of multi-stakeholder processes for forestry governance • Up scaling collaborative management and benefit sharing initiatives between UWA and NFA, and communities • Supporting management of central and local forest reserves • Strengthening sustainable use of forest resources • Capitalization of the Uganda Biodiversity	▪ Business models for the rehabilitation of natural forests, SFM and sustainable use of timber and non-timber forest resources from natural forests have been developed and implemented in pilot projects ▪ Degraded and sensitive areas on private land have been reforested by land owners/users alone or in public-private partnership. ▪ Availability of data and information on forests, wildlife resources. ▪ Degraded forest areas	

[124] Include agriculture based interventions that address land productivity and agriculture resilience to climate change

Fund • Combatting wildlife crimes and timber theft • Promoting forest resources-based livelihoods • Improved efficiency in use of biomass fuel • Strengthening wood and wood fuel value chains	within PAs have been restored. ▪ Markets for diversified and improved forest products, including green charcoal ▪ CFM and CRM is in place and functional in the selected gazetted areas ▪ Stakeholders engaged in management of targeted forest reserves (participatory forest management processes) ▪ Enhanced resilience of ecosystems and status of biodiversity ▪ Reduced GHG emission from deforestation and forest degradation. ▪ Reduced threats to forested national parks ▪ Increased contribution of forest resources to national economy and livelihoods ▪ Increased incomes from forest/wood products. ▪ Increased biodiversity funding opportunities	
Component 3: Restoring land, forest and other ecosystems in key sub-catchments		
▪ Up scaling successful forest and land restoration pilots ▪ Incentives for production forestry within forest reserves and on private land ▪ Incentives for maintaining natural forest on private land ▪ Restoring forests and other critical ecosystems in key biodiversity corridors ▪ Promoting and developing resource management agreements, on-farm tree-agriculture based production systems	▪ Restored forest lands and forest and biodiversity corridors ▪ Private land with natural forests ▪ Production forest in PAs and on private land ▪ Enhanced resilience of ecosystems and livelihoods to effects of climate change. ▪ Improved livelihoods of the households in the project areas.	
Component 4: Nature-based tourism development		
▪ Marketing and promotion of Uganda's nature-based tourism ▪ Wildlife and forest based (eco-) tourism concession management ▪ Investments in key infrastructure to 'unlock' wildlife and nature based tourism potential		

▪ Support to increase community participation in nature-based tourism ▪ Strengthening effectiveness of revenue sharing schemes		
Component 5: Integrated Land and Watershed Management including Support to Water Harvesting, Storage and Utilization		
▪ Construction of dams and other water reservoirs for domestic and agricultural production. ▪ Rainwater harvesting and on-farm water harvesting for domestic use. ▪ Development of water delivery channels (pipes; canals etc.) to water stressed areas. ▪ Supporting development of sanitation facilities to improve sanitation and hygiene as part of improved livelihood resilience against outbreaks of water-borne diseases. ▪ Land based interventions for protecting water sources. ▪ Promote efficient water use at households and for commercial uses (agriculture, aquaculture) and management of water sources (watershed) for sustaining supply of water. ▪ Pilot the use of solar pumps for irrigation in selected irrigation schemes which is environmentally friendly. ▪ Development of small to medium scale irrigation schemes (preferably drip) where there are dams and other reservoirs. Initial proposal from MWE is to start with most viable areas such as Kiige (to demonstrate the utilization of solar pumps) in Kamuli district, Ongole in Katakwi district, Leye in Kole, Atera in Apac district and Arechek in Napak districts respectively. ▪ Construction of water storage reservoirs in selected sites for agricultural and other uses. Priority sites include Kabamba in Mubende, Opochi in Katakwi Katabok in Abim and Namatata). ▪ Promoting agroforestry practices to increase tree cover in farming systems. ▪ Promoting conservation agriculture (soil and water conservation). ▪ Scaling up technologies for irrigation by medium and large scale farming in selected sub-catchments. ▪ Scaling up technologies for aquaculture	▪ Enhanced resilience of ecosystems and livelihoods to effects of climate change ▪ Improved livelihoods of households in the project areas through increase access to water, improved sanitation, improved land and agriculture productivity ▪ Technologies and practices for efficient water harvesting and use for domestic and agricultural production	

in selected sub-catchments. ▪ Construction of flood control channels and check dams to store water for productive use		
Project monitoring and management		
▪ Project management and implementation team ▪ Program operations ▪ Monitoring, evaluation and reporting	▪ Effectively managed Joint FIP&PPCR investment	

6.4.3 Investment Project 3: Forestry governance and institutional capacity

IP3 aims to strengthen the enabling environment for forestry governance, enhanced forest sector performance as well as for development of an efficient and sustainable forest-based industry. A range of issues within the forest sector related to governance (policy implementation, sector and cross-sector coordination and stakeholder engagement), institutional capacity (management systems and facilities, information management, skills and human resources) and policy measures for ensuring efficient forest industry will be addressed, through two content-related components.

Component 1 will strengthen forestry sector and cross-sector coordination between national and local government levels. Forest governance platforms at national level will be supported to improve performance in the sector. Reforms to strengthen the engagement of civil society, private sector and indigenous communities will be initiated and or supported in particular at national level. Through these platforms, FLEG and resources tenure issues as well as the integration of international social and environmental safeguards into forestry management, policies, legislation and processes will be addressed.

Component 1 will also address institutional capacity deficits (management/administrative systems and facilities, skills and human resources) in mandated government institutions within and outside the forestry sector. The priority institutional capacities are: i) collecting, managing and increasing access to forestry data and information about the forest sector within and outside the sector at national and district levels (including more reliable data on wood energy consumption and supply); ii) regulating and monitoring forest utilization, trade and forest revenue collection and management (including regulatory simplification concerning charcoal production and transportation); and, iii), equipping NFA, FSSD, DEA, DLOG and UWA with skills necessary to apply social and environmental safeguards The implementation of this component will be linked to IP1 and IP2, i.e. institutional capacity building in the districts covered by the landscape pilot projects.

The low level of law enforcement in the commercial woodfuels sector will be tackled through a new approach involving simplification of regulations to encourage greater compliance and mechanisms to expand existing out-sourcing of revenue collection. Laws and regulations governing the commercial woodfuels industry, especially the charcoal sector, will be reviewed, to develop a simpler, more implementable policy and legal framework that can be more realistically implemented with the capacity available at district level.

Component 1 will address the current shortage of a skilled labour force for supporting value chain and value addition (wood product development and processing). This effort will be supported in form of supporting provision of training infrastructure, facilities and trainers

through the government owned Nyabyeya Forest College and private sector led training initiatives. It is envisaged that the support will benefit short term, tailor made training modules. The curricula of the Nyabyeya Forest College do not provide adequate focus on technical levels training in wood processing, wood science and product engineering.

Component 2 will focus on promoting private sector-led investments into appropriate technologies for the utilization of large and small dimension timber as well as promoting the development of new markets for forest products from sustainably managed forests and diversified forest products. This will include new models for the production and supply of biomass energy from trees on privately owned land, and the development of value-added markets for sustainably produced premium charcoal, in close collaboration with suitably qualified private sector partners.

Transformational change: IP3 will improve policy performance and policy and institutional environment for forestry sector coordination and development and for enabling landscape approaches to succeed (Table 7).

Table 7: FIP outcome IP3

Activity	Outcome	Transformational impact
Strengthening forestry governance and sector performance		
▪ Strengthening forestry policy implementation and sector coordination between mandated institutions at the centre and districts and with mandated institutions, CSOs, private sector at national level. ▪ Supporting active participation of NGOs/CSOs, private sector and indigenous/forest dependence people in stakeholder platforms in forestry sector national level planning and governance. ▪ Strengthening NFA, FSSD and UWA management/administrative systems, facilities, skills and human resources for improved enforcement, supervision and compliance. ▪ Establishing forestry data and information management systems at national including processes for data generation and management within government institutions, mechanisms for easy access to knowledge and information about forestry and the sector by third parties and generation of materials for policy makers. ▪ Strengthening forest revenue generation and management systems including harmonizing national licensing/permit/fee systems, linking them to a centralized control and grievance mechanisms and mandate and operations of DFOs at district levels. ▪ Reviewing laws and regulations governing the commercial woodfuels industry, especially the charcoal sector, to develop a simpler, more implementable policy and legal framework that can be more realistically implemented with the capacity available at district level. ▪ Strengthening capacity of Nyabyeya Forest	▪ Adequate coordination of lead agencies, mandated institutions and other stakeholders in the forestry sector at national levels. ▪ Formal involvement of NGOs/CSO, private sector and indigenous/forest dependent people in forest governance. ▪ Comprehensive forestry data and forest sector information is available and accessible ▪ Improved forest revenue from permits, licenses and fees issued transparently at national and district levels and revenue/income generated predictable. ▪ Improved forestry regulation ▪ Increased skilled manpower in wood processing and wood science	▪ Improved forestry policy performance ▪ Improved forestry sector coordination and development ▪ High forest values and premiums for wood products

Activity	Outcome	Transformational impact
College (NFC) with training infrastructure, facilities and trainers to conduct short term, tailor made training modules.		
Efficient and sustainable forest based industry		
▪ Efficient conversion technologies and value addition ▪ Wood value chains and timber markets ▪ Forestry industry market research and product development and dissemination. ▪ Develop commercially viable value chains for the biomass energy by-products of farm forestry, offering tree growers useful cashflow at income-deficient points in the production cycle and providing industrial, commercial and domestic consumers with a reliable source of high quality wood-based fuel from sustainable sources. To include (a) support and expansion of supply chains for un-carbonized biomass from planted trees to Ugandan industry, potentially including the conversion of fossil fuel systems to biomass-powered alternatives; and (b) developing markets and supply chains for value-added charcoal in markets that place value on product features other than price, such as environmental or community credentials, packaging, branding, convenience, reliability, consistency or terms of credit.	▪ Increased uptake of appropriate technologies and diversifies wood products of good quality ▪ Stronger and reliable markets ▪ Improved technologies and utilization efficiency	
Project monitoring and management		
▪ Project management and implementation team ▪ Program operations ▪ Monitoring, evaluation and reporting	▪ Effectively managed Joint FIP&PPCR investment	

6.5 Alignment of the investment projects with FIP criteria and the SPRC

Climate change mitigation potential: The selected landscapes (Lake Albert WMZ) and Mt. Elgon (Lake Kyoga WMZ) contain most of the tropical high forest left in Uganda and are hotspots of deforestation. Given the high carbon stock of these forests a reduction in deforestation rate / restoration will result in substantial avoidance of GHG emissions. However, the landscape specific mitigation potential from reduced deforestation and forest degradation as well as forest landscape restoration has not yet been quantified. Climate resilient landscapes: Assessment of sites and opportunities for catchment-level investments for adaptation to and mitigation of climate change" will quantify the climate change mitigation potential, within the proposed landscapes; based upon which the project boundaries and target interventions will be refined during project design.

Scaling-up potential: IP3 (policy, regulations and institutional capacity) will create the enabling framework required for upscaling the approaches tested and lessons learnt in IP1 and IP2 (combining different sets of interventions at landscape level). The capacity building of the WMZ offices to plan for and coordinate landscape level projects (part of IP1 and IP2) will enable them to roll out similar projects across the WMZs.

Cost-effectiveness: The implementation of FIP and SPCR will be aligned closely, in particular in the framework of IP1 and IP2. By working in the same landscape, the overall impact of each program is expected to be greater than if implemented individually. IP1 and IP2 are specifically designed to leverage private sector finance by applying a PPP approach. Last but not least, with core funding from FIP, Uganda expects to be able to leverage additional donor funding, e.g. through the Green Climate Fund.

Implementation potential: FIP will be embedded in the overall REDD+ process and structures currently being created by the REDD+ strategy (in particular in relation to stakeholder participation and decision making). Implementation of FIP can rely on existing institutions and stakeholder frameworks. Furthermore, civil society organizations are already engaged in forestry and forest governance related projects, as well as REDD+ pilots. FIP will work with these organizations, strengthening interaction and cooperation between government and civil society.

Co-benefits: targeted by FIP together with the SPCR are:

a. Sustainable development and improved resilience of rural communities by providing more secure access to forest resources, better integration into forest /timber value chains, and diversified and more productive land management systems.
b. More active and effective participation of all stakeholder groups (incl. forest dependent communities) in forest governance.
c. Protection of biodiversity with a particular focus on Uganda's montane areas and the restoration of corridors connecting protected areas.

Safeguards: The landscape projects will apply the safeguard policies of WB and AfDB. Additionally, the integration of international safeguard standards into policies and regulations is one of the interventions in IP3.

6.6 Implementation arrangements

The implementation architecture will involve:

a. Oversight by the Policy Committee on Environment (PCE) at the Cabinet level;
b. Oversight and coordination by the NCCAC at the program steering level; and
c. Implementation by the Project Management Units (PMU) mainstreamed in the relevant coordinating departments, Agencies or ministries at the investment level.

FIP implementation will be led by three entities: (i) MWE (through NFA, FSSD and DWRM), (ii) UWA for investment in forested National Parks, and, (iii) DLGs for investment in local forest reserves and landscapes outside protected areas. Implementing entities will collaborate with CSOs, private sector, research and academic institutions and other stakeholders.

FIP and SPCR will implement landscape investments jointly and seek to realize synergies across all investment projects implemented under FIP and SPCR. Within the framework of the landscape projects the WB has indicated that it will take the lead for the Lake Albert WMZ and AfDB in the Lake Kyoga and Upper Nile WMZs.

More detailed implementation arrangements are provided in the concept note for each project.

7. IMPLEMENTATION POTENTIAL WITH RISK ASSESSMENT

7.1 Potential for Success

Sector Plans: The forest sector is recognised in Vision 2040 and NDP II with specific performance indicators, and is a priority economic sector in the Mid-Term Expenditure Framework. It has been included in Uganda's NDC as part of measures to mitigate climate change impacts. FIP investments are therefore readily accommodated within existing development priorities.

Multi-sector approach: FIP recognises the multi-sectoral nature of forest issues and seeks to engage non-forest sector players. The landscape-based components within three WMZs will be implemented in collaboration with SPCR to catalyse mitigation and resilience investments in the same landscapes. FIP will mobilize different related sectors and support their mandates and Programs. Such integrated approaches will allow FIP investments to tackle drivers of forest degradation and loss that emanate from outside the sector. Further, FIP will help demonstrate the value of forests to other sectors such as energy, agriculture and health, and support the mainstreaming of forest management issues into their policies, plans and Programs.

REDD+ process: Uganda's REDD+ readiness process enjoys political, financial and technical support towards defining national priority strategies and action. FIP will be in a position to support strategic actions that have been defined through the REDD+ process.

The PPCR/SPCR process: Uganda is a signatory to the Paris Climate Agreement and prioritised climate change issues in political and development policies and processes. Opportunities for joint investments and actions with PPCR were identified included in the investment projects (Annex 1).

Institutional capacity and structures: FIP will be coordinated and supported by existing planning and coordination structures, including the National Climate Change Advisory Committee, the Joint Sector Review and the ENR Sector Working Group. FIP investments will take place within WMZs that have mandated institutional and technical management structures under the Ministry of Water and Environment and in the case of national parks, the UWA structures and mandates will apply. Implementation is therefore expected to be well coordinated and supervised by government. FIP will also be in a position to engage with WMZ stakeholder participation and catchment management planning processes, including wildlife and forestry conservation areas, and local government at district and sub county levels.

Stakeholder involvement: Non-state actors (CSO, the private sector and communities) are heavily engaged in Uganda's forestry sector and they will have an implementing role in FIP to further improve forest governance and provide complementary actions.

Success stories: FIP incorporates learning from successful initiatives such as forest governance, restoration and carbon stocking (Mt Elgon and Kibale NP), stakeholder engagement processes such as CFM under NFA (Echuya, Kasyoha Kitomi, Budongo) and CRM under UWA (Kibale, Bwindi, Mt. Elgon NPs), as well as benefit-sharing schemes under UWA (districts bordering National Parks) and private sector investment in sawlog production. These initiatives have generated lessons for FIP design, especially in engaging with the private sector, community interest groups and restoration activities.

7.2 Risks and Mitigation Measures

The following risks are identified with FIP implementation and corresponding mitigation measures proposed (Table 8).

Table 8: Risks and mitigation measures

Risk	Mitigation
Being a multi sectoral Program with multiple implementing partners, there will be challenges of coordination of the different players.	♣ Strong measures for FIP implementation coordination, supervision and monitoring are included in the FIP design, together with commensurate financial resources for each IP to ensure good performance of these functions. ♣ Linkages with national development priorities and institutional mandates have been entrenched in the design and implementation plans. ♣ Measures for donor coordination have been provided or recommended.
Policy reform is a slow process. FIP success will in part depend on envisaged reforms aimed at effective implementation of policies and laws. Slow adoption of reforms will affect the speed with which some of FIP results can be realized.	♣ Preparation of Uganda's REDD Strategy will be completed and priority strategies confirmed by time FIP implementation commences. This will provide FIP investment added legitimacy and credibility. ♣ Incentives for policy reforms and implementation targeting private land owners have been embedded in the design and investments. ♣ Capacity building through training and demonstration actions. ♣ Demonstrating the contribution of forestry sector ot national economy will justify implemenatoon of policy reforms.
The question of land tenure and the lack of incentives for maintaining forest on private land remains a great challenge that could reverse gains from FIP investment.	♣ FIP intends to: i) provide incentives to private land owners to maintain forest on their land or to utilize their land for forestry purposes; ii) strengthen tenure of community and private forests.
Climate Changes	♣ Linkages between mitigation and resilience strengthen the appreciation of role of forestry ♣ Climate change adaptation strategies e.g., smart agriculture addresses likely effect of climate on forestry
Fiduciary	♣ Prudent financial management systems and controls will be developed at the onset of the project implementation.

8. FINANCING PLAN AND INSTRUMENTS

The total FIP cost, including co-financing and leveraged funding, is USD 234 M over 10 years (Table 9).

Table 9: Investment Plan (USD million)

Components	GoU	FIP	PPCR	OTHERS indicative and scalable				TOTAL
				Climate Funds (GCF+ GEF+ Others)	WB	AFDB	Other	
IP1: Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Albertine Rift								
Component 1: Strengthening integrated water catchment management	0.2	2	3	8	0	0	0	13.2
Component 2: Strengthening forest conservation	0.4	10	4	23	30	0	0	67.4
Component 3: Restoring land, forest and other ecosystems in key sub-catchments	0.2	2.5	6	12	10	0	0	30.7
Component 4: Nature-based tourism development	0.1	3	1.5	2	10	0	0	16.6
Component 5: Project Monitoring and evaluation	0.1	0.5	0.5	0	0	0	0	1.1
SUB-TOTAL 1P1	**1**	**18**	**15**	**45**	**50**	**0**	**0**	**129**
IP2: Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Lake Kyoga and Upper Nile WMZ								
Component 1: Strengthening integrated water catchment management	1.5	1	1	4	0	2	0	9.5
Component 2: Strengthening forest conservation	1	2	1.5	5	0	2	0	11.5
Component 3: Restoring land, forest and other ecosystems in key sub-catchments	0.5	1	3	15	0	4	0	23.5
Component 4: Nature-based tourism development	0.5	1	1.5	2	0	3.5	0	8.5
Component 5: Provision of water for domestic use and agricultural production	1	7	8.5	3.5	0	8	0	28
Component 6: Project Monitoring and evaluation	0.5	0	0.5	0.5	0	0.5	0	2
SUB-TOTAL IP2	**5**	**12**	**16**	**30**	**0**	**20**	**0**	**83**
IP 3: Strengthening capacity for forestry governance and policy implementation								

Component 1: Strengthening forest governance and institutional capacity	1.5	0	0	0	0	0	17.5	19
Component 2: Efficient and sustainable forest based industry	0.3	0	0	0	0	0	2	2.3
Component 3: Project monitoring and management	0.2	0	0	0	0	0	0.5	0.7
SUB-TOTAL IP3	2	0	0	0	0	0	20	22
OVER-ALL TOTAL	**8**	**30**	**31**	**75**	**50**	**20**	**20**	**234**

In addition, Uganda request for additional USD 0.5 million from IBRD/WB and AfDB to support project design and preparatory activities (Table 10).

Table 10: FIP Projects preparatory budget

Project	Prepration Grant Request (USD)	
	IBRD/WB	AfDB
IP1: Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Albertine Rift	250,000	0
IP2: Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Lake Kyoga and Upper Nile WMZ	0	250,000
IP 3: Strengthening capacity for forestry governance and policy implementation	0	0
TOTAL	**250,000**	**250,000**

9. RESULTS FRAMEWORK

The Results Framework in Table 11 is derived from a logical analysis of the relationship between FIP investments and desired changes at landscape and national level (Annex 8).

Table 11: FIP Results framework

Component	Indicator	Source of information
Impacts		
Reduced deforestation and forest degradation	♣ Million tonnes (Mt) of CO2 emissions reduced from deforestation and forest degradation relative to reference levels	MRV Reports
Well-coordinated and governed forestry resources	♣ Measures for stakeholder participation in forestry sector coordination and sustainable forest management ♣ Measures for integrating forestry on macro-economic policy and other sectors	Sector /institutional Reports Non-forestry Sector Investment Plans
Outcomes		
Enhanced forest and livelihoods resilience to climate change	♣ Climate change adaptation strategies and actions in the targeted landscapes ♣ Changes in quantities of water from protected catchments	Sector Reports
Improved enabling environment for sustainable management of forests	♣ No of policy reforms initiated/concluded ♣ Measures for forestry regulation	Sector reports
Access to predictable and adequate financial resources	♣ Size of area of forest benefitting/qualifying for results based payments	Sector reports
Key Results		
Reduced emissions from Deforestation and forest degradation	♣ Million tonnes (Mt) of CO_2 sequestered through natural regeneration, re- forestation, afforestation/restoration activities, and conservation relative to forest reference level in targeted WMZs	MRV Reports
Improved ecological integrity of targeted forest ecosystems	♣ Size of forest area restored ♣ Size of biodiversity corridors restored row hoe management has improved	MRV Reports Institutional Reports
Sustainable use of forest resources for livelihoods and economic development	♣ Size of forest estate under collaborative forest management arrangements ♣ Size of forest area managed as private commercial forests	Sector Reports Non-forestry Sector Investment Plans
Improved forest sector coordination and development	♣ Changes in institutional capacities for forestry sector coordination	Sector /institutional Reports
Improved Forest policy performance	♣ Changes in institutional capacities for forestry policy implementation	Sector /institutional Reports
High forest values and premiums for wood products	♣ % increase in private sector led investment in wood chains	Statistical Reports (Uganda Bureau of Statistics, UBOS)

Co-Benefits (Results)		
Forest sector contribution to the economy increased	♣ % increase in monetary contribution of forest to GDP ♣ % increase in value of ecotourism investments	Sector Reports Statistical Reports (UBOS)
Forest sector contribution to livelihoods and poverty reduction increased	♣ % increase in incomes at household level in targeted landscapes	Sector Reports Statistical Reports (Uganda Bureau of Statistics, UBOS
Status of forest biodiversity improved	♣ Size of forest area under improved biodiversity conservation practices	Biodiversity surveys/ monitoring reports Sector Reports

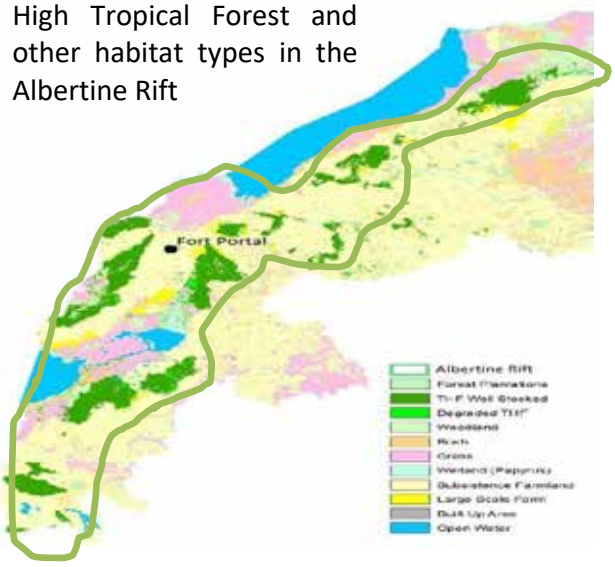
Annex 1: FIP Investment Projects

Investment Project 1: Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Albertine Rift[125]

Investment Project Role	Institution
Lead Implementing MDB	IBRD/World Bank
Supporting MDB and Technical Agency(s)	African Development Bank Food And Agriculture Organisation
Lead national entity	Ministry of Water and Environment, Uganda Wildlife Authority and Local Governments (Districts)
Supporting national implementing entities	Ministry of Tourism, Wildlife and Antiquities National Forest Authority

Status summary		Source	Contribution
Short Project Name	Albertine Rift Landscape Program	GCF, GEF **and other Climate Funds** FIP PPCR GoU Other funding	USD 45.0 million USD 18.0 million USD 15.0 million USD 1.0 million IDA: USD 50.0 million
		Total financing	USD 129.0 million
Country/Region	Uganda, East Africa		
Type of funding	Grant		
Status	CIF submission planned - June 2017		
Expected GCF Board	2017		

High Tropical Forest and other habitat types in the Albertine Rift



Summary

This Investment Project will address rapidly degrading natural resources in the Albertine Rift in order to protect environmental services and enhance resilience to climate change. The IP will support catchment management, forest management, land restoration and nature-based tourism.

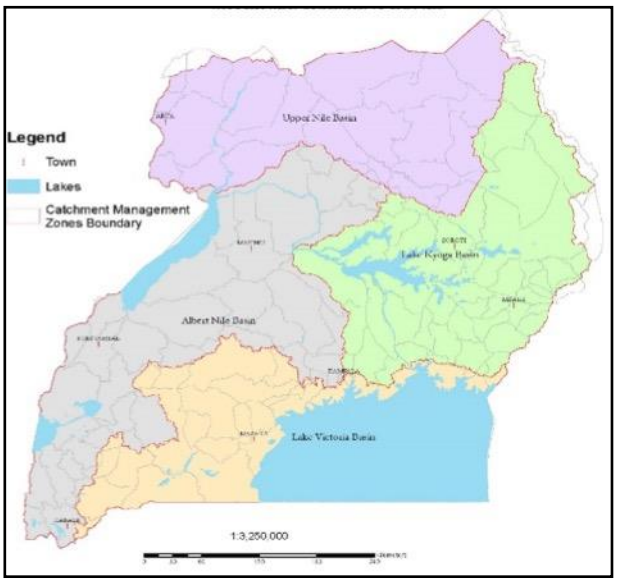
GoU seeks to mobilize CIF, GCF, GEF and other sources for additional support. IDA loans and forest carbon financing are also potential source of funding. Uncertainty over the scale of the project and availability of financing requires the design of the IP to be 'scaleable' and phased.

[125] IP1 will operate in the Albertine Rift, falling within the Lake Albert Water Management Zone

1. BACKGROUND AND JUSTIFICATION

Forest Resources: At national level, the rate of forest loss, at 120,000 ha per annum, is amongst the highest in the world. In the Albertine Rift deforestation is driven largely by expansion of smallholder agriculture. Despite high levels of loss and degradation, the Albertine Rift still holds extensive natural forests that sustain high levels of biodiversity (including globally-significant populations of Mountain Gorilla and Chimpanzee that are the foundation of Uganda's nature-based tourism sector). These forests also sustain and regulate supply of water for domestic and industrial consumption, irrigation and hydropower, provide wood fuels, timber and other resources central to local livelihoods, and are major carbon sinks.

Population and Poverty: The Albertine Rift supports rural population densities up to 1,000 people per km^2 leading to land shortages and fragmentation. During the 1990s, poverty declined from 56% in 1992 to 35% in 2000, rose during the early 2000s - attributed to a decline in agriculture and worsening of income distribution - and fell again in 2005/2006. People use natural forests, wetlands and savannas to supplement income from crop and livestock agriculture. In some communities living close to natural forests, access to and sale of forest products contributes up to 35% of household income, supporting families during the 'hungry period' when crops are not ready for harvesting. However, human-wildlife conflict is common, working against efforts to engage communities in conservation management.



Economic growth: The Albertine region is experiencing significant economic growth related to the developing oil sector, hydropower programs and commercial agriculture that are a threat – they increase pressure on natural resources – and an opportunity – they provide potential for compensation measures and PES approaches.

Land tenure: Gazetted forests (7% of the Rift area), wildlife areas (14.5% of the area) and wetlands are held in trust and managed by Government. Customary tenure (individual and communal) is the primary form of private land. Protected forests are either central forest reserves managed by the National Forest Authority (NFA) or local forest reserves managed by local government. National parks and wildlife reserves, some of which are forested, are managed by the

Uganda Wildlife Authority (UWA). Forest on private land is managed by the owners under relevant regulations.

Watershed Management: Despite its many water bodies and high rainfall, water scarcity in the Albertine Rift contributes to poverty and vulnerability to climate change. The supply of water resources and other ecosystem services depends on the sustainable management of major catchments and their natural resources. GoU policy on integrated water catchment management is operationalized through 4 Water Management Zones (WMZ). The Lake Albert WMZ that covers the Albertine Rift area has no funding agreements to develop and support the catchment and sub-catchment management institutions that must deliver sustainable catchment management.

Nature-Based Tourism: Tourism is Uganda's fastest growing industry. In 2012 it contributed 9% of GDP and created 225,300 jobs directly and a further 296,700 indirectly[126]. Revenue generation increased from USD 640M in 2008 to USD 2n in 2012 – the second largest foreign exchange earner after coffee. Every dollar spent by tourists generates $2.5 – comparing favourably with traditional exports[127]. An additional 100,000 tourists per year would boost GDP by 1%. Tourism is a key driver of economic growth in the Albertine Rift - its national parks[128] and especially its chimpanzees and mountain gorillas attract 81% of leisure tourist for wildlife safaris, gorilla tracking and adventure tourism. Tourism to Bwindi Impenetrable National Park, which supports half of the world population of mountain gorilla, generates significant revenues for local communities, improved social services (through revenue sharing) and improved attitudes towards forest and park management. Further investment is needed in tourism infrastructure, protected area management and marketing to achieve continued development of nature-based tourism.

Transformational change: The IP will reduce pressure on natural forest resources through improvements in land use and demonstration of the ecological and aesthetic values to the economy and livelihoods. Working with Government, NGOs/CSO, Communities, land owners and private sector players, capacities for forest management, catchment management and engaging multi-stakeholder processes will be strengthened and utilized to scale up integrated landscape and catchment management processes across the WMZ and Uganda as a whole.

2. PROJECT DESCRIPTION

The Investment Project aims to address the needs of communities for climate resilient livelihoods and the need for ecosystem protection concurrently. Broadly, it will protect environmental services and maintain and enhance resilience to climate change, establishing sustainable resource management strategies in the Albertine Rift, operating under the Lake Albert WMZ. Community-based models to reduce natural resource degradation, promote land,

[126] World Bank report (2013) provides the following figures. Tourism accounts for 3.7% of GDP compare to 4.8% in Tanzania and 5% in Kenya. Uganda attracts 75,000 leisure and cultural tourists per annum (17% of the tourism total) Over 50% of all tourists visit Queen Elizabeth and Murchison Falls national parks. Leisure tourists spend in the order of $88 million per annum. Tourism arrivals have dropped in the last couple of years (UBOS 2015 - The number of visitors to national parks decreased from about 214,000 in 2013 to about 203,000 in 2014; Tourists visiting Friends and Relatives in Uganda decreased from about 528,000 in 2013 to about 441,000 in 2014).

[127] Analysis by World Bank published in 2013.

[128] 10 out of 22 national parks and wildlife reserves in Uganda, including Murchison Falls NP and Queen Elizabeth NP – two of Uganda's most visited parks - are located within the Albertine Rift.

forest and wetland restoration and rehabilitation, and protect ecosystems and water catchments will be developed and supported.

The project will work with stakeholders at community, land owner, local government, sub-catchment and WMZ levels, and engage the management bodies of forests, wildlife areas and wetlands. Investments in nature-based tourism will focus on revenue generation and on re-investment in communities and management and will be defined with management authorities and private sector tourism operators.

The project will demonstrate and enhance synergies between climate change mitigation and resilience investments of FIP and PPCR in the same landscapes.

3. PROJECT GOAL AND OBJECTIVES

Goal - To strengthen resilience of communities and ecosystems to the impacts of climate change while contributing to the mitigation of climate change.

Overall objective - To strengthen the management of water catchments, catchment forests and other catchment ecosystems.

Immediate objectives:

a) Strengthen integrated water catchment management.
b) Improve management of forest reserves, forested national parks and wildlife conservation areas.
c) Enhance stakeholder participation in the management of water catchments and their natural resources
d) Support nature-based tourism and forest-based livelihoods.

4. GEOGRAPHICAL SCOPE

Sub-catchments will be selected on their potential to: i) reduce CO2 emissions from deforestation and forest degradation; ii) demonstrate climate change mitigation and adaptation/resilience; iii) achieve biodiversity conservation; iv) enhance livelihoods; v) existing and planned interventions.

5. PROJECT COMPONENTS

Component 1: Strengthening integrated water catchment management

Investments will focus on improved planning, management and dialogue between stakeholders for water catchment management at national, WMZ, catchment and sub-catchment levels. Indicatively, this will include support for:

a. Mapping, analysis and geospatial support at WMZ and catchment level
b. Development and implementation of catchment management plans[129]
c. Establishment and operations of WMZ stakeholder forums
d. Establishment and operations of sub-catchment management committees
e. Support national and WMZ institutions and local stakeholders to deliver integrated water catchment management interventions

Component 2: Strengthening forest conservation

[129] Including agriculture-based interventions that address land productivity and agriculture resilience to climate change

Investments will focus on engaging stakeholders in the conservation of forest reserves, forested national parks, and sustainable management of forest on private land. Indicatively, this will include support for:

a. Management of five forested national parks[130]
b. Biodiversity and ecological data collection and analysis and management
c. Conservation and restoration of forest/biodiversity corridors
d. Establishment and operations of multi-stakeholder processes for forestry governance
e. Up scaling collaborative management and benefit sharing initiatives between UWA and NFA, and communities
f. Supporting management of central and local forest reserves
g. Strengthening sustainable use of forest resources[131]
h. Capitalization of the Uganda Biodiversity Fund[132]
i. Combatting wildlife crimes and timber theft
j. Promoting forest resources-based livelihoods
k. Improved efficiency in use of biomass fuel
l. Strengthening wood and wood fuel value chains

Component 3: Restoring land, forest and other ecosystems in key sub-catchments

Investments will focus on restoring ecosystems for the supply of goods and services: Indicatively, this will include support for:

a. Up scaling successful forest and land restoration pilots
b. Incentives for production forestry within forest reserves and on private land
c. Incentives[133] for maintaining natural forest on private land
d. Restoring forests and other critical ecosystems in key biodiversity corridors[134]
e. Promoting and developing resource management agreements, on-farm tree-agriculture based production systems

Component 4: Nature-based tourism development

Investments will focus on long-term development of pro-poor; community orientated nature-based tourism. Indicatively, this will include support for:

a. Marketing and promotion of Uganda's nature-based tourism
b. Wildlife and forest based (eco) tourism concession management
c. Investments in key infrastructure to 'unlock' wildlife and nature based tourism potential
d. Support to increase community participation in nature-based tourism
e. Strengthening effectiveness of revenue sharing schemes

[130] National Parks that could be supported include *Mgahinga, Bwindi, Rwenzori, Semliki, Kibale. Forested components of Queen Elizabeth and Murchison Falls NPs will be incorporated.*

[131] *Central Forest Reserves in the Lake Albert WMZ that could be supported: Echuya, Kasyoha-Kitomi-Maramagambo, Itwara, Budongo, Matiri, North Rwenzori, Kalinzu, Mpanga, Nkera, Bundikeke, Kabongo*. *Support could also extend to Local Forest Reserves and forest on private/community land.*

[132] The Uganda Biodiversity Fund, recently established with support from USAID and the Wildlife Conservation Society, will employ GEF funding to support conservation activities.

[133] Include land/forest tenure, PES.

[134] Forest blocks that could be supported include: Budongo-Bugoma- Kangole-Itwara-Semliki; Kibale-Kasyoha-Kitomi-Maramagambo; Bwindi-Echuya-Mgahinga.

Component 5: Project monitoring and management

Investments will focus the efficient and timely delivery of the program. Indicatively, this will include support for:

a. Project management and implementation team
b. Program operations
c. Monitoring, evaluation and reporting

6. EXPECTED OUTCOMES

The following outcomes are envisaged:

a. Enhanced resilience of ecosystems and conservation of biodiversity
b. Greater resilience of communities and livelihoods to climate change impacts
c. Reduced poverty and direct dependence on natural resources use
d. Increased incomes from nature-based tourism
e. Improved land management sustaining supply of ecosystem goods and services
f. Reduced GHG emission from deforestation and forest degradation
g. Pilot projects for results based payments

Project activities	Project outcomes	Transformational change
Component 1: Strengthening integrated water catchment management		
▪ Mapping, analysis and geospatial support at WMZ and catchment level ▪ Development and implementation of catchment management plans[135] ▪ Establishment and operations of WMZ stakeholder forums ▪ Establishment and operations of sub-catchment management committees ▪ Support national and WMZ institutions and local stakeholders to deliver integrated water catchment management interventions	▪ The selected WMZs Offices have the capacity to design, plan and coordinate land management projects at landscape level ▪ Districts have capacity for forests sector coordination, forestry resources management and forest revenue management. ▪ Roles and responsibilities for implementation of plans are clear and finance to implement them is available or has been identified ▪ Availability of data and information on water resources. ▪ Catchment based Water resources management processes (IWRM) adequately addressing land based interventions • Increased knowledge on water resources potential in the targeted sub catchments • Increased funding /funding opportunities for Catchment management plans	▪ Reduced pressure on natural forest resources through improvements in land use, restoration of forest lands and corridors. ▪ Demonstration of the ecological and aesthetic values to the economy and livelihoods. ▪ Capacities and processes for forest management and catchment management within and among Government, NGOs/CSO, Communities, land owners and private sector players ▪ Multi-stakeholder processes supporting integrated landscape and catchment management
Component 2: Strengthening forest conservation		
• Management of five forested national parks • Biodiversity and ecological data	▪ Business models for the rehabilitation of natural forests, SFM and sustainable use of timber and non-timber forest resources from natural forests have	

[135] Include agriculture based interventions that address land productivity and agriculture resilience to climate change

collection and analysis and management • Conservation and restoration of forest/biodiversity corridors • Establishment and operations of multi-stakeholder processes for forestry governance • Up scaling collaborative management and benefit sharing initiatives between UWA and NFA, and communities • Supporting management of central and local forest reserves • Strengthening sustainable use of forest resources • Capitalization of the Uganda Biodiversity Fund • Combatting wildlife crimes and timber theft • Promoting forest resources-based livelihoods • Improved efficiency in use of biomass fuel • Strengthening wood and wood fuel value chains	been developed and implemented in pilot projects ▪ Degraded and sensitive areas on private land have been reforested by land owners/users alone or in public-private partnership. ▪ Availability of data and information on forests, wildlife resources. ▪ Degraded forest areas within PAs have been restored. ▪ Markets for diversified and improved forest products, including green charcoal ▪ CFM and CRM is in place and functional in the selected gazetted areas ▪ Stakeholders engaged in management of targeted forest reserves (participatory forest management processes) ▪ Enhanced resilience of ecosystems and status of biodiversity ▪ Reduced GHG emission from deforestation and forest degradation. ▪ Reduced threats to forested national parks ▪ Increased contribution of forest resources to national economy and livelihoods ▪ Increased incomes from forest/wood products. ▪ Increased biodiversity funding opportunities	processes across the WMZ
Restoring land, forest and other ecosystems in key sub-catchments		
▪ Up scaling successful forest and land restoration pilots ▪ Incentives for production forestry within forest reserves and on private land ▪ Incentives for maintaining natural forest on private land ▪ Restoring forests and other critical ecosystems in key biodiversity corridors ▪ Promoting and developing resource management agreements, on-farm tree-agriculture based production systems	▪ Restored forest lands and forest and biodiversity corridors ▪ Private land with natural forests ▪ Production forest in PAs and on private land ▪ Enhanced resilience of ecosystems and livelihoods to effects of climate change. ▪ Improved livelihoods of the households in the project areas.	
Nature-based tourism development		
▪ Marketing and promotion of Uganda's nature-based tourism ▪ Wildlife and forest based (eco) tourism concession management ▪ Investments in key infrastructure	▪ Increased contribution of tourism to national economy and livelihoods ▪ Increased incomes from tourism to private sector and PA agencies	

to 'unlock' wildlife and nature based tourism potential ▪ Support to increase community participation in nature-based tourism ▪ Strengthening effectiveness of revenue sharing schemes		
Project monitoring and management		
▪ Project management and implementation team ▪ Program operations ▪ Monitoring, evaluation and reporting	▪ Effectively managed IP	

7. **IMPLEMENTATION**

IP1 implementation will be in Lake Abertine Water Management Zone by the Ministry of Water and Environment and Uganda Wildlife Authority with the IBRD/WB as the Lead MDB. The AfBD and FAO will actively participate in the project as participating MDB and Technical Agency respectively.

8. **READINESS**

Institutional capacity: Capacity to implement the Investment Program is based on laws and policies on forestry, wildlife, wetlands, agriculture, land, water and the environment. The Catchment based Water Resources Management Strategy and Water Management Zones are central to institutional readiness. NFA and UWA have offices in forest reserves and wildlife protected areas and management and operational plans. The participating institutions have a wealth of experience in implementing multi-donor and multi sectoral donor supported programs of World Bank, AfDB, UNDP and EU.

District capacity: Districts have the mandate to manage Local Forest Reserves, forest resources outside forest reserves, wildlife conservation areas, wetlands, land, agriculture, community development, and renewable energy initiatives. Districts function through Technical Planning Committees responsible for planning and coordinating implementing multi-sector Programs at district levels.

Monitoring and Evaluation: Program specific monitoring will be undertaken against FIP and PPCR output and outcome indicators.

9. **IMPLEMENTATION ARRANGEMENTS AND READINESS**

a) **Implementation Arrangements**

IP1 implementation will be led by three entities: (i) the Ministry of Water and Environment (MWE) (through the National Forestry Authority (NFA), Forest Sector Support Department (FSSD) and Directorate of Water Resources Management (DWRM/WMZ)), (ii) Uganda Wildlife Authority (UWA) for investment in forests in national parks and wildlife reserves, and, (iii) District Local Governments (DLGs) for investment in local forest reserves and landscapes outside protected areas. Implementing entities will collaborate with CSOs, private sector, research and academic institutions and other stakeholders.

Implementing institutions will be supported by the: (i) Ministry of Finance, Planning and Economic Development (MoFPED), (ii) National Environment Management Authority (NEMA), (iii) Ministry of Energy and Minerals Development, (iv) Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), (v) Ministry of Land, Housing and Urban Development (MLHUD), (vi) National Planning Authority (NPA), and (vii) National Forestry Resources Research Institute (NaFORRI).

The cohesive manner in which this project will be implemented will provide key lessons that can be utilized for future effectiveness of collaboration and partnerships between the participating agencies, both governmental and non-governmental and the MDBs.

b) **Readiness**

Uganda's implementation readiness for the proposed project is high as elaborated below.

i. **Institutional capacity:** There are laws and policies on forestry, wildlife, agriculture, energy, land, water and the environment with institutional capacity to plan and implement policies, programs and projects. MWE developed a Catchment-based Water Resources Management Strategy (2013) and created WMZ offices and structures for implementing the Strategy. These Offices are pillars for the Integrated Catchment Management approach envisage under this project. The UWA and NFA have management presence and facilities in each of the targeted protected areas as well management plans and strategies and operational plans. The participating institutions have a wealth of experience in implementing multi-donor and multi sectoral donor supported programs including World Bank, AfDB, UNDP and EU.

ii. **Institutional capacity (Districts):** Districts have mandate to manage Local Forest Reserves, forest resources outside forest reserves and wildlife conservation areas, land, agriculture, community development, and renewable energy Programs and initiatives. In addition, districts function through Districts Technical Planning Committees whose function, among others, is planning and coordinating implementing multi-sector Programs at district levels.

iii. **Coordination/supervision**: The project will be implemented through existing government structures, led by the Water Management Zone offices, Local Governments/Districts and field offices of UWA and NFA. It will be coordinated and supervised by PCE, NCCAC, Water and Environment Sector Working Group (WESWG) at Central levels and by District Technical Planning Committee at District level.

iv. **Implementing Partners:** MWE and FSSD, NFA, UWA, DWRM, Districts, Non-Government/CSO (TBD), Private Sector players (TBD).

v. **M&E:** M&E will be part of the PPCR and FIP Results Frameworks. Project specific monitoring will be through project specific outputs and outcome indicators.

10. **FINANCING PLAN (USD million)**

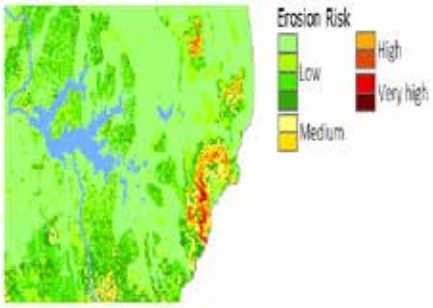
Components	**GoU commitment**	**FIP request**	**PPCR request**	**TOTAL (indicative and scalable)**			TOTAL
				GCF	**GEF**	**IBRD /WB**	
Component 1: Strengthening integrated water catchment management	0.2	2	3	8	0	0	13.2
Component 2: Strengthening forest conservation	0.4	10	4	18	5	30	67.4
Component 3: Restoring land, forest and other ecosystems in key sub-catchments	0.2	2.5	6	12	0	10	30.7
Component 4: Nature-based tourism development	0.1	3	1.5	2	0	10	6.6
Project Monitoring and evaluation	0.1	0.5	0.5	0	0	0	1.1
SUB-TOTAL 1P1	**1**	**18**	**15**	**40**	**5**	**50**	**129**

Investment Project 2: Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Lake Kyoga and Upper Nile WMZ[136]

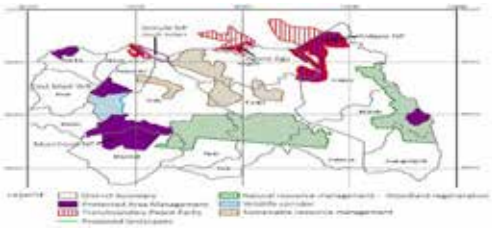
Investment Project Role	Institution
Lead Implementing MDB	African Development Bank
Supporting MDB and Technical Agency(s)	IBRD/WB Food And Agriculture Organisation
Lead national entity	Ministry of Water and Environment, Ministry of Agriculture and Animal Industry
Supporting national implementing entities	Ministry of Wildlife, Tourism and Antiquities Local Governments (Districts), National Forest Authority, Uganda Wildlife Authority

Status summary		Source	Contribution
Short Project Name	Lake Kyoga and Upper Nile Landscape project	GCF funding PPCR FIP AfDB GoU	USD 30.0 million USD 16.0 million USD 12.0 million USD 20.0 million USD 5.0 million
		Total financing	USD 83.0 million
Country/Region	Uganda, East Africa		
Type of funding	Grant		
Status	CIF submission planned - June 2017		
Expected GCF Board	2017		

Mt. Elgon Ecosystem



Upper Nile WMZ



Summary

This Investment Project will address rapidly degrading natural resources in the Lake Kyoga and Upper Nile WMZ in order to protect environmental services and enhance resilience to climate change. The IP will support catchment management, forest, wetlands and rangeland management, land /agriculture management, biomass energy, access to water for domestic use and agriculture production, and restoration and nature-based tourism.

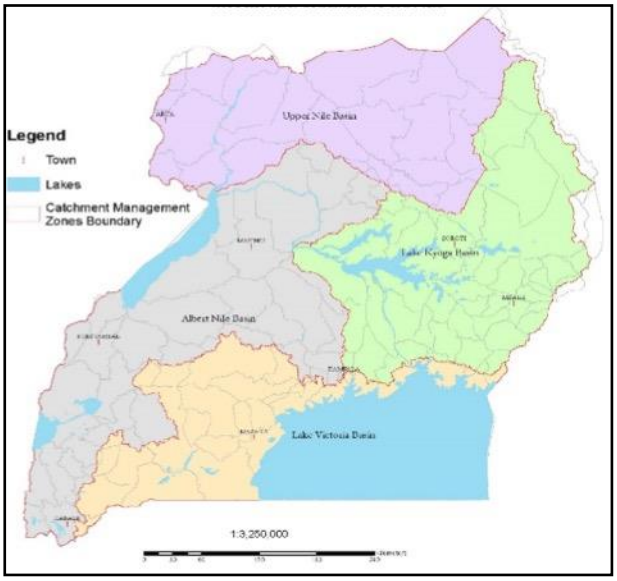
GoU seeks to mobilize CIF, GCF, GEF and other sources for additional support. AfDB loans and forest carbon financing are also potential source of funding. Uncertainty over the scale of the project and availability of financing requires the design of the IP to be 'scaleable' and phased.

[136] IP1 will operate in the Albertine Rift, falling within the Lake Albert Water Management Zone

1. BACKGROUND AND JUSTIFICATION

Forest Resources: At national level, the rate of forest loss, at 120,000 ha per annum, is amongst the highest in the world. In the Upper Nile and Lake Kyoga WMZ deforestation is driven largely by expansion of smallholder agriculture and charcoal production. Despite high levels of loss and degradation, the Mt Elgon and woodlands ecosystems in upper Nile still holds high levels of biodiversity. These forests and woodlands also sustain and regulate supply of water for domestic and industrial consumption, irrigation and hydropower, provide wood fuels, timber and other resources central to local livelihoods, and are major carbon sinks.

Socio-economic:



Upper Nile WMZ: Large parts of the Upper were marked by civil conflict until recently, leading to a recovery of forests in many areas. However, with peace and stability this trend has been completely reversed with woodlands being converted to agricultural and range land at an alarming rate. Additional, uncontrolled fires play an important role in woodland degradation in the region. Despite the increased security and on-going economic development, over 75% of people remain below the poverty line[137]. In combination with the more erratic climate patterns and frequent droughts common to northern Uganda household vulnerability to climate change is high, in particular in Karamoja (east) and West Nile (west). The two landscapes are also the areas with the lowest rainfall and highest temperatures in the WMZ (semi-arid zones[138]). The eruption of civil war in South Sudan has had negative impacts for the border regions – limiting trade and resulting in a renewed influx of refugees.

Lake Kyoga WMZ: The remaining mountainous forest lands, largely in protected areas (Mt. Elgon NP and Namatala CFR), constitute important shelters for biodiversity, and are very important for the replenishment of water resources in lower areas of the watersheds. The rough terrain in combination with limited permanent vegetation cover/intensive agricultural use in the densely populated landscape results in high erosion levels. Large, very destructive landslides have occurred several times in recent years. In order to secure sustainability of Mt Elgon ecosystem, sustainable landscape level land use planning is needed, taking into consideration climate change and hazards, the high population pressure, and the important functions of intact wetlands – many of which have already been drained and converted to agricultural uses without planning.

[137] UBOS (2015). *Statistical Abstract 2015.*
[138] MWE (2013). *Water Resources Assessment Report.*

Nature-Based Tourism: Tourism is Uganda's fastest growing industry. In 2012 it contributed 9% of GDP and created 225,300 jobs directly and a further 296,700 indirectly[139]. Revenue generation increased from USD 640 million in 2008 to USD 2bn in 2012 – the second largest foreign exchange earner after coffee. Every dollar spent by tourists generates $2.5 – comparing favourably with traditional exports[140]. An additional 100,000 tourists per year would boost GDP by 1%. Mt Elgon and Kidepo NP and associated Wildlife Reserves have great potential for contributing to generating significant revenues for local communities, improved social services (through revenue sharing) and improved attitudes towards forest and park management. However, investment is needed in tourism infrastructure, protected area management and marketing to achieve continued development of nature-based tourism.

Transformational change: The IP will reduce pressure on natural forest resources through improvements in land use and demonstration of the ecological and aesthetic values to the economy and livelihoods, increased resilience of ecosystems and livelihoods and security of access and use of water for domestic and agricultural development. Working with Government, NGOs/CSO, Communities, land owners and private sector players, capacities for forest management, catchment management and engaging multi-stakeholder processes will be strengthened and utilized to scale up integrated landscape and catchment management processes across the WMZ and Uganda as a whole.

2. PROJECT DESCRIPTION

The Investment Project aims to address the needs of communities for climate resilient livelihoods and the need for ecosystem protection concurrently. Broadly, it will protect environmental services and maintain and enhance resilience to climate change, establishing sustainable resource management strategies in the two WMZs. Community-based models to reduce natural resource degradation, promote land, forest and wetland restoration and rehabilitation, increase land productivity and protect ecosystems and water catchments will be developed and supported.

The project will work with stakeholders at community, land owner, local government, sub-catchment and WMZ levels, and engage the management bodies of forests, wildlife areas and wetlands. Investments in nature-based tourism will focus on revenue generation and on re-investment in communities and management and will be defined with management authorities and private sector tourism operators.

The project will demonstrate and enhance synergies between climate change mitigation and resilience investments of FIP and PPCR in the same landscapes.

[139] World Bank report (2013) provides the following figures: Tourism accounts for 3.7% of GDP compared to 4.8% in Tanzania and 5% in Kenya. Uganda attracts 75,000 leisure and cultural tourists per annum (17% of the tourism total) Over 50% of all tourists visit Queen Elizabeth and Murchison Falls National Parks. Leisure tourists spend in the order of USD 88 million/yr. Tourism arrivals have dropped in the last couple of years (UBOS 2015 - The number of visitors to national parks decreased from 214,000 in 2013 to 203,000 in 2014; Tourists visiting friends and relatives in Uganda decreased from 528,000 in 2013 to 441,000 in 2014).

[140] Analysis by World Bank published in 2013.

3. PROJECT GOAL AND OBJECTIVES

Goal - To strengthen resilience of communities and ecosystems to the impacts of climate change while contributing to the mitigation of climate change.

Overall objective - To strengthen the management of water catchments, catchment forests and other catchment ecosystems.

Immediate objectives:

a. Strengthen integrated water catchment management.
b. Improve management of forest reserves, forested national parks and wildlife conservation areas.
c. Enhance stakeholder participation in the management of water catchments and their natural resources
d. Support nature-based tourism and forest-based livelihoods.
e. Support to Water harvesting, storage and utilization.

4. GEOGRAPHICAL SCOPE

Sub-catchments will be selected on their potential to: i) reduce CO2 emissions from deforestation and forest degradation; ii) demonstrate climate change mitigation and adaptation/resilience; iii) achieve biodiversity conservation; iv) enhance livelihoods; v) existing and planned interventions.

5. PROJECT COMPONENTS

Component 1: Strengthening integrated water catchment management
Investments will focus on improved planning, management and dialogue between stakeholders for water catchment management at national, WMZ, catchment and sub-catchment levels. Indicatively, this will include support for:

a. Mapping, analysis and geospatial support at WMZ and catchment level
b. Development and implementation of catchment management plans[141]
c. Establishment and operations of WMZ stakeholder forums
d. Establishment and operations of sub-catchment management committees
e. Support national and WMZ institutions and local stakeholders to deliver integrated water catchment management interventions

Component 2: Strengthening forest conservation
Investments will focus on engaging stakeholders in the conservation of forest reserves, forested national parks, and sustainable management of forest on private land. Indicatively, this will include support for:

a. Management of Mt Elgon national park
b. Biodiversity and ecological data collection and analysis and management
c. Conservation and restoration of forest/biodiversity corridors
d. Establishment and operations of multi-stakeholder processes for forestry governance
e. Up scaling collaborative management and benefit sharing initiatives between UWA and NFA, and communities

[141] Include agriculture based interventions that address land productivity and agriculture resilience to climate change

f. Supporting management of central and local forest reserves
g. Strengthening sustainable use of forest resources
h. Capitalization of the Uganda Biodiversity Fund[142]
i. Combatting wildlife crimes and timber theft
j. Promoting forest resources-based livelihoods
k. Improved efficiency in use of biomass fuel
l. Strengthening wood and wood fuel value chains

Component 3: Restoring land, forest and other ecosystems in key sub-catchments

Investments will focus on restoring ecosystems for the supply of goods and services: Indicatively, this will include support for:

a. Up scaling successful forest and land restoration pilots
b. Incentives for production forestry within forest reserves and on private land
c. Incentives[143] for maintaining natural forest on private land
d. Restoring forests and other critical ecosystems in key biodiversity corridors
e. Promoting and developing resource management agreements, on-farm tree-agriculture based production systems

Component 4: Nature-based tourism development

Investments will focus on long-term development of pro-poor; community orientated nature-based tourism. Indicatively, this will include support for:

a. Marketing and promotion of Uganda's nature-based tourism
b. Wildlife and forest based (eco) tourism concession management
c. Investments in key infrastructure to 'unlock' wildlife and nature based tourism potential
d. Support to increase community participation in nature-based tourism
e. Strengthening effectiveness of revenue sharing schemes

Component 5: Provision of water for domestic use and agricultural production

Investments will focus on technologies for water harvesting, storage and utilization and control and management of water flows. Indicatively, this will include support for:

a. Construction of water storage dams and reservoirs for domestic and agricultural production and associated water supply infrastructure.
b. Efficient water use, rainwater harvesting and on-farm water harvesting for domestic use and agriculture (including aquaculture).
c. Development of sanitation facilities to improve sanitation and hygiene.
d. Land based interventions for protecting water sources.
e. Development of small to medium scale irrigation schemes.
f. Construction of flood control channels and check dams to store water for productive use.

[142] The Uganda Biodiversity Fund, recently established with support from USAID and the Wildlife Conservation Society, will employ GEF funding to support conservation activities
[143] Include land/forest tenure , PES,

Component 6: Project monitoring and management
Investments will focus the efficient and timely delivery of the program. Indicatively, this will include support for:

a. Project management and implementation team
b. Program operations
c. Monitoring, evaluation and reporting

6. EXPECTED OUTCOMES

The following outcomes are envisaged:

a. Enhanced resilience of ecosystems and conservation of biodiversity
b. Greater resilience of communities and livelihoods to climate change impacts
c. Reduced poverty and direct dependence on natural resources use
d. Increased incomes from nature-based tourism
e. Improved land management sustaining supply of ecosystem goods and services
f. Reduced GHG emission from deforestation and forest degradation
g. Pilot projects for results based payments

7. IMPLEMENTATION

Joint FIP and PPCR project implementation will be led by the Ministry of Water and Environment (through the National Forestry Authority, the Forest Sector Support Department and the Directorate of Water Resources Management), Ministry of Agriculture and Animal Industry with the AfDB as the Lead MDB and FAO will actively participate as Technical Agency.

8. READINESS

Institutional capacity: Capacity to implement the Investment Program is based on laws and policies on forestry, wildlife, wetlands, agriculture, land, water and the environment. The Catchment based Water Resources Management Strategy and Water Management Zones are central to institutional readiness. MWE/DWRM, NFA and UWA have offices in forest reserves and protected areas and management and operational plans. The participating institutions have a wealth of experience in implementing multi-donor and multi sectoral donor supported programs of World Bank, AfDB, UNDP and EU.

District capacity: Districts have the mandate to manage Local Forest Reserves, forest resources outside forest reserves, wildlife conservation areas, wetlands, land, agriculture, community development, and renewable energy initiatives. Districts function through Technical Planning Committees responsible for planning and coordinating implementing multi-sector Programs at district levels.

Monitoring and Evaluation: Program specific monitoring will be undertaken against FIP and PPCR output and outcome indicators.

The details of the outcomes are presented in the following table.

Project activities	Project outcomes	Transformational change
Component 1: Strengthening integrated water catchment management		
▪ Mapping, analysis and geospatial support at WMZ and catchment level ▪ Development and implementation of catchment management plans[144] ▪ Establishment and operations of WMZ stakeholder forums ▪ Establishment and operations of sub-catchment management committees ▪ Support national and WMZ institutions and local stakeholders to deliver integrated water catchment management interventions	▪ The selected WMZs Offices have the capacity to design, plan and coordinate land management projects at landscape level ▪ Districts have capacity for forests sector coordination, forestry resources management and forest revenue management. ▪ Roles and responsibilities for implementation of plans are clear and finance to implement them is available or has been identified ▪ Availability of data and information on water resources. ▪ Catchment based Water resources management processes (IWRM) adequately addressing land based interventions • Increased knowledge on water resources potential in the targeted sub catchments • Increased funding /funding opportunities for Catchment management plans	▪ Reduced pressure on forest resources through improvements in land use, restoration of forest lands and corridors. ▪ Demonstration of the ecological and aesthetic values to the economy and livelihoods. ▪ Capacities and processes for forest management and catchment management within and among Government, NGOs/CSO, Communities, land owners and private sector players ▪ Multi-stakeholder processes supporting integrated landscape and catchment management processes across the WMZ ▪ Capacities and processes for
Component 2: Strengthening forest conservation		
• Management of five forested national parks • Biodiversity and ecological data collection and analysis and management • Conservation and restoration of forest/biodiversity corridors • Establishment and operations of multi-stakeholder processes for forestry governance • Up scaling collaborative management and benefit sharing initiatives between UWA and NFA, and communities • Supporting management of central and local forest reserves • Strengthening sustainable use of forest resources • Capitalization of the Uganda Biodiversity Fund • Combatting wildlife crimes and timber theft • Promoting forest resources-based livelihoods • Improved efficiency in use of biomass fuel	▪ Business models for the rehabilitation of natural forests, SFM and sustainable use of timber and non-timber forest resources from natural forests have been developed and implemented in pilot projects ▪ Degraded and sensitive areas on private land have been reforested by land owners/users alone or in public-private partnership. ▪ Availability of data and information on forests, wildlife resources. ▪ Degraded forest areas within Pas have been restored. ▪ Markets for diversified and improved forest products, including green charcoal ▪ CFM and CRM is in place and functional in the selected gazetted areas ▪ Stakeholders engaged in management of targeted forest reserves (participatory forest management processes) ▪ Enhanced resilience of ecosystems and status of biodiversity ▪ Reduced GHG emission from deforestation and forest degradation. ▪ Reduced threats to forested national parks ▪ Increased contribution of forest resources to national economy and livelihoods ▪ Increased incomes from forest/wood products.	

[144] Include agriculture based interventions that address land productivity and agriculture resilience to climate change

• Strengthening wood and wood fuel value chains	▪ Increased biodiversity funding opportunities	integrated land and watershed management
Component 3: Restoring land, forest and other ecosystems in key sub-catchments		
▪ Up scaling successful forest and land restoration pilots ▪ Incentives for production forestry within forest reserves and on private land ▪ Incentives for maintaining natural forest on private land ▪ Restoring forests and other critical ecosystems in key biodiversity corridors ▪ Promoting and developing resource management agreements, on-farm tree-agriculture based production systems	▪ Restored forest lands and forest and biodiversity corridors ▪ Private land with natural forests ▪ Production forest in Pas and on private land ▪ Enhanced resilience of ecosystems and livelihoods to effects of climate change. ▪ Improved livelihoods of the households in the project areas.	
Component 4: Nature-based tourism development		
▪ Marketing and promotion of Uganda's nature-based tourism ▪ Wildlife and forest based (eco) tourism concession management ▪ Investments in key infrastructure to 'unlock' wildlife and nature based tourism potential ▪ Support to increase community participation in nature-based tourism ▪ Strengthening effectiveness of revenue sharing schemes		
Component 5: Integrated Land and Watershed Management including Support to Water Harvesting, Storage and Utilization		
▪ Construction of water storage dams and reservoirs for domestic and agricultural production and associated water supply infrastructure. ▪ Efficient water use, rainwater harvesting and on-farm water harvesting for domestic use and agriculture (including aquaculture). ▪ Development of sanitation facilities to improve sanitation and hygiene. ▪ Land based interventions for protecting water sources. ▪ Development of small to medium scale irrigation schemes. ▪ Construction of flood control channels and check dams to store water for productive use.	▪ Enhanced resilience of ecosystems and livelihoods to effects of climate change ▪ Improved livelihoods of households in the project areas through increase access to water, improved sanitation, improved land and agriculture productivity ▪ Technologies and practices for efficient water harvesting and use for domestic and agricultural production	

Component 6: Project monitoring and management		
▪ Project management and implementation team ▪ Program operations ▪ Monitoring, evaluation and reporting	▪ Effectively managed Joint FIP&PPCR investments	

9. IMPLEMENTATION ARRANGEMENTS AND READINESS

Implementation arrangements

FIP implementation will be led by three entities: (i) the Ministry of Water and Environment (MWE) through the National Forestry Authority (NFA), Forest Sector Support Department (FSSD) and Directorate of Water Resources Management (DWRM), (ii) Uganda Wildlife Authority (UWA) for investment in forests in national parks and wildlife reserves, and, (iii) District Local Governments (DLGs) for investment in local forest reserves and landscapes outside protected areas. Implementing entities will collaborate with CSOs, private sector, research and academic institutions and other stakeholders.

Implementing institutions will be supported by the: (i) Ministry of Finance, Planning and Economic Development (MoFPED), (ii) National Environment Management Authority (NEMA), (iii) Ministry of Energy and Minerals Development, (iv) Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), (v) Ministry of Land, Housing and Urban Development (MLHUD), (vi) National Planning Authority (NPA) and (vii) National Forestry Resources Research Institute (NaFORRI).

The cohesive manner in which this project will be implemented will provide key lessons that can be utilized for future effectiveness of collaboration and partnerships between the participating agencies, both governmental and non-governmental and the MDBs.

Readiness

Uganda's implementation readiness for the proposed project is high as elaborated below.

a. **Institutional capacity:** There are laws and policies on forestry, wildlife, agriculture, energy, land, water and the environment with institutional capacity to plan and implement policies, programs and projects. The MWE developed a Catchment-based Water Resources Management Strategy (CbWRM) (2013) and created WMZ offices and structures for implementing the Strategy. These Offices are pillars for the Integrated Catchment Management approach envisage under this project. The UWA and NFA have management presence and facilities in each of the targeted protected areas as well management plans and strategies and operational plans. The participating institutions have a wealth of experience in implementing multi-donor and multi sectoral donor supported programs including World Bank, AfDB, UNDP and EU.

b. **Institutional capacity (Districts):** Districts have mandate to manage Local Forest Reserves, forest resources outside forest reserves and wildlife conservation areas, land, agriculture, community development, and renewable energy Programs and initiatives. In addition, districts function through Districts Technical Planning Committees whose function, among others, is planning and coordinating implementing multi-sector Programs at district levels.

c. **Coordination/supervision**: The project will be implemented through existing government structures, led by the Water Management Zone offices, Local Governments/Districts and field offices of UWA and NFA. It will be coordinated and supervised by PCE, NCCAC and WESWG at Central levels and by District Technical Planning Committee at District level.

d. **Implementing Partners:** MWE and FSSD, NFA, UWA, DWRM, DWD, Districts, Non-Government/CSO (TBD), Private Sector players (TBD).

e. **M&E:** M&E will be part of the PPCR and FIP Results Frameworks. Project-specific monitoring will be through project specific outputs and outcome indicators.

10. **FINANCING PLAN (USD million)**

Components	**GoU commitment**	**FIP request**	**PPCR request**	OTHER (indicative and scalable		TOTAL
				GCF	AFDB	
Component 1: Strengthening integrated water catchment management	1.5	1	1	4	2	9.5
Component 2: Strengthening forest conservation	1	2	1.5	5	2	11.5
Component 3: Restoring land, forest and other ecosystems in key sub-catchments	0.5	1	3	15	4	23.5
Component 4: Nature-based tourism development	0.5	1	1.5	2	3.5	8.5
Component 5: Provision of water for domestic use and agricultural production	1	7	8.5	3.5	8	28
Project Monitoring and evaluation	0.5	0	0.5	0.5	0.5	2
SUB-TOTAL IP2	**5**	**12**	**16**	**30**	**20**	**83**

Investment Project 3: Strengthening capacity for forestry governance and policy implementation

Investment Project Role	Institution
Lead Implementing MDB	TBD
Supporting MDB and Technical Agency(s)	TBD
Lead national entity	Ministry of Water and Environment
Supporting national implementing entities	Ministry of Wildlife, Tourism and Antiquities Local Governments (Districts), National Forest Authority, Uganda Wildlife Authority

Status summary		Source	Contribution
Short Project Name	Forestry policy and sector performance	TBD GoU	USD 20 million USD 2.0million
		Total financing	USD 22.0 million
Country/Region	Uganda, East Africa		
Type of funding	Grant		
Status	CIF submission planned - June 2017		
Expected GCF Board	2017		

Summary

Uganda has a well-developed policy and legal framework for the forest sector and non-forest sectors, providing measures for forest regulation at central and district levels, and for creating or fostering coordination and engagement with stakeholders and mainstreaming forestry issues into other sector policies. Uganda also has well established institutional structures and mandates for managing the forestry sector at central and district levels.

The performance of these frameworks performance remains weak, however, partly due to inadequate institutional capacities, weak sector and cross-sector coordination, and complex regulations that agencies lack the incentives and means to enforce. As a consequence, there are weaknesses in regulation and compliance. There are serious under-capacities for knowledge generation and information management. In addition, there is need is to strengthen the enabling policy environment and to enhance forest sector performance, including by promoting the commercial production of woodfuels from integrated plantation forestry systems.

1. BACKGROUND AND JUSTIFICATION

Policy, legal and institutional arrangements

Uganda's aspirations for forestry sector development continue to be undermined by the weaknesses and short-comings in the policy, legal and institutional arrangements and capacities. Current efforts of ensuring better policy performance, sector coordination and service delivery within the forestry sector continue to the face challenges in form of capacities for coordination within the sector and between the sector and non-sector institutions and mandates, policy implementation and monitoring policy performance, mobilizing and engaging stakeholders as

well as creating enabling environment for private sector contribution to the sector growth and management.

The environment for the private sector to engage in forest based industries is not conducive. The sector is weakly governed and regulated while availability of technology and financial resources in forest products value addition is limited. There is limited information on legal and illegally traded timber in the market and ineffective control of chain of custody for forest products. Regulations are sometimes unenforceable and the costs of evasion are lower than the costs of compliance, while enforcement agencies lack both the means and the incentive to apply the rules. This is especially the case for the massive charcoal industry, which operates largely outside the law. In order to have a sustainable forest sector and to address deforestation and degradation, there is need to address these underlying challenges.

The objective of IP3 is to strengthen the enabling environment for forestry governance, enhanced forest sector performance. IP3 recognizes the significance of the policy performance and institutional capacities in achieving its objectives in the following key aspects: forest protection, regulation of forestry sector and forest industry activities, monitoring policy implementation and compliance, sustainable forest management as well as generating and disseminating forestry data and information.

IP3 will target a wide range of capacity and governance-related issues within the forest sector related to governance (policy implementation, sector and cross-sector coordination and stakeholder engagement), institutional capacity (management systems and facilities, information management, skills and human resources) and policy measures for ensuring efficient forest industry are addressed.

Transformational change: Transformational change: IP3 will improve policy performance and policy and institutional environment for forestry sector coordination and development and for enabling landscape approaches to succeed.

2. PROJECT DESCRIPTION

This project will strengthen forestry sector and cross-sector coordination between the national and local government levels. Forest governance platforms at national level will be supported to improve performance in the sector. Reforms to strengthen the engagement of civil society, private sector and indigenous communities will be initiated or supported, in particular at national level. Further, the project will address institutional capacity deficits (management/administrative systems and facilities, skills and human resources) in mandated government institutions within and outside the forestry sector. The implementation of this component will be linked to IP1 and IP2, i.e. institutional capacity building in the districts covered by the landscape pilot projects. Lastly, the project will promoting private sector-led investments into appropriate technologies for the utilization of large and small dimension timber as well as promoting the development of new markets for forest products produced from sustainably managed forests and diversified forest products. The production of energy from integrated plantation forestry systems for industrial, commercial and domestic use will be a key element.

3. GEOGRAPHICAL SCOPE

The project will be implemented at national level targeting the sector ministries, Departments and Agencies, legislature and law enforcement agencies as well as national levels actors (NGOs/CSO, private sector, academia).

4. PROJECT GOAL AND OBJECTIVES

Goal - To strengthen forestry policy performance.

Overall objective - To strengthen forestry governance and sector coordination.

Immediate objectives:

a. Strengthen forest sector coordination.
b. Strengthen forest regulation
c. Strengthen forest governance and stakeholder engagement in policy implementation
d. Strengthen skills for supporting value chains and value
e. Improve forest utilization efficiency
f. Improve market for forestry produce.

5. PROJECT COMPONENTS

Component 1: Strengthening forest governance and institutional capacity
Investments will focus on forestry policy implementation, regulation and sector coordination. Indicatively, this will include support for:

a. Strengthening forestry policy implementation and sector coordination between mandated institutions at the centre and districts and with mandated institutions, CSOs, private sector at national level.

b. Supporting active participation of NGOs/CSOs, private sector and indigenous/forest dependence people in stakeholder platforms in forestry sector national level planning and governance.

c. Strengthening NFA, FSSD and UWA management/administrative systems, facilities, skills and human resources for improved enforcement, supervision and compliance.

d. Establishing forestry data and information management systems at national including processes for data generation and management within government institutions, mechanisms for easy access to knowledge and information about forestry and the sector by third parties and generation of materials for policy makers.

e. Strengthening forest revenue generation and management systems including harmonizing national licensing/permit/fee systems, linking them to a centralized control and grievance mechanisms and mandate and operations of DFOs at district levels.

f. Reviewing laws and regulations governing the commercial woodfuels industry, especially the charcoal sector, to develop a simpler, more implementable policy and legal framework that can be more realistically implemented with the capacity available at district level.

g. Strengthening capacity of Nyabyeya Forest College (NFC) with training infrastructure, facilities and trainers to conduct short term, tailor made training modules

Component 2: Efficient and sustainable forest based industry

Investments will focus on private sector-led technologies and processes for efficient forest utilization, value addition and value chains. Indicatively, this will include support for:

a. Efficient conversion technologies and value addition

b. Wood value chains and timber markets

c. Forestry industry market research and product development and dissemination

d. Development of commercially viable value chains for the biomass energy by-products of farm forestry, offering tree growers useful cashflow at income-deficient points in the production cycle and providing industrial, commercial and domestic consumers with a reliable source of high quality wood-based fuel from sustainable sources. To include (i) support and expansion of supply chains for un-carbonized biomass from planted trees to Ugandan industry, potentially including the conversion of fossil fuel systems to biomass-powered alternatives; and (ii) developing markets and supply chains for value-added charcoal in markets that place value on product features other than price, such as environmental or community credentials, packaging, branding, convenience, reliability, consistency or terms of credit.

Component 3: Project monitoring and management

Investments will focus the efficient and timely delivery of the program. Indicatively, this will include support for:

a. Project management and implementation team
b. Program operations
c. Monitoring, evaluation and reporting

6. EXPECTED OUTCOMES

a. Improved forestry policy performance

b. Improved forestry sector coordination and development

Activity	Outcome	Transformational impact
Strengthening forestry governance and sector performance		▪ Improved forestry policy performance ▪ Improved forestry sector coordination and development ▪ High forest values and premiums for wood products
▪ Strengthening forestry policy implementation and sector coordination between mandated institutions at the centre and districts and with mandated institutions, CSOs, private sector at national level. ▪ Supporting active participation of NGOs/CSOs, private sector and indigenous/forest dependence people in stakeholder platforms in forestry sector national level planning and governance. ▪ Strengthening NFA, FSSD and UWA management/administrative systems, facilities, skills and human resources for improved enforcement, supervision and compliance. ▪ Establishing forestry data and information management systems at national including processes for data generation and management	▪ Adequate coordination of lead agencies, mandated institutions and other stakeholders in the forestry sector at national levels. ▪ Formal involvement of NGOs/CSO, private sector and indigenous/forest dependent people in forest governance. ▪ Comprehensive forestry data and forest sector information is available and accessible	

within government institutions, mechanisms for easy access to knowledge and information about forestry and the sector by third parties and generation of materials for policy makers. ▪ Strengthening forest revenue generation and management systems including harmonizing national licensing/permit/fee systems, linking them to a centralized control and grievance mechanisms and mandate and operations of DFOs at district levels. ▪ Reviewing laws and regulations governing the commercial woodfuels industry, especially the charcoal sector, to develop a simpler, more implementable policy and legal framework that can be more realistically implemented with the capacity available at district level. ▪ Strengthening capacity of Nyabyeya Forest College (NFC) with training infrastructure, facilities and trainers to conduct short term, tailor made training modules.	▪ Improved forest revenue from permits, licenses and fees issued transparently at national and district levels and revenue/income generated predictable. ▪ Improved forestry regulation ▪ Increased skilled manpower in wood processing and wood science	
Efficient and sustainable forest-based industry		
▪ Efficient conversion technologies and value addition ▪ Wood value chains and timber markets ▪ Forestry industry market research and product development and dissemination. ▪ Develop commercially viable value chains for the biomass energy by-products of farm forestry, offering tree growers useful cashflow at income-deficient points in the production cycle and providing industrial, commercial and domestic consumers with a reliable source of high quality wood-based fuel from sustainable sources. To include (a) support and expansion of supply chains for un-carbonized biomass from planted trees to Ugandan industry, potentially including the conversion of fossil fuel systems to biomass-powered alternatives; and (b) developing markets and supply chains for value-added charcoal in markets that place value on product features other than price, such as environmental or community credentials, packaging, branding, convenience, reliability, consistency or terms of credit.	▪ Increased uptake of appropriate technologies and diversifies wood products of good quality ▪ Stronger and reliable markets ▪ Improved technologies and utilization efficiency	

7. IMPLEMENTATION

Arrangements

The Ministry of Water and Environment (via FSSD and NFA) and Uganda Wildlife Authority (UWA) will act as the lead government agencies for implementing this project. The MWE has mandate and responsibility for policy and legislation formulation and for monitoring and evaluation for the Water and Environment Sector, and Forestry subsector in particular, UWA has mandate over forest resources within the wildlife protected areas while Districts manage Local Forest Reserves and oversee management of Community forests. Within the Ministry, there are

lead agencies for forestry namely; NFA (responsible for managing CFRs) and FSSD (responsible for forestry policy coordination and supervision and regulation). At District level, the District Forest Support Department will take lead in implementing the district based components and for coordinating with other district technical departments, NFA and UWA and other players, including CSOs and private sector.

The MWE, UWA and Districts will be supported by: i) MoFPED, which coordinates donor support in the country; ii) NEMA, which coordinates environment matters in the Country, iii) Ministry of Energy and Minerals Development, which is responsible for renewable energy, iv) Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) which has mandate over agriculture, v) Ministry of Land, Housing and Urban Development (MLHUD) which has mandate over land use policies, vi) National Planning Authority (NPA) which coordinates national planning, vii) National Forestry Resources Institute (NaFORRI) which has mandate for conducting research in forestry, and Nyabyeya Forest College which provides training to Forestry technicians as well as providing skills development to forestry stakeholders.

Readiness

Uganda's implementation readiness for the proposed project is high.

a. **Institutional capacity (National)** There is a comprehensive body of legislation in forestry, wildlife, agriculture, energy, land and the environment with institutional capacity to plan and implement policies, programs and projects. The institutions in charge of the forestry are staffed with professional in forestry and policy matters although their numbers are low compared to the institutional mandates. Furthermore, there is a wealth of experience in implementing multi-donor and multi sectoral donor supported programs in Uganda (World Bank, UNDP and EU).

b. **Institutional capacity (Districts):** Districts have obligation to implement national policies and development plans. Districts and lower governments also have mandate to develop and implement bylaws and ordinances. Further, Districts have mandate over management of Local Forest Reserves and development of land use plans. Under the Local Government structures, districts have established forestry and natural resources linked departments (environment, land, wetlands) and staff positions. The main challenge is that departments in charge of the forestry and over-natural resources over-all are under-staffed. Staffing at the Local Forest Reserves is very low.

c. **Coordination/supervision**: The proposed FIP implementation arrangement will use the existing sector coordination and supervisions process and structures including PCE, NCCAC and WESWG and national levels and Technical Planning Committee and other coordination structures at District level.

d. **Implementing Partners:** Government Implementing agencies: Lead MWE, UWA; Others: FSSD, NFA, UWA and Districts; Non-Government (TBD), CSO/Private Sector players (TBD).

8. FINANCING PLAN/BUDGET (USD million)

Components	GoU commitment	Donor to be ideintified	TOTAL
Component 1: Strengthening forest governance and institutional capacity	**1.5**	**17.5**	19
Component 2: Efficient and sustainable forest based industry	**0.3**	**2**	2.3
Component 3: Project monitoring and management	**0.2**	**0.5**	0.7
SUB-TOTAL IP3	**2**	**20**	**22**

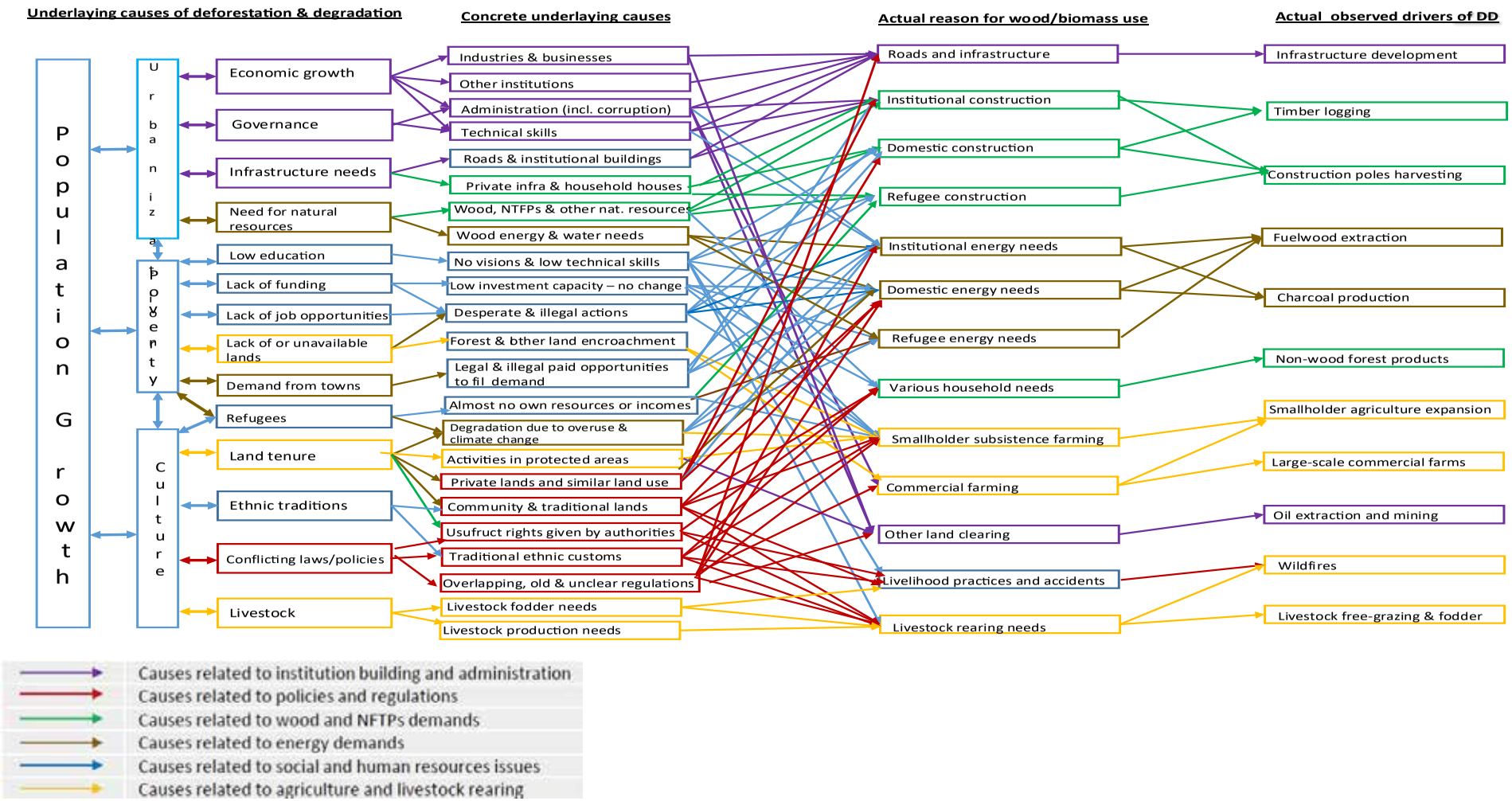
Annex 2: Strategy for Stakeholder Engagement in FIP formulation

Website: www.mwe.go.ug

Annex 3: Uganda's REDD+ Readiness Strategy and Action Plan

Website: www.mwe.go.ug

Annex 4: Underlying causes and drivers of deforestation and forest degradation in Uganda



Annex 5: Report of the Independent Review of the FIP

Uganda's Response to International Peer Review of Draft FIP Document

Dated: 2.5.2017

Part 0: Setting the context

Uganda has enjoyed solid economic growth (5 percent per year in 2014) and average increases in per capita consumption of 3 percent per year the last 25 years. There have been impressive reductions in poverty, 56.4 percent in 1992-3 to 24.5 percent in 2009 and 19.7 percent in 2013. Poverty rates however are higher in rural than in urban areas, and especially high in the north. With a land area of about 230,000 km^2 and a population of 35 million, Uganda has a favorable climate, fertile soils and generally abundant water resources. While landscapes in the south west are hilly and mountainous, with high rainfall and tropical rainforest ecosystems, the terrain flattens towards the north east, and savannah woodland predominates. Uganda has some of the richest biodiversity in Africa; nature-based tourism accounts for 9 percent of GDP, and is the second largest source of foreign exchange earnings after coffee.

Uganda has one of the highest rates of population growth (3.3 percent p.a.) and highest rates of deforestation (1.8 percent p.a.) in the world, both substantially higher than the African average. Expansion of small scale agriculture, on which the majority of the population (70 percent) depends, is a key driver, and biomass energy accounts of 93 percent of energy used in cooking and heating. Extensive livestock grazing is a further source of woodland degradation in the north. In addition, Uganda hosts large numbers of refugees from neighbouring countries (Rwanda, Southern Sudan and DRC). Wildfires, artisanal mining, oil exploration and expansion of human settlements are further causes.

Uganda's forests are categorized into four types: Tropical High Forest (THF) well stocked (430,888 ha); THF, degraded (136,280 ha); woodland (1,161,610 ha); and plantation forest (107,608 ha). Natural forest cover reduced from 30% of land area in 1990 to approximately 10% in 2015, from 3.32 million ha to 0.66 million ha outside protected areas, a fall of 80%, and from 1.53 to 1.07 million ha within protected areas. Uganda's plantation forest area meanwhile increased from 32,225 to 107,608 ha, with 63% of new planting in forest reserves and 27% on private land.

GHG emissions are low on a per capita basis; however, deforestation is a primary contributor. Using 2000 as the base year, the initial 2017 (forests emissions reference level) FERL report estimates that agriculture, land-use, land use change and forestry together contributed 91% of the national (11,759 Gg) GHG emissions, with forestry, mostly from deforestation, contributing 7,360 Gg. Data are not available on GHG emissions from livestock. Uganda currently does not

have sufficient data on non-CO2 emissions such as Methane (CH4), Carbon Monoxide (CO) and Nitrous Oxide (N2O).

A combination of high exposure and high vulnerability makes Uganda at high risk from the impacts of climate change. Uganda's temperature may increase by up to 1.5°C in the next 20 years and up to 4.3°C by the 2080s. Predictions indicate an increase in rainfall of 10–20% over most of the country with increased risk of floods and landslides especially in the highland areas, and a decrease in the northern semi-arid cattle corridor, with increased incidence of drought and periods of extreme heat.

Uganda has a well-developed policy and legal framework for the forest and non-forest sector, at central and district levels, with clearly defined responsibilities and mechanisms for stakeholder engagement. However implementation has been poor, as result of weak capacity and financing, inadequate staffing especially at district level, and difficulties with putting cross sectoral coordination into practice.

The Objective of the FIP is to reduce GHG emissions from deforestation and forest degradation, and to enhance forest carbon stocks through investments that aim to reduce pressure on natural forests, enhance forest ecosystem services, improve coordination and governance in the forestry sector and ensure a vibrant forest industry in Uganda. It aims to trigger a transformative change in the forestry sector towards low-carbon, sustainable development. It also aims to help implement national forest policy goals and the emerging REDD+ strategy, 'bridging-the-gap' between the REDD+ readiness process and results-based payments. It has been designed alongside the PPCR and will be implemented with it. It takes a landscape approach to implementation, focusing on four Water Management Zones through two investment projects. A third operation aims to strengthen the policy and institutional framework and support sustainable private investment in forestry and forest value chains.

Specific objectives include:

i. Promote integrated and sustainable management of forest landscapes and catchments, defined by GoU's planning jurisdictions at the catchment and sub-catchment level.
j. Strengthen institutional capacity for forest management at the landscape level.
k. Seek to mobilize additional and new forms of financing to support improved forest management outcomes, show good levels of permanence from previous forest carbon payments financed from voluntary carbon markets.
l. Encourage and finance the use of longer-term management plans for watersheds and forests.
m. Encourage private sector led investments in wood value addition and value chains and nature based tourism.

n. Encourage and facilitate Civil Society Organizations (CSOs)/Non-Government Organizations (NGOs).

o. Facilitate generation of and use of comprehensive and reliable forestry data.

p. Strengthen capacity for forest regulation of illegal forest utilization and trade in forest products.

The estimated cost of implementing Uganda's FIP is US$ 234 million for the three Investment Projects (IP) (Annex 1 of the FIP).Uganda requests funding from FIP (US$ 30 million), PPCR (US$ 31 million) and support of the MDBs to leverage additional funding of USD 173 million from other sources. Both projects contribute to both mitigation and adaptation, but project two, implemented in areas more subject to drought, has a stronger focus on resilience and seeks funding from PPCR. IP3 is at present unfunded.

IP1: Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Albertine Rift. (US$ 129m)

- Component 1: Strengthening integrated water catchment management (US$ 13.2m).
- Component 2: Strengthening forest conservation (US$ 67.4m).
- Component 3: Restoring land, forest and other ecosystems in key sub-catchments (US$ 30.7m).
- Component 4: Nature-based tourism development (US$ 16.6m).
- Component 5 Monitoring and Evaluation (US$ 1.1m).

IP2: Climate Resilient Landscapes, Integrated Catchment Management and Nature-Based Tourism in Uganda's Lake Kyoga and Upper Nile WMZ (US$ 83m)

- Component 1 Strengthening integrated water catchment management (US$ 9.5m), through improved planning, management and dialogue between stakeholders for water catchment management at national, WMZ, catchment and sub-catchment levels.
- Component 2: Strengthening forest conservation (US$ 11 .5m), through engaging stakeholders in the conservation of forest reserves, forested national parks, and sustainable management of forest on private land.
- Component 3: Restoring land, forest and other ecosystems in key sub-catchments through restoring ecosystems for the supply of goods and services: (US$ 23.5m).
- Component 4: Nature-based tourism development through long-term development of pro-poor, community orientated nature-based tourism. (US$ 8.5m).

- Component 5: Provision of water for domestic use and agricultural production through support for technologies for water harvesting, storage and utilization and control and management of water flows (US$ 28m).
- Component 6: Project Monitoring and evaluation through efficient and timely delivery of the program (US$ 2m).

IP 3: Strengthening capacity for forestry governance and policy implementation

- Component 1: Strengthening forest governance and institutional capacity (US$ 19m).
- Component 2: Efficient and sustainable forest based industry (US$ 2.3m).
- Component 3: Project monitoring and management (US$ 0.7m).

The outcomes of the FIP are described as: (i) Increased direct management of forest resources including by local communities and indigenous peoples, (ii) Improved enabling environment for REDD+ and sustainable management of forests, and (iii) access to predictable and adequate financial resources, including, results-based incentives for REDD+ and income from sustainably managed forests.The overall transformational impact expected from the FIP in Uganda is reduced deforestation and forest degradation, well-coordinated and governed forestry resources contributing to improving resilience of rural livelihoods to climate change in the targeted landscapes.

Implementation arrangements are clearly described for each project, and are well grounded in existing institutions. FIP implementation will be led by three entities: (i) the Ministry of Water and Environment (MWE) through the National Forestry Authority (NFA), Forest Sector Support Department (FSSD) and Directorate of Water Resources Management (DWRM/WMZ) and Directorate of Water Development (DWD), (ii) Uganda Wildlife Authority (UWA) for investment in forests in national parks and wildlife reserves, and, (iii) District Local Governments (DLGs) for investment in local forest reserves and landscapes outside protected areas. Implementing entities will collaborate with CSOs, private sector, research and academic institutions and other stakeholders.

Desired results and key indicators are mapped against each component, and include REDD+, landscape restoration/ecosystem resilience, and livelihood and biodiversity co-benefits indicators.

Part 1: General criteria: The Investment Plan complies with the general criteris indicated in the TOR

A. Country capacity to Implement Plan	Yellow	Response
The FIP describes implementation responsibilities clearly, and there is good institutional alignment. However it does not provide information on the capacity to implement and does not link staffing/resources with the activities to be carried out. It would benefit from an institutional assessment with a clearer indication of which areas need strengthening, at national but especially at local level, in order to implement the projects. Each project is quite ambitious in design, with several components and subcomponents. Furthermore there is currently no information, for example, on the size of the rural population or the pattern of agriculture/livestock and other economic activities including charcoal production/off take for timber/ tourism/encroachment (see below technical assessment).		The team has added a capacity needs assessment that provides additional information on the capacity of GoU to implement the project at the national district and local government level. More detailed analysis of capacity needs will be assessed and further elaborated during detailed design of the investment projects. Clear distinction will be made for capacity needs for Local Government (Districts), Lead agencies (National Forestry Authority (NFA), Forestry Sector Support Department (FSSD), Uganda Wildlife Authority (UWA) and for Ministry of Water and Environment (MWE). Although general information on these points is included in section 6 and introduction of IP1 and IP2, the team has now added more specific figures for charcoal supply/demand gaps, production figures, timber off takes and tourism numbers. These figures are now included for the national level, and, to the extent possible, at the landscape level in the project descriptions.

B. Developed on the basis of sound technical assessments	Yellow	Responses
It would be helpful for the project background to have a brief assessment of the expected scale of intervention for each component, so that the reader has a better idea of unit costs. An understanding of the population and likely number of beneficiaries would be helpful, as well as the		**Brief assessment of the expected scale of intervention for each component:** description of the landscape under section 6.3 for IP1 and IP2 has been revised to provide clarity on the concept of Water Management Zone (WMZ) and the process of designating specific landscapes/sub catchment that will be targeted by FIP. The revision show that FIP investments will be implemented in specific landscapes/sites and not entire WMZ. The IP1 and IP2 description provides information on candidate forests, biodiversity

likely area of forests to be protected, watersheds to be restored, and other technical parameters. There is past experience with most of the interventions supported, so the information is likely to be relatively easily available. a. Projects one and especially project 2 two may be "spread too thin" both geographically and across activities to manage or to have impact. It certainly makes sense to concentrate interventions geographically, but should they be more concentrated? It is difficult to understand why project 1is twice the size of project 2. b. Given that small-scale agriculture is such a driver of deforestation, will the projects support "sustainable intensification" to increase productivity on existing areas, and reduce pressure for area expansion? (trees on the production landscape and water management will help to some extent). If these projects do not support sustainable intensification, are there other initiatives ongoing that may do so? c. Given the scale of use of biomass energy, some more detail also possible interventions to improve biomass productivity, charcoal production, and	corridors etc. that will be targeted. The team has also added demographic figures to provide readers with a sense of scale/numbers for the whole landscape level. Indication has been made to show that the scope of investment across the landscape and at each location will be commensurate with the size of budget and implementation capacity, i.e that the scale of interventions will be tailored carefully to the resources available and in a programmatic manner – to enable scale-up according to financing capacity. **Population and likely number of beneficiaries:** general numbers have been provided and specific numbers will only be available at the detailed design stage, once target areas have been identified. IP1 budget is bigger than that of IP2 due to capital intensive nature of infrastructure development and Protected areas management as well as private sector investments in nature based tourism and wood value chains which cover more forested landscapes than in IP2. The same investments are implemented in both IPs but at different scales. **Sustainable intensification:** Sustainable intensification has been described as component under "Smart agriculture" and under the "resilience /PPCR components". Government already provides strong support for on-farm tree planting and the team has ensured that this is made clear in the document. Activities under IP1 Component 3 "Restoring land, forest and other ecosystems in key sub-catchments" include piloting approaches that promote the restoration of degraded agricultural lands. Sustainable practices (e.g. conservation agriculture, agroforestry, climate-smart agriculture) will enable the restoration of degraded lands while improving agricultural productivity. **Improve biomass productivity, charcoal production, and fuel-efficient stoves:** The FIP recognizes the significance of biomass energy utilization in form fuel wood and charcoal as drivers of deforestation and forest degradation, especially in the woodlands. Recent studies in Uganda, including a specific study on biomass undertaken as part of the FIP preparation process, indicate that previous and ongoing investments/programmes focus on charcoal production technologies,

fuel-efficient stoves would be helpful, drawing on past experience. d. Regarding project 3, are the expected outcomes on forest industry consistent with the scale of the interventions, which are very modest?	charcoal use efficiency and increasing biomass for provision of charcoal and wood fuel. However, these studies do not find strong linkage between these technologies and their effects in reducing rates of deforestation and degradation. FIP recognizes that in near future, there is going to be a significant increased conversion of trees in commercial plantations that will generate wood that may not be used for economic values. Hence, FIP seeks to target wood value chains targeting commercials plantations including energy products (charcoal, briquettes, gasification). FIP will invest in landscape restoration that also increases wood biomass. The PPCR is seeking to address biomass use efficiencies in poor urban dwellers and large scale biomass users for energy. **Outcomes on forest industry consistent with the scale of the interventions, which are very modest:** IP3 aims at creating enabling policy environment for regulating forest industry (utilization efficiency, trade and harvesting) and incentivizing investment in value chains and value addition. The policy environment has spillover effect that would cover the entire country, including supporting private sector led forestry industry under IP1 and IP2. Justification for IP3 has been revised to better reflect the relationship between FIP investment in policy and anticipated outcomes.

C. Demonstrate how it will initiate transformative impact 1.	green	
FIP architecture is sound and transformative, if it can be implemented. The FIP combines projects implemented at national level which will improve/create enabling environment for sustainable forest management and forest conservation in Uganda (IP3) with investments implementing concrete activities on the ground targeting forest landscape restoration (IP 1 and IP2) activities at selected landscapes in three water management zones. The parallel implementation at different levels will ensure alignment		Please see the clarification above on the relationship between FIP and sustainable agriculture intensification. The wording for IP1 and IP2 has been revised accordingly to better reflect these relationships and cross referencing to PPCR investments has been provided in the revised document.

of policy and on-the-ground actions, e.g. in the form of reality checks of any adjustments to policies and regulations through the landscape projects, and help lead to transformative change. (as mentioned above, implement-ability and linkages with sustainable agricultural intensification, including livestock especially in the north, are key challenges which could be better addressed)	

D. Prioritization of investments, lessons learnt, M&E, links to results framework	yellow	
Section 3.3.3 links priorities for emissions reduction/sequestration clearly, and investments are consistent with these. Stakeholders identified three priorities, (i) Forest Governance and institutional capacities; (ii) Integrated landscape management; and (iii) Forest utilization. The FIP is consistent with these, though as mentioned above there are concerns about implementability on the scale of landscape envisaged. The FIP draws clearly on lessons learnt, including from landscape management, promoting woody biomass for energy and promoting sustainable investment in plantation forestry, as well as in the pros and cons of decentralized forest management, and markets and value chains. The results framework is clear, and includes		Please see above on further responses re: implement-ability. The results framework has been further revised and simplified; in particular, the following indicators have been revised: a. Change in the contribution of forest resources to livelihoods b. Change in the contribution of forest resources at the catchment/WMZ level. c. State of biodiversity in protected natural forests Scale (and benefits) will be confirmed during investment project preparation phase.

indicators on tonnes of GHG sequestered and reductions in area/volume of forest degraded/destroyed; as well as indicators on biodiversity. It may be helpful to review some indicators for attribution (eg increases in incomes in targeted landscapes).. and others may be difficult to measure (eg Change in the contribution of forest resources at the catchment/WMZ level). Income increase is often due to many factors, not only project specific interventions. Some simplification of the results framework is recommended, A broader point is that in order to quantify the benefits, it will be necessary to estimate the scale of the different interventions.		
E. Stakeholder consultation and engagement	yellow	
Ugandan legislation provides for stakeholder engagement, and the projects are designed to use participatory approaches. Over 700 individuals have participated in development of the FIP (see annex). However annex 2 on the strategy for stakeholder engagement will be inserted later.		The Stakeholder Engagement Strategy is available on the Ministry of Water and Environment website and a web link has been inserted in the FIP document.

F. Social and environmental issues, including gender	yellow	
The IP is designed to provide social and environmental benefits. The document refers to past difficulties with evicting local people from forest land, and the intention, and Uganda legislation, is intended to avoid negative		The team agrees that conducting a social / beneficiary assessment is, indeed, premature not to raise false expectations. A specific section has been added under Chapter 6 highlighting he significance of gender

impacts of any resettlement. At the present stage of preparation a social assessment has not been carried out so there is no indication of particular issues as perceived by local potential beneficiary populations, and no discussion of male or female gender issues. Since funding has not yet been secured (see below) a social/beneficiary assessment may be premature, and may raise false expectations (see below).	considerations.

G. New investments or Funding additional to on-going/ planned MDB investments	yellow	
The investments are certainly additional but the program at present has large funding gaps. This is unfortunate, since it presents good investment opportunities for both MDBs participating in FIP preparation to seek to fulfil their mandates (Afdb inclusive growth and transition to green growth; and IDA to end extreme poverty and promote shared prosperity, with climate change management as a cross cutting solution). It would be helpful to have some clarity as to whether either MDB is planning to invest in the sector.		FIP budget already reflects USD 50 million pledged by IBRD/WB under IP1 and USD 20 pledged by AfDB under IP3. The Government is to continue working with the MDBs to identify additional sources of funding, including request to GCF and other climate funds.

H. Institutional arrangements and coordination	yellow	
Institutional arrangements for implementation are clearly articulated and there is strong institutional alignment. The		Thank you, an institutional assessment specific to each project will form

challenge is capacity; the FIP mentions that, especially at district level, staffing and capacity are weak; at this stage of project preparation it is not possible to know what capacity building measures will be necessary to secure smooth project implementation, and, more important, post project sustainability. It would be helpful to carry out an institutional assessment linked to the geographical areas of intervention at an early stage of project preparation. With regard to coordination, it would be helpful to understand what sustainable agricultural and improved livestock management initiatives are ongoing in the project areas. With regard to project 3, given the (very positive) outcomes of the sawlog grant scheme, it would be helpful to understand how the FIP will build on this initiative regarding sustainable private sector investment in forest plantations ..plantation forestry may have a very strong role to play in Uganda moving forward, given the favourable growing conditions and the strong track record.	part of the project preparation activities. Further information on how the FIP plans to build on the SPGS has been added under section 6.4.3 of FIP and under IP3

I. Poverty reduction	green	
The FIP will support activities in rural areas (poverty incidence is higher in rural areas than in urban) , including in the north, where poverty rates are higher than elsewhere in the country. The social and beneficiary assessment which should be undertaken as part of project preparation will help identify specific measures regarding poverty reduction,		Thank you, a social and beneficiary assessment will be part of project preparation.

J. Cost effectiveness of proposed investments	red	
It is not possible to assess the cost effectiveness of interventions without an understanding of the likely number of beneficiaries, area of intervention, or balance of intervention between different activities. However, once funding sources are identified it will be possible during project preparation to have a better understanding of these parameters. It would also be useful to draw upon past experience in this regard.		Specific numbers of beneficiaries, areas of intervention, etc. will only be known at the detailed project design phase, once specific target areas have been identified. It is expected that scale and scope will be tailored in a way to make meaningful impact …targeting cover approx. 60% of the WMZ.

Part 2: compliance with investment criteria of FIP

1) Complies with principals, objectives and criteria of FIP as specified in design documents and programming modalities

2.

In addition to the Governance Framework on the Strategic Climate Fund (SCF) the principles (1) to (vi) apply		
(i) National ownership and national strategies	green	
The FIP is well grounded in the National Forest Plan and the NDC, as well as in the emerging REDD strategy		
(ii) Contribution to sustainable development	green	
The FIP, by focusing on integrated landscape management in water management zones, and supporting ecosystem restoration, contributes to sustainable development		
(iii) Promotion of measurable outcomes and results based	green	

support		
The FIP will have measurable outcomes and will help lead the way to results based support. Exact quantification of these outcomes is premature at this stage of project preparation, and some planned outcome indicators may need to be reviewed to be sure that they are easily measurable and attributable given capacity limitations		
(iv) *Coordination with other REDD efforts*	green	
The FIP is well coordinated with the emerging Uganda REDD strategy		
(v) Cooperation with other actors and processes	green	
The FIP is well coordinated with related development programs in Uganda. The one question concerns sustainable agricultural intensification programs, which given the level of rural population growth and the role that small scale agricultural expansion plays in degradation/deforestation, would benefit from closer attention		
(vi) Early, integrated and consistent learning efforts	yellow	
The FIP builds on previous initiatives and includes a strong M&E focus. Learning processes and outcomes would be elaborated during project preparation. It will be important to link data/M&E from projects 1 and 2 with the integrated data/MIS systems to be supported under project 3. There may also be scope for cross country learning		Agreed…integration to be achieved as indicated during implementation of IP3

FIP Objectives: Providing up-front financing for REDD readiness reform and public and private investments identified through national REDD readiness strategy building efforts, while taking into account opportunities to help mitigate the impacts of climate change on forests and contribute to multiple benefits such as biodiversity conservation, protection of the rights of indigenous peoples and local

communities, poverty reduction and rural livelihoods enhancement	
(a) To initiate and facilitate steps towards transformative change in developing countries forest related policies and practices[145]	green
The FIP supports transformative change; although policies are well developed, the FIP articulates well areas for improvement in implementation. These include strengthened coordination both across sectors and between levels of government within the forestry and protected area administrations, stronger participation of CSOs, improved management and admininstrative procedures, better data and information management, improved processes for revenue generation and improved training for foresters.	
(b) To pilot replicable models to generate understanding and learning of the links between the implementation of forest-related investments, policies and measures and long-term emission reductions and conservation, SFM and the enhancement of forest carbon stocks in developing countries	
3. The FIP distinguishes clearly the likely REDD and enhanced sequestration benefits from the different FIP interventions, as well resilience and livelihood co-benefits	green
(c) To facilitate the leveraging of additional financial resources for REDD, including through a possible UNFCCC forest mechanism, leading to an effective and sustained reduction of deforestation and forest degradation, thereby enhancing the sustainable management of forests	
FIP lessons in principle could help leverage such financing, promoting interest in landscape restoration and forest regeneration.	Green
(d) To provide valuable experience and feedback in the context of UNFCCC on deliberations on REDD	
4.	Green

[145] This should be done through
(i) serving as a vehicle to finance investments and related capacity building necessary for the implementation of policies and measures that emerge from inclusive multi-stakeholder REDD planning processes at the national level;
(ii) strengthening cross-sectoral ownership to scale up implementation of REDD strategies at the national and local levels;
(iii) addressing key direct and underlying drivers of deforestation and forest degradation;
(iv) supporting change of a nature and scope necessary to help significantly shift national forest and land use development paths;
(v) linking the sustainable management of forests and low carbon development

A particular strength is that the Uganda FIP explicitly links FIP and PPCR actions, emphasizing the link between REDD and resilience

FIP Criteria (FIP design document, additions as per FIP Investment Criteria and financial modalities: *Identify the theory of Change behind the proposed interventions (projects) identified and how they contribute to the overall programmatic approach. Consider how the IP can also effectively meet criteria set by other funding sources, especially the Green Climate Fund, FCPF and Biocarbon Fund*		
(a) Climate Change mitigation potential	green	
The FIP actions clearly illustrate climate change mitigation potential		
(b) Consistency with FIP objectives and principles	green	
The FIP is consistent with FIP objectives and principles		
(c) Drivers of deforestation and forest degradation	yellow	
The FIP addresses key drivers. There are two questions: (i) is it sufficiently linked with climate smart agriculture, given the role that small scale agricultural expansion and livestock grazing play in degradation/deforestation (FIP 2 provides some link through the water management component; and the landscape components support trees in the production landscape?; (ii) is there is a strong enough focus on improved fuelwood production, charcoal processing, value chains, regulation and fuel efficient stoves? (There is one sub-component, but it is not quantified as such .. support for forest plantations may support sustainable intensification of wood energy as well as sawlogs and other wood products).		Please see responses to comments in part B above.
(d) Inclusive processes and participation of	green	

all important stakeholders, including indigenous peoples and local communities		
The FIP intends to use participatory processes and CSO engagement and there have already been consultations in this regard. More detailed consultations should wait until financing is better secured and preparation can start		
(e) Demonstrating impact (potential and scale)	green	
The FIP is designed to demonstrate REDD impact		
(f) Forest related governance	green	
FIP project 3 focuses on governance, but projects 1 and 2, addressing integrated landscape planning through water management zone, and working through existing forest and protected area management structures at local and central level, also strengthen governance. Institutional alignment is a strong feature of the FIP		
(g) Safeguarding the integrity of natural forests	green	
The FIP seeks to strengthen forest protected area management and conserve remaining natural forests outside protected areas		
(h) Partnership with the private sector	yellow	
The FIP supports private sector engagement in ecotourism and in sustainable development of plantations and wood products harvesting/processing. The reason for the yellow rating is: "'does it do enough?" especially in the area of charcoal production/marketing, but also in plantation forestry and value chain development, which offers potential for relieving the pressure on natural forests and woodlands, and where Uganda has a strong track record and substantial potential		Please see responses to comments in part B above.
(i) Cost effectiveness, including economic and financial viability	yellow	
It is too early to have a sense of this: there is no information yet on		As indicated in responses under Part A and B above, some

unit costs or on the scale of interventions		information on scale of intervention has been added to the revised document, and further clarity will be achieved at the project formulation stage.
(j) Capacity building	green	
FIP 3 has a strong focus on capacity building and it is included in FIPs 1 and 2.		

Additional FIP investment criteria		
(k) Implementation potential	yellow	
Although there is strong institutional alignment, it is not possible form a judgment on implement-ability since the interventions are not scaled, or linked to capacity building		Please see responses under part A and B.
(j) Integrating sustainable development benefits (co-benefits)	green	
The FIP integrates well resilience and livelihood benefits		

2). Assessment towards the FIP Results framework

Results	***Indicator***	***Comment***	***Score***	
C1 reduced pressure on forests	a)Change in hectares deforested in program/project area	The FIP includes activities and indicators for this	*green*	
	b) Change in hectares degraded in program/project area	The FIP includes activities and indicators for this	*green*	
	c)percent poor people	The FIP does not support	*Not*	

	FIP project area with access to modern sources of energy	access to modern energy; however it does support improved biomass production, marketing and utlization	*applicable*	
	d)non-forest sector investments identified and addressed as drivers of degradation	The FIP identifies small scale agricultural expansion, demand for woodfuel (and other products) and livestock grazing as drivers of degradation	*green*	
C2 Sustainable management of forests and forest landscapes to address drivers of deforestation or degradation	a)preservation of natural forests integrated in land use planning processes	The FIP seeks to preserve and manage better natural forests both inside and outside protected areas	*green*	
	b)Evidence that laws and regulations in the project/program areas are being implemented, monitored and enforced and violations detected, reported and prosecuted	The FIP seeks to improve implementation of forest laws and regulations	*green*	
C3 Institutional and legal/regulatory framework that	a)Evidence that legal framework & implementation provide for non-	This is the intention of legal frameworks. The FIP seeks improved implementation	*green*	

supports sustainable forest management and rights of local communities and indigenous peoples	discriminatory land tenure rights and land use systems and protect the rights of local communities (men and women) and indigenous peoples			
	b)Evidence that a national land use plan exists and progress I being made to secure the rights to land and resources of forest dependent people including indigenous people and local communities	The FIP does not state that A national land use plan exists. Many countries do not have such a plan. However, it seeks to support integrated landscape management using water management zones as the point of reference,	*yellow*	Uganda does not have a national Land Use Plan. FIP intends to invest in preparing landscape/district land use plans based on the general WMZ plans
C4 Empowered local communities ad indigenous peoples and protection of their rights	a)Increase in area with clearly recognized land tenure and rights to land and resources for local communities	This area will be better clarified during detailed project preparation.	*yellow*	Thank you, this area will be better articulated during detailed project preparation.
	b) Level and quality of participation in decision making & monitoring or land use planning, forest management, projects and policies	The FIP seeks to use participatory processes in land use planning	*green*	

	impacting community areas			
	c)Improved access to effective justice/recourse systems	This area will be better defined during detailed project preparation	*yellow*	Thank you, this area will be better articulated during detailed project preparation.
C5 Increased capacity to plan, manage & finance solutions to address direct and underlying drivers of deforestation & degradation	Indicators to be developed in context of specific projects	This aspect forms an integral part of the FIP projects	*green*	
C6 New and additional resources for forest projects		It is not yet clear what funding in addition to FIP, PPCR and existing bilateral sources will be available for the FIP, in particular from AfDB and IDA	*yellow*	As per above, IDA and AfDB indicated a potential commitment of US$50 million and US$ 20 million which is already included in the FIP financing plan.
C7 Integration of learning by development actors active in REDD+		FIP processes seek to involve all actors	*green*	

Part 3 Conclusions and Recommendations

The FIP is well articulated to address some major drivers of deforestation and degradation, there are strong co-benefits and implementation is well grounded in Ugandan institutions. It combines both climate change mitigation and climate resilience, and this is a very strong feature. It supports private sector development and improved governance, and contributes to REDD processes. It builds on lessons learnt.

There are some questions, however:

(i) Financing: it is not clear whether, and how much, co-financing is likely to be provided from the main partner MDBs, AfDB and IDA. Without more clarity on this, it is difficult to press for more detailed preparation.

Response: FIP budget reflects USD 50 million pledged by IBRD/WB and USD 20 million by AfDB. Under Section 8, the FIP document clarifies that Uganda seeks support/collaboration with the MDBs to identify additional sources of funding, including from GCF and other climate funds.

(ii) Cost effectiveness: FIP projects 1 and 2 provide component cost estimates but no unit costs, no estimates of likely numbers of beneficiaries, and no estimates of land area likely to benefit. So it is difficult at present to assess the cost effectiveness of the proposals.

Response: Information on the size of rural populations …. Information on demography, socio-economic activities at district level has now been provided in section 6 and introduction of IP1 and IP2. More detailed information will be available as project preparation advances.

(iii) Given that small scale agricultural area expansion is a key driver, some more discussion of how the FIP will address climate smart agriculture/sustainable intensification (everywhere) and livestock management (especially in the north), either through its own investments, or through working with related operations, would be helpful.

Response: Sustainable intensification has been described as component under "Smart agriculture" and under the "resilience /PPCR components". The wording for IP1 and IP2 has been revised accordingly to better reflect these relationships and cross referencing to PPCR investments has been provided.

5.

(iv) Given the importance of biomass energy, more focus on fuel wood productivity, charcoal processing, regulation and use of fuel efficient stoves would be also be welcome, as would a stronger discussion of the potential of plantation forestry and the private sector (both through smallholder plantations and larger plantations).

Response: The FIP recognizes the significance of biomass energy utilization in form fuel wood and charcoal as drivers of deforestation and forest degradation, especially in the woodlands. Recent studies in Uganda indicate that previous and ongoing investments/programmes focus on charcoal production technologies, charcoal use efficiency and increasing biomass for provision of charcoal and wood fuel. However, these studies not find strong linkage between these technologies and their effects in reducing rates of deforestation and degradation. FIP recognizes that in near future, there is going to be a significant increased conversion of trees in commercial plantations that will generate wood that may not be used for economic values. Hence, FIP seeks to target wood value chains targeting commercials plantations including energy products (charcoal, briquettes, gasification). FIP will invest in landscape restoration that also increases wood biomass. The PPCR is seeking to address biomass use efficiencies in poor urban dwellers and large scale biomass users for energy.

(v) Implement-ability: each subproject has several components and sub-components and addresses a large landscape. It would be helpful to have some rationale about whether the scale of intervention is appropriate for measurable impact, and whether, given existing capacity, the FIP is "implementable". There may be an argument for concentrating interventions on a smaller geographical area(s) to maximize measurable impact (without necessarily reducing the financing).

Response: Specific numbers of beneficiaries, areas of intervention, etc. will only be known at the detailed project design phase, once specific target areas have been identified.

Annex 6: Land tenure definitions and implications for FIP

Definition of forms of land tenure

a. **Freehold tenure** involves the holding of registered land in perpetuity that enables the holder to exercise full powers of ownership of that land, including using and developing it, and obtaining any produce from it. It also allows the title-holder to enter into any transaction in connection with the land, including selling, leasing, mortgaging or pledging, and subdividing. Most private forests owned by individuals and companies fall on freehold lands.

b. ***Mailo* tenure** involves the holding of registered land in perpetuity. It differs from freehold in that it permits the separation of ownership of land from the ownership of developments on the land made by a lawful or *bona fide* occupant (a person who has lived on the land for 12 years or more). It enables the holder, subject to the customary and statutory rights of those persons lawful or *bona fide* occupants of the land, to exercise all the powers of ownership of land as that under a freehold title.

c. **Leasehold tenure** is a form of tenure created either by contract or by operation of law; under which one person, namely the landlord or lessor, grants another person, namely the tenant or lessee, exclusive possession usually for a period defined, in return for a rent. On expiry of the lease, land tenure reverts to the lessor/landlord. When land under natural vegetation is leased, it is generally for purposes of development (agriculture or construction), which will create returns over the leasehold cycle (maximum 49 years).

d. **Customary tenure** is a form of land tenure applicable to a specific area of land and a specific class of persons, and is governed by rules generally accepted as binding by the latter. It is applicable to any persons acquiring land in that area in accordance with those rules. Customary tenure is the most common form of land tenure in the rural parts of northern, eastern and western Uganda. In Masindi, Arua, Hoima, Bulisa districts and the entire northern region, land is owned at a tribal level, held in trust for the people by a paramount chief. In eastern Uganda, customary land is owned at family lineage level. Individuals have user rights, but not rights of disposal without the permission of the chief/or leader. There is no clear system of registration of members who can lay claim to the land. Individual tenure security seems to be dependent on active agriculture or settlement. Land is generally not officially surveyed or registered. Boundaries (marked by natural features such as trees, rivers, valleys etc.) often demarcate only the utilized (agriculture and settlement) part of the land and are mutually known among neighbours.

Implications for FIP

Category	Implications for forestry resources management	Potential FIP investments
Freehold	♣ Land owners investing in long term forest development ♣ High rates of forest loss due to changes in land use due to competing values and returns from land	♣ Incentives for forestry development ♣ Incentives for sustainable use of natural forests
Mailo	♣ Land owners investing in long term forest development ♣ High rates of forest loss due to unregulated/uncontrolled use of trees by land tenants or squatters or encroachers. ♣ High rates of forest loss due to changes in land use due to competing values and returns from land	♣ Incentives for forestry development ♣ Incentives for sustainable use of natural forests ♣ Policy measures for addressing land and resources tenure
Leasehold	♣ Opportunities for leasing land for forestry development/management purposes…. ongoing under NFA ♣ Opportunities for leasing forested land for other land uses resulting in forest loss	♣ Incentives for leasing land for forestry development ♣ Policy measures for addressing change in land use
Customary	♣ Opportunities for community forestry ♣ Priorities for food security and livelihoods options may supersede long term investment t in forestry ♣ High potential for forest loss/degradation due to open-access to recognized customary owners.	♣ Incentives for leasing land for forestry development ♣ Policy measures for addressing change in land use ♣ Incentives' for sustainable forest management of community or communal forests

Annex 7: Policy, legal and institutional frameworks

Policy frameworks	
Forest Policy (2001)	♣ Stakeholder participation ♣ Maintenance of Permanent Forest Estate ♣ Sustainable forest management ♣ Promotes private sector ♣ Provides incentives for forest resources development
National Environment Management Policy (1994)	♣ Provides for sustainable management of forests ♣ Strategy of using incentives and sharing benefits
Renewable Energy Policy (2006)	♣ Promotion of efficient wood energy processing and use technologies ♣ Promotion of alternative renewable energy sources
Legal frameworks	
The Constitution of Republic of Uganda (amended 2005)	♣ Protection of Uganda's natural resources including Forests ♣ Ownership of natural resources by Ugandans and creation of trusteeship arrangements
Forestry and Tree Planting Act (2003)	♣ Legal framework for management of forest resources in Forest Reserves ♣ Stakeholder participation ♣ Sustainable forest management ♣ Promotion of farm forestry ♣ Establishes Joint management arrangements
Wildlife Act (cap 200)	♣ Legal framework for management of forest resources in wildlife conservation areas ♣ Incentives including sharing of benefits from conservation of forests ♣ Stakeholder participation
Local Government Act (1997)	♣ Stakeholder participation ♣ Decentralized (devolved) management of Local forest reserves ♣ Carrying out Forestry Extension services ♣ Regulating Private Forests and Community Forests
National Environment Act (cap 153)	♣ Environmental standards ♣ Incentives including sharing of benefits from conservation ♣ Stakeholder participation
Land Act (cap 227)	♣ Stakeholder participation ♣ Tenure of trees and Forests
Guidelines and Regulations (under Forestry and Tree Planting Act)	
Private Forest Registration Guidelines	♣ Regulates management of Private Forests ♣ Regulates management of Community Forests
Collaborative Forest Management Guidelines (2002)	♣ Community participation in forest management ♣ Benefit sharing between NFA and communities ♣ Development of community regulations
Development Plans	
National Development Plan II	♣ Develop countrywide community based and institutional tree planting initiatives ♣ Promote sustainable development of commercial forestry plantations and industry including value addition

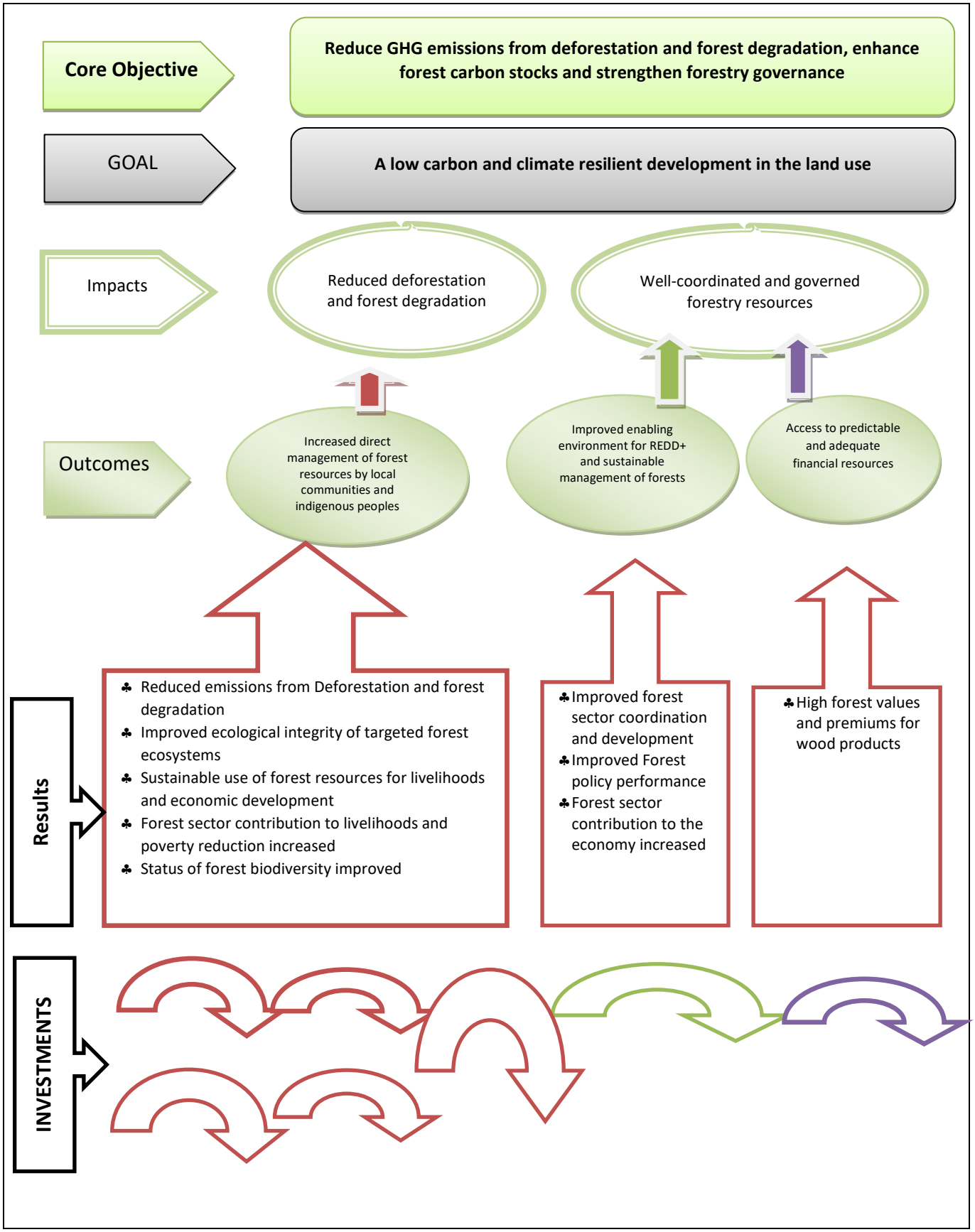
	♣ Promote implementation of sustainable management of forests through restoration of natural forests on protected and private land ♣ Promote forestry research and development ♣ Develop markets for forest products and services ♣ Develop National REDD+ Strategy and costed Plan ♣ Develop Forest Emissions Reference Levels and Forest Reference Levels ♣ Develop a Robust and functional National Forest Monitoring System (NFMS) for monitoring and reporting of REDD+ activities in the REDD+ Strategy ♣ Promote Forestry in Urban Development Planning ♣ Scale up agroforestry – based alternative livelihoods
National Forest Plan (2014)	♣ Forest law enforcement and governance (FLEG) ♣ Strengthening of institutions responsible for forest management ♣ Planted trees and forests ♣ Restoration of degraded natural forests ♣ Promotion of forest-based industries and trade
Vision 2040	♣ Increase forest cover from 15 to 24% by 2040

CORE INSTITUTIONS	
MWE	♣ Formulation and oversight of appropriate policies, standards and legislation ♣ Coordination and supervision of technical support and training to LGs ♣ Inspection and monitoring of LGs and NFA performance in forest sector ♣ Co-ordination of the NFP and cross-sectoral linkages ♣ Mobilization of funds and other resources for the sector ♣ Promotion, public information and advocacy for the forest sector
FSSD	♣ Formulation and oversight at appropriate policies, standards, and legislation for the forest sector; ♣ coordination and supervision of technical support and training to local governments; ♣ inspection and monitoring of local governments; ♣ monitor NFA using a performance contract ♣ coordination of the National Forest Plan (NFP) (the sector's investment plan) and cross- ♣ Sectoral linkages.
NFA	♣ Management of CFRs in partnership with private sector and local communities ♣ Advisory, research or commercial services on contract ♣ Seed supply ♣ National forest inventory and other technical services
Nyabyeya Forest College	♣ Forestry training
Local Governments	♣ Strengthen forestry in production and environment committees and District Development Plans ♣ Offer permits, and collect fees ♣ Mobilise funds for forestry development ♣ Develop and enforce bye-laws ♣ Support and quality control of forestry extension

	♣ Manage LFRs in partnership with communities and private investors ♣ Land administration, surveying, approval of Community Forests
UWA	♣ Management of the forest resources in Wildlife Conservation Areas ♣ Joint-management with NFA of some central forest reserves under this management status
MAAIF	♣ Provide agriculture and forestry interface ♣ Deliver advisory services – to mainstream forestry in NAADS ♣ Provide enabling policies, laws and regulations and standards for agricultural practices that enhance sustainable land management ♣ Promotion of agro-forestry practices
NaFFORI	♣ Research and development ♣ Promotion of forestry technologies
NEMA	♣ Control of forestry activities in relation to environmental legislation ♣ Provide environmental planning framework ♣ Supports local governments in the development and implementation of the District ♣ Environment Action Plans ♣ Provides guidance and advice on forestry EIAs
MEMD	♣ Formulate Policies, laws, regulations, standards and guidelines for sustainable production ♣ and provision of energy from various sources. ♣ Promote biomass energy conservation technologies ♣ Promote energy substitution (LPG,solar, hydro power, etc)
MTWA	♣ Domestication of the Multi-lateral Environmental Agreements (MEAs) is important in the control of trans-boundary trade, e.g. under CITES. ♣ Supply of the capital base (natural resource and biodiversity) on which the industry is based. ♣ Formulate regulations, guidelines, standards and provisions for management of biodiversity and promotion of tourism industry.
MoFPED	♣ Set Sector budget allocations and ceilings ♣ Mobilise funds and other resources ♣ Provision of incentives and disincentives (Economic Instruments) for forestry development
UIA	♣ Promote investment in forestry-based businesses, including plantation development and processing
MoLG	♣ Set standards and guidelines for local government planning and budgeting
URA	♣ Collect Taxes on forest products, businesses and trading
Ministry of Internal Affairs	♣ Build capacity for enforcement of environmental laws and regulations both within Justice ♣ Law and Order Sector and within civil society for community management of ecosystems ♣ Enforcement of forest laws
Ministry of Public Service	♣ Public sector reforms ♣ Strengthening staffing levels of FSSD and DFS ♣ Monitoring sector institutional performance
Ministry of Education and Sports	♣ Integration of forestry management in formal education for sustainable development through development of curriculum
Private Sector	♣ Forest management and tree farming investments on private land

	♣ Forest investments in CFRs on rented land ♣ Collaborative Forest Management of CFRs ♣ Wood and NWFP processing ♣ Trade in forest products
NGOs/CSOs	♣ Advocacy for increased understanding of the role of forests in national and local development ♣ Promotion of government accountability in forest management ♣ Participating in management and utilization of forests ♣ Public education, information dissemination, ♣ Training of local communities, private forest owners and resource managers ♣ Action research ♣ Advisory service delivery ♣ Mobilize local communities to participate in the development process

Annex 8: FIP Logical Framework



Annex 9: Stakeholders engaged in FIP formulation

No.	**Name**	**Gender**	**Designation/ Village**	**Institution / Sub county**
1.	Akareut Esther	F	Assistant Lecturer	Nyabyeya Forestry College
2.	Dr. Justine Jumba	F	Lecturer	Makerere University
3.	Katusabe Erasmus	M	Lecturer	Nyabyeya Forestry College
4.	Akera Anania Christopher	M	Senior Lecturer	Nyabyeya Forestry College
5.	Godfrey Nabona	M	Principal Lecturer	Nyabyeya Forestry College
6.	Kisakye Richard	M	Acting Dep. Principal	Nyabyeya Forestry College
7.	Nasta Babirye	M	Academic Registrar/ Lecturer	Nyabyeya Forestry College
8.	Komaketch Julius Peter	M	Senior Instructor	Nyabyeya Forestry College
9.	Ahimbisibwe Ambrose	M	Lecturer	Nyabyeya Forestry College
10.	Katuhaise Godfrey	M	Lecturer	Nyabyeya Forestry College
11.	David Kissa	M	Scientist	National Forest Research Institute
12.	Grace Nangendo	F	Director Landscape Ecology	Wildlife Conservation Society
13.	Nakyeyune Cotilda	F	Senior Prog. Officer	IUCN
14.	Dr. Joshua Zaake	M	Executive Director	Environmental Alert
15.	Polycarp M. Mwima	M	Program Officer	IUCN
16.	Dennis Kavuma	M	General Manager	Uganda Timber Growers Association
17.	Adrine Kirabo	F	Prog. Coordinator	Eco-trust Masindi
18.	Nyagoma S	F	Farmer	Eco-trust Masindi
19.	Kabasiguzi Leonida	F	Farmer	Eco-trust Masindi
20.	Rhoda Tuhimbisibwe	F	Treasurer	SWAGEN
21.	Murangi John	M	Vice Chairman	Basheija-Kweyamba
22.	Mwesigye Alfonse Katiiti	M	Treasurer	BECA
23.	Bakegumanya Silver	M	Secretary	BECA
24.	Warugaba James	M	Chairperson	BECA
25.	Twesigye Patrick	M	C/Person	KADA
26.	Ndyanabo C	M	Chairperson	KADA
27.	Kurinamanyire Robert	M	V/Chairman	KADA
28.	Kwesiga Gerald	M	Farmer	Eco-trust Masindi
29.	Erick Mijumbi	M	Farmer Division Coordinator	Eco-trust Masindi
30.	Ahaisibwe Richard	M	Farmer	Eco-trust Masindi
31.	Mugisa Geofrey	M	Farmer	Eco-trust Masindi
32.	Mrs. Mbabazi Gerald	M	Farmer	Eco-trust Masindi
33.	Bataringaya John	M	Secretary	SWAGEN Farmer
34.	Mugarura Emmanuel	M	Chairperson	SWAGEN Farmer
35.	Mr. Mugume Robert	M	Official	Joint Efforts to Save the Environment

36.	Mr. Mwayafu David	M	Official	Uganda Coalition for Sustainable Development
37.	Ms. Sarah Kawesa	F	Official	AROCHA Uganda
38.	Ms. Nampeera Regina	F	Official	Pro-Biodiversity Conservationists in Uganda
39.	Ms. Rose Karugaba	F	Official	Kihuura Fruit Growers and Beekeepers Association
40.	Mr. Paoley Onencan	M	Official	Bulisa Rural Development Organization
41.	Mr. Hussein Birigenda	M	Official	Hoima Environment Project
42.	Mr. Deo Odida	M	Official	Kiryandogo District Forest Forum
43.	Mr. Bosco Nek	M	Official	Masindi District NGO Forum
44.	Ms. Biira mutesi	F	Official	Climate Change Action Network
45.	Mr. Byamukama Peter	M	Official	Kabalore District Forest Forum
46.	Mr. Taremwa Joseph	M	Official	The Uganda National Apiculture Development Organization
47.	Mr. Timothy Akugizibwe	M	Official	Jane Goodall Institute (JGI))
48.	Nimpamye Enock	M	Official	Civil Society Coalition on Oil and Gas
49.	Ms. Anna Namakula	F	Official	Sencanta Group
50.	Dr. Priscilla Nyadoi	F	Official	Uganda Wildlife Society
51.	Ms. Sylvia Nalubega	F	Official	Action for Rural Women's Empowerment
52.	Mr. Samuel Nyanzi	M	Official	Rural Community In Development (
53.	Mrs. Rose Mulumba	F	Official	Volunteer Efforts for Development Concerns
54.	Mr. Herbert Wamagale	M	Official	ENR-CSO Network/UFWG
55.	Mr. Amanzuru William	M	Official	Global Aim
56.	Mr. Ambrose Bugaari	M	Official	Environmental Alert
57.	Dr. Joshua Zake (PhD)	M	Official	Environmental Alert
58.	Mr. Mike Watkins	M	Official	Masterlinks
59.	Ms. Kabagenyi Madina	F	Official	Center for Energy legal Practice
60.	Mr. Mpooya seth	M	Official	Nature Palace Foundation
61.	Mr. Kyeyune Emmanuel	M	Official	Environment Managemet and Livelihoods Iniatives
62.	Mr. Opio Ronald	M	Official	ENR-CSO Network
63.	Ms. Lilian Babirye	F	Official	Action Coalition on Climate Change, ACCC
64.	Mr. Kemigisha M. Devine	F	Official	Southern and Eastern Africa Trade, Information and Negotiations Institute
65.	Mr. Akugizibwe Robert	M	Official	Uganda Network of Collaborative Forestry Associations
66.	Ms. Cotilda Nakyeyune	F	Official	International Union for Conservation of Nature
67.	Ms. Diana Taremwa	F	Official	Water Governance Institute
68.	Mr. Asiku Micah	M	Official	Community Development and Conservation Agency
69.	Mr. Gaster Kiyingi	M	Official	Tree Talk Plus

70.	Mr. Jonathan Mayanja	M	Official	Tree Talk Plus
71.	Mr.David Walugembe	M	Official	Uganda Forestry Association
72.	Mr. Marin Asimwe	M	Official	World Wide Fund for Nature – Uganda Country Office
73.	Mr. Dezi Irumba	M	Official	CARE International in Uganda
74.	Mr. Kizito Eric	M	Official	Participatory Ecological Land Use Management Uganda
75.	Ms. Anna Amumpiire	F	Official	Advocate Coalition for Environment and Development
76.	Ms. Ephrance Nakiyingi	F	Official	Anti-Corruption Coalition in Uganda
77.	Ms. Salome Alweny	F	Official	Albertine Rift Conservation Society
78.	Mr. Hassan Mulopa	M	Official	Panos Eastern Africa
79.	Ramesh E .S	M	Factory Manager	Buzirasagama
80.	Rutagwera Dominic	M	Group Manager	Buzirasagama
81.	Thomas Joseph	M	General Manager	Buzirasagama
82.	Twinabusingye John Bosco	M	DFC	Kabuyanda
83.	Rushenyana G.	M	C/man	Kabuyanda
84.	Bimanyomwe Robert	M	General Secretary	Kabuyanda
85.	Eswaramurthy. R	M	Engineering Manager	Kinyara Sugar Works Ltd
86.	Twegyemukama Sam	M	CMSO	Farmer
87.	Leodinas Tukyarimunsi	M	Plantation Officer	Global woods
88.	Sheila Kiconco	F	NTA	UNREDD
89.	Robert Nabanyumya	M	Consultant	African Development Bank
90.	Nyangoma Joseline	F	Senior Envt. Officer	Hoima DLG
91.	Babihemaiso Doreen	F	DAO	Buliisa DLG
92.	Karungi Atisa	F	Sec. Production and Natural Resources	Masindi DLG
93.	Kenganzi Christine	F	District Production Officer	Masindi DLG
94.	Akankwasa Eunice Wafula	F	Ag. Forestry Officer	Kisoro DLG
95.	Manirakiza Rose	F	LC5 Vice C/Person	Kisoro DLG
96.	Kyomugisha Catherine	F	Secretary Prod. and Natural Resources	Kabale DLG
97.	Tumwebaze Dinnah	F	DFO	Ntungamo DLG
98.	Florence Kadoma	F	Secretary Prod. and Natural Resources	Kabarole DLG
99.	Bahizi Peninah	F	DAO	Kabarole DLG
100.	Biira Roselyn	F	Secretary Prod. and Natural Resources	Bundibugyo DLG
101.	Nagawa Fausta	F	District Planner	Rubirizi DLG
102.	Murungi Ritah	F	DFO	Rubirizi DLG
103.	Mugume Evelyn	F	DNRO	Kasese DLG
104.	Kaija Hellen	F	Secretary Prod. and Natural Resources	Kyenjojo DLG
105.	Niyigira Molly Harriet	F	District Production Officer	Kamwenge DLG

106.	Namata Resty	F	DNRO	Kamwenge DLG
107.	Dugo Amina	F	District Production Officer	Butaleja DLG
108.	Nankoma Jackiline	F	Ag. Chief Admin. Officer	Butaleja DLG
109.	Kalebbo Jeninah J	F	Secretary Prod. and Natural Resources	Budaka DLG
110.	Zaina Muyobo	F	Secretary Prod. and Natural Resources	Manafwa DLG
111.	Musuya Caroline	F	Elgon Trust Tree Assoc.	Manafwa DLG
112.	Nambuya Modesta	F	District Production Officer	Manafwa DLG
113.	Arao Rebecca	F	Secretary Prod. and Natural Resources	Dokolo DLG
114.	Connie Attogwang	F	Civil Society Organisation	Oyam DLG
115.	Akuma Susan	F	Chief Admin. Officer	Oyam DLG
116.	Among Milly Molly	F	Secretary Prod. and Natural Resources	Oyam DLG
117.	Ayo Julliet Okwir	F	Ag. Chief Admin. Officer	Amolatar DLG
118.	Anyiru Jesca	F	Green Farm -CSO	Koboko DLG
119.	Asibazoyo Nancy	F	Chief Admin. Officer	Arua DLG
120.	Ongertho Jesca	F	DAS (CAO)	Nebbi DLG
121.	Nimungu Clare Doreen	F	Secretary Prod. and Natural Resources	Nebbi DLG
122.	Fualing Doreen	F	DNRO	Nebbi DLG
123.	Nyangoma Joseline	F	SEO/ Ag. DNRO	Hoima DLG
124.	Bahiza Peninah	F	District Agric. Officer	Kabarole DLG
125.	Nyakaisiki Grace	F	Student	Kabarole DLG
126.	Waiswa Lilian	F	SHRO	Mbale DLG
127.	Nyaribi Rhoda	F	Envt. Officer	Mbale Municipality
128.	Natifu Bridget	F	Intern	Mbale Municipality
129.	Nambuba Fatuma	F	Intern	Mbale Municipality
130.	Ibrahin M Me Aza	F	Intern	Mbale Municipality
131.	Namono Marion	F	Envt. Officer	Bududa DLG
132.	Apolot Elizabeth	F	DNRO	Katakwi DLG
133.	Businge Zaha	F	Envt. Officer	Kiryandongo DLG
134.	Atuhura Annet	F	Intern (HRO)	Kiryandongo DLG
135.	Tugume Emmanuel	M	Prog. Manager	Hoima DLG
136.	Perez Kyomuhangi	M	District Production Officer	Hoima DLG
137.	Kihika James	M	Senior Forest Officer	Hoima DLG
138.	Mugisa Tadeo	M	Asst. DFO	Hoima DLG
139.	Chiche Benson	M	V/C Natural Resources	Hoima DLG
140.	Byakagaba John	M	District Planner	Hoima DLG
141.	Nabwire Flavia	M	Asst. Chief Admin.	Hoima DLG

			Officer	
142.	Kaija Catherine	M	DAO	Hoima DLG
143.	Hairora Willy	M	F.G	Hoima DLG
144.	Tumusiime Disan	M	Sec. for Production and Natural Resources	Kibale DLG
145.	Nakasumba Susan	M	Kakira Tree Growers Association	Kibale DLG
146.	Kasaija Cornelius	M	District Production Officer	Kibale DLG
147.	Lumu Mike Alfred	M	DAO	Kibale DLG
148.	Sekuye Ben	M	Ag. District Water Officer	Kibale DLG
149.	Tibihikirira William	M	District Planner	Kibale DLG
150.	Nsamba Peter	M	Chief Admin. Officer	Kibale DLG
151.	Kyamuhondire Wilson	M	Ag. DFO	Kibale DLG
152.	Balikuddembe S.M. Louis	M	DNRO	Kibale DLG
153.	Kaahwa Robert M.	M	District Production Officer	Buliisa DLG
154.	Tumusiime Tadeo	M	District Planner	Buliisa DLG
155.	Robinah Muhimbo	M	Sec. Production and Natural Resources	Buliisa DLG
156.	Mujuni Stephen	M	Program Manager	Buliisa DLG
157.	Murungi Moses	M	Ag. DFO	Buliisa DLG
158.	Tugume Bernard	M	DNRO	Buliisa DLG
159.	Asiimwe Maxwell	M	Ag. District Water Officer	Buliisa DLG
160.	Ocen J. Andrew	M	Deputy Chief Admin. Officer	Masindi DLG
161.	Byaruhanga Job	M	DAO	Masindi DLG
162.	Biryetega Simon	M	Ag. District Natural Resources Officer	Masindi DLG
163.	Anthony Akoko	M	DFO	Masindi DLG
164.	Sunday Joseph	M	District Water Officer	Masindi DLG
165.	Kisakye Daniel Justus	M	District Planner	Masindi DLG
166.	Kwizera George	M	Senior Asst. Secretary	Kisoro DLG
167.	Nkumbwe Christopher	M	District Water Officer	Kisoro DLG
168.	Moses Nteziyaremye	M	Senior Assistant Town Clerk	Kisoro DLG
169.	Mudanga Vincent	M	DNRO	Kisoro DLG
170.	Solomon Basaza	M	DAO	Kisoro DLG
171.	Bainenama Francis	M	District Planner	Kisoro DLG
172.	Munyambonera Isaiah	M	District Production Officer	Kisoro DLG
173.	Nizeyimana Charles	M	Outreach Program Co-ordinator	Kisoro DLG
174.	John Justice Tibesigwa	M	UWA-BMCA	Kisoro DLG

175.	Kyomukama Adios	M	DFO	Kabale DLG
176.	Turinawe Bagamuhunda	M	District Water Officer	Kabale DLG
177.	Zeneb Musiimire	M	Programme Officer, Nature Uganda	Kabale DLG
178.	Bamwende Wilson	M	Bwindi Mgahinga Manager	Kabale DLG
179.	Akatwijuka Rogers	M	DNRO	Kabale DLG
180.	Tumwesigye Martin	M	District Planner	Kabale DLG
181.	Byaruhanga Ambrose	M	District Water Officer	Kanungu DLG
182.	Nkwasibwe Godwin	M	Senior Agric. Officer	Kanungu DLG
183.	Roger Mugisha	M	DFO	Kanungu DLG
184.	Turinayo Peter	M	District Production Officer	Kanungu DLG
185.	Saturday Jackson	M	District Planner	Kanungu DLG
186.	Byaruhanga Anthony	M	Secretary Prod. and Natural Resources	Ntungamo DLG
187.	Byarugaba Dennis	M	District Production Officer	Ntungamo DLG
188.	Taritweba Dan	M	Deputy Chief Admin. Officer	Ntungamo DLG
189.	Joga Bright	M	DNRO	Ntungamo DLG
190.	Ahabwe Johnson	M	District Planner	Ntungamo DLG
191.	Agaba Gershom	M	Executive Director NECOM	Ntungamo DLG
192.	Kariyo Apollo	M	District Water Officer	Ntungamo DLG
193.	Rukwago Severino	M	DNRO	Rukungiri DLG
194.	Twinomujuni Arthur	M	DFO	Rukungiri DLG
195.	Mugyeni Dan	M	District Production Officer	Rukungiri DLG
196.	Twekwase Deus	M	District Water Officer	Rukungiri DLG
197.	Oneck Pius Kwesiga	M	Senior Agric. Officer	Rukungiri DLG
198.	Kwizera Godie	M	District Planner	Rukungiri DLG
199.	Kabugo Deo	M	Deputy Chief Admin. Officer	Rukungiri DLG
200.	Charles Bruno	M	Secretary Prod. and Natural Resources	Rukungiri DLG
201.	Kokugonza Harriet	M	Conservation and Environment	Kabarole DLG
202.	Kunihira Eriya	M	District Planner	Kabarole DLG
203.	Muhairwe Timothy	M	DFO	Kabarole DLG
204.	Nyakoojo Paul	M	DNRO	Kabarole DLG
205.	Mugabi Paul	M	District Water Officer	Kabarole DLG
206.	Mugabe Nathan	M	District Envt. Officer	Kabarole DLG
207.	Mweige Michael	M	Deputy Chief Admin. Officer	Kabarole DLG
208.	Guma Emmanuel	M	Senior Water Officer	Kabarole DLG

209.	Baguma Brian	M	District Water Officer	Kabarole DLG
210.	Faita Lawrence	M	DFO	Bundibugyo DLG
211.	Opolot Peter	M	District Water Officer	Bundibugyo DLG
212.	Sabiiti Gerald	M	Coordinator	Bundibugyo DLG
213.	Mbakania Joseph	M	District Production Officer	Bundibugyo DLG
214.	Kaliisa Herbert	M	Deputy Chief Admin. Officer	Bundibugyo DLG
215.	Maate Jackson	M	DNRO	Bundibugyo DLG
216.	Kaliisa Stephen	M	District Planner	Bundibugyo DLG
217.	Baluku Ibrahim	M	DFO	Ntoroko DLG
218.	Mugume Brason	M	District Production Officer	Ntoroko DLG
219.	Ninsiima Benjamin	M	DAO	Ntoroko DLG
220.	Asiimwe Tadeo	M	DNRO	Ntoroko DLG
221.	Musinguzi Robert	M	District Water Officer	Ntoroko DLG
222.	Binta Robert Rwamuhokya	M	Secretary Prod. and Natural Resources	Ntoroko DLG
223.	Mugizi Obed	M	Deputy Chief Admin. Officer	Rubirizi DLG
224.	Monday Lwanga	M	DNRO	Rubirizi DLG
225.	Abimpe Deo	M	DAO	Rubirizi DLG
226.	Yeyambe Steven	M	C/ Person BUENCA	Rubirizi DLG
227.	Byamukama Ventino	M	Secretary Prod. and Natural Resources	Rubirizi DLG
228.	Mwesigye Musasizi	M	District Production Officer	Rubirizi DLG
229.	Twikirize Peninah	M	District Water Officer	Rubirizi DLG
230.	Mwesige Johnson Sabuni	M	DAO	Kasese DLG
231.	Bwambale Wilberforce	M	Senior Forestry Officer	Kasese DLG
232.	Mujuni John	M	MIFA	Kasese DLG
233.	Bazirio Kabagambe	M	District Production Officer	Kasese DLG
234.	Syayipuma N. Patrick	M	District Water Officer	Kasese DLG
235.	Muganyizi Paul	M	District Planner	Kasese DLG
236.	Adolf Kamara	M	Deputy Chief Admin. Officer	Kyenjojo DLG
237.	Amolo Ronnie Smurts	M	District Planner	Kyenjojo DLG
238.	Mugabe Robert	M	DAO	Kyenjojo DLG
239.	Bigabwa Julius	M	DFO	Kyenjojo DLG
240.	Kyomuhendo Edson	M	District Water Officer	Kyenjojo DLG
241.	Muhenda Patrick Agaba	M	District Production Officer	Kyenjojo DLG
242.	Musinguzi Leo	M	Deputy Chief Admin.	Kamwenge DLG

			Officer	
243.	Betwa Geoffrey	M	District Planner	Kamwenge DLG
244.	Rwaheru Moses	M	DAO	Kamwenge DLG
245.	Tugume Edward	M	DFO	Kamwenge DLG
246.	Ojangole O. Silvester	M	DFO	Kapchorwa DLG
247.	Apil Nelson	M	District Production Officer	Kapchorwa DLG
248.	Chepsukor David	M	DAO	Kapchorwa DLG
249.	Teko Andrew Bayi	M	District Planner	Kapchorwa DLG
250.	Chemangai AwadL	M	DNRO	Kapchorwa DLG
251.	Mwanga Patrick	M	Ag. Chief Admin. Officer	Kapchorwa DLG
252.	Chepkurui George Wonge	M	Secretary Prod. and Natural Resources	Kapchorwa DLG
253.	Nyangas Simon	M	Coordinator KADCACC	Kapchorwa DLG
254.	Olal David	M	Water Officer	Kapchorwa DLG
255.	Matumi John	M	DAO	Butaleja DLG
256.	Mulebeke Dondlord	M	Secretary Prod. and Natural Resources	Butaleja DLG
257.	Wasoge Richard	M	District Water Officer	Butaleja DLG
258.	Banamwita Charles	M	DFO	Butaleja DLG
259.	Were Lamuk	M	DNRO	Butaleja DLG
260.	Taata Samson	M	District Planner	Butaleja DLG
261.	Wandera Tom	M	Manager, Manafwua Basin Farmers Assoc.	Butaleja DLG
262.	Makwata Moses	M	DFO	Kween DLG
263.	Nandala Michael L.	M	Civil Society Organisation	Kween DLG
264.	Chelogoi Geoffrey	M	Civil Society Organisation	Kween DLG
265.	Charicha Kamuyeke	M	District Production Officer	Kween DLG
266.	Chemutai Patrick	M	DAO	Kween DLG
267.	Mubani Arapkissa	M	District Production Officer	Kween DLG
268.	Anguria Albert	M	District Water Officer	Kween DLG
269.	Nabaya Stephen	M	Secretary Prod. and Natural Resources	Kween DLG
270.	Ofwono Willy Osinde	M	District Production Officer	Budaka DLG
271.	Lutaya Robert	M	District Water Officer	Budaka DLG
272.	Mugombe Yusuf	M	Ag. Chief Admin. Officer	Budaka DLG
273.	Nakendo Kizire S.	M	DNRO	Budaka DLG
274.	Okki Patrick Wilber	M	DFO	Budaka DLG
275.	Kabise Shaban	M	District Planner	Budaka DLG

276.	Ochodio Michael	M	DAO	Budaka DLG
277.	Mwirugazu Richard	M	Secretary Prod. and Natural Resources	Budaka DLG
278.	Masonga Paul	M	District Planner	Manafwa DLG
279.	Mwangale Michael	M	Forestry Officer	Manafwa DLG
280.	Eng. Alunyu Denis	M	District Water Officer	Manafwa DLG
281.	Himigu Herbert	M	Ag. Chief Admin. Officer	Manafwa DLG
282.	Masoboni Samson	M	DAO	Manafwa DLG
283.	Masolo Alfred	M	Production officer	Manafwa DLG
284.	Wabwire David	M	District Envt. Officer	Manafwa DLG
285.	Mwalye James	M	DFO	Mbale DLG
286.	Wandwasi Robert	M	District Planner	Mbale DLG
287.	Ddema Fred M	M	District Water Officer	Mbale DLG
288.	Mubokhisa Robert	M	Sector Manager NFA	Mbale DLG
289.	Mayegu Isaac	M	Ag. District Production Officer	Mbale DLG
290.	Paul Magira	M	Civil Society Organisation	Mbale DLG
291.	MalingaPeter James	M	DNRO	Bukedea DLG
292.	Omuya Peter James	M	Ag. DFO	Bukedea DLG
293.	Okwir Alfred Dan	M	District Planner	Dokolo DLG
294.	Ojok David	M	Ag. Chief Admin. Officer	Dokolo DLG
295.	Okello Peter	M	ART	Dokolo DLG
296.	Okaka.G.Sam	M	DAO	Dokolo DLG
297.	Epilla Rajab	M	DNRO	Dokolo DLG
298.	Owiny Reddie	M	District Water Officer	Dokolo DLG
299.	Opio Ronald Coggan	M	DFO	Dokolo DLG
300.	Joseph Peter Etwo	M	Programme Asst.	Dokolo DLG
301.	Omara Alex	M	Ag. District Production Officer	Dokolo DLG
302.	Okello Thomas	M	District Production Officer	Oyam DLG
303.	Okullo Lawrence	M	DFO	Oyam DLG
304.	Ongoro Sam	M	District Water Officer	Oyam DLG
305.	Odyomo Patrick	M	DAO	Oyam DLG
306.	Agunsi Benedict	M	District Planner	Oyam DLG
307.	Opio Moses	M	DNRO	Oyam DLG
308.	Lakor Jackson	M	District Production Officer	Gulu DLG
309.	Ojera Alex	M	DNRO	Gulu DLG
310.	Kolo Tobia	M	DAO	Gulu DLG
311.	Santa Oketa	M	Secretary Prod. and Natural Resources	Gulu DLG

312.	Ochen Charles Okodi	M	Programme Asst.	Gulu DLG
313.	Kenny Pido Stephen	M	DFO	Gulu DLG
314.	Nyeko Samuel	M	District Water Officer	Gulu DLG
315.	Anselm Kyaligonza	M	Deputy Chief Admin. Officer	Gulu DLG
316.	Ojok Francis	M	District Production Officer	Amolatar DLG
317.	Ecir Denis	M	District Water Officer	Amolatar DLG
318.	Ronald Obuku	M	Population Officer	Amolatar DLG
319.	Omara Apollo M	M	DNRO	Amolatar DLG
320.	Opio Francis Obote	M	Secretary Prod. and Natural Resources	Amolatar DLG
321.	Okello Richard	M	Civil society organisation	Amolatar DLG
322.	Oryem Tonny	M	Senior Agric. Officer	Amolatar DLG
323.	Otunga Anthony	M	Ag. DFO	Amolatar DLG
324.	Adupa Richard	M	Forestry Officer	Lira DLG
325.	Ogwal Aldo	M	District Planner	Lira DLG
326.	Ojia Gilbert	M	DFO	Koboko DLG
327.	Onzima Stephen	M	District Production Officer	Koboko DLG
328.	Dradria Anthony	M	District Water Officer	Koboko DLG
329.	Keyi	M	District Water Officer	Koboko DLG
330.	Dudu Dominic Moro	M	Secretary Prod. and Natural Resources	Koboko DLG
331.	Asendu Patrick	M	Chief Admin. Officer	Koboko DLG
332.	Avako Nolah	M	DFO	Maracha DLG
333.	Drateru George	M	Field Coordinator DRC	Maracha DLG
334.	Lillian Andama	M	DNRO	Maracha DLG
335.	Adule Rodger	M	District Production Officer	Maracha DLG
336.	Drani Christopher	M	Secretary Prod. and Natural Resources	Maracha DLG
337.	Mathias Vuciri	M	DAO	Maracha DLG
338.	Adule Kefa	M	District Production Officer	Arua DLG
339.	Drateru Natalie	M	Secretary Prod. and Natural Resources	Arua DLG
340.	Anguinzi Ronald	M	DFO	Arua DLG
341.	Andiandu Joackine	M	DNRO	Arua DLG
342.	Oloya Pyerino	M	DAO	Arua DLG
343.	Dima Felix	M	Water Department	Arua DLG
344.	Maguma Alex	M	Coordinator Rice. WN	Arua DLG
345.	Onduma Suldiman	M	Deputy Chief Admin. Officer	Arua DLG

346.	Orochi George K	M	Program Manager	Nebbi DLG
347.	Oryem Richard	M	District Planner	Nebbi DLG
348.	Emuto Joseph	M	DFO	Nebbi DLG
349.	Okecha Jean Andrew	M	District Water Officer	Nebbi DLG
350.	Dr. Okwir Anthony	M	District Production Officer	Nebbi DLG
351.	Onegin Francis	M	DAO	Nebbi DLG
352.	Parouk Julius	M	District Envt. Officer	Nebbi DLG
353.	Dr. Dratele Christopher	M	District Production Officer	Moyo DLG
354.	Drama Patrick	M	DFO	Moyo DLG
355.	Madrara Bosco	M	Ag. Chief Admin. Officer	Moyo DLG
356.	Maiku Didi Paul	M	Secretary Prod. and Natural Resources	Moyo DLG
357.	Zaaniago Johnny	M	District Planner	Moyo DLG
358.	Oja Albine	M	District Water Officer	Moyo DLG
359.	Sekate Moses	M	Snr. Program Officer (EA)	Moyo DLG
360.	Anguyo Jonathan Gift	M	Ag. DNRO	Moyo DLG
361.	Alule Herbert	M	District Envt. Officer	Moyo DLG
362.	Denis Anguzo T.	M	Coordinator, Save Forests- NGO	Moyo DLG
363.	Isa Arita Abu	M	Dragon Agro Forestry. Prog.	Yumbe DLG
364.	Bakole Stephen	M	DAO	Yumbe DLG
365.	Andama Solo	M	DFO	Yumbe DLG
366.	Magara Bernard	M	District Water Officer	Yumbe DLG
367.	Kawawa Serbeet	M	DNRO	Yumbe DLG
368.	Andio Jimmy	M	District Production Officer	Yumbe DLG
369.	Guma E. Victor	M	District Planner	Yumbe DLG
370.	Ibrahim Anguzo	M	Deputy Chief Admin. Officer	Yumbe DLG
371.	Rusheesha Alex	M	Engineer	Kasese DLG
372.	Bwambale William	M	Snr. Forestry Officer	Kasese DLG
373.	Mwesige Johnson Sabuni	M	Agriculture Officer	Kasese DLG
374.	Bahati Emmanuel	M	Forest Ranger	Kasese DLG
375.	Ntabose Gideon Sanyu	M	Sec. for Production & Natural Resources	Kasese DLG
376.	Tibesigwa Lawrence	M	O/C Mubuku	Kasese DLG
377.		M		
378.	Tumwesigye Robert	M	Senior Agric. Officer	Mbarara DLG
379.	Tusiime Frank	M	DFO	Mbarara DLG
380.	Musingwire Jeconious	M	DNRO SES/Rwizi CMC	Mbarara DLG

381.	Muron-Ocakara	M	Chief Admin. Officer	Kabarole DLG
382.	Muhairwe Timothy	M	District Forestry Officer	Kabarole DLG
383.	Andama Charles	M	SFO	Nakasongola DLG
384.	Kanyarutokye Moses	M	Chief Admin. Officer	Rubirizi DLG
385.	Kasekende Innocent	M	Intern	Rubirizi DLG
386.	George Musinguzi	M	District Water Officer	Rubirizi DLG
387.	Yuyambo Steven	M	Forest Ranger	Rubirizi DLG
388.	Agaba Patriot Aggrey	M	SEO	Rubirizi DLG
389.	Bugembe Levi N	M	SCO	Rubirizi DLG
390.	Monday Lwanga	M	DNRO	Rubirizi DLG
391.	Agubashangorera	M	LC5 Chairman	Rubirizi DLG
392.	Walakira Paul	M	CAO	Mbale DLG
393.	Wakube Charles	M	Environment Officer	Mbale DLG
394.	Ayo Julius Peter	M	DNRO	Mbale DLG
395.	Namakola Rajab	M	SAE	Mbale DLG
396.	Mwalye James	M	DFO	Mbale DLG
397.	Kutosi Peter	M	Intern	Mbale Municipality
398.	Gidudu Josephat	M	Intern	Mbale Municipality
399.	Ddembe Fred	M	DWO	Mbale DLG
400.	Waniale Abdallah	M	District Planner	Mbale DLG
401.	Lubuuka David	M	CAO	Bududa DLG
402.	Masoigoyi Kamba	M	SCDO	Bududa DLG
403.	Ocailap Filbert	M	RDC	Katakwi DLG
404.	Elakasi Walter Okiring	M	LCV	Katakwi DLG
405.	Onzu M Ismael	M	CAO	Katakwi DLG
406.	Lakor Jackson	M	DPMO	Gulu DLG
407.	Abwola Samuel Lewis	M	SFO	Gulu DLG
408.	Oola Eugene	M	District Planner	Gulu DLG
409.	Okot Francis	M	DAO	Gulu DLG
410.	Aker John Bosco	M	DCAO	Gulu DLG
411.	Jawoko Perry	M	SCDO	Gulu DLG
412.	Atuha Ndaaga Moses	M	District Planner	Kiryandongo DLG
413.	Acan Denis	M	SAS/C/C	Kiryandongo DLG
414.	Kasangaka Fred	M	Forest Officer	Kiryandongo DLG
415.	Ochieng Vincent	M	Labour Officer	Kiryandongo DLG
416.	Opolot James	M	EFP	Kiryandongo DLG
417.	Bogerre Edward	M	Senior Planner	Kiryandongo DLG
418.	Joseph Katswera	M	DNRO for CAO	Kasese DLG
419.	Doreen Abamurungi	F	M&E Intern	National Forest Authority
420.	Damalie Nyamatte	F	Research Officer	Kampala Capital City Authority
421.	Ariho Julius	M	M&E Specialist	National Forest Authority

422.	Ronald Kaggwa	M	Director	National Planning Authority
423.	Othieno Odoi	M	Senior Planner	National Planning Authority
424.	Besigye Samuel	M	Partnerships Coordinator	Uganda Wildlife Authority
425.	Kapere Richard	M	Planning Coordinator	Uganda Wildlife Authority
426.	Charles Tumwesigye	M	Deputy Director Conservation	Uganda Wildlife Authority
427.	Raymond Engena	M	DiBs	Uganda Wildlife Authority
428.	Fred Kisame Eria	M	EMRO	Uganda Wildlife Authority
429.	Bintoora K. A.	M	CBWE	Uganda Wildlife Authority
430.	Edgar Buhanga	M	Deputy Director Planning	Uganda Wildlife Authority
431.	Isaac Mugumbule	M	Supervisor Landscape	Kampala Capital City Authority
432.	Lusireti Florence	F	NFA, CDM focal person, Rwoho CFR	National Forest Authority
433.	Kasemiire Joyce	F	Nursery Supervisor	National Forest Authority
434.	Andrea Shalka	F	TA	Kyoga WMZ
435.	Kyaligonza Herbert	M	NFA Plantation Manager	National Forest Authority
436.	Rukundo Tom	M	EIARI	National Forest Authority
437.	Mwodi Martin Kegere	M	Range Manager	National Forest Authority
438.	Levi Etwodu	M	Director Natural Forests	National Forest Authority
439.	Mafabi William	M	Forest Supervisor	National Forest Authority
440.	Kitiyo Benard	M	Forest Supervisor	National Forest Authority
441.	Barugahare Vanancio	M	Forest Supervisor	National Forest Authority
442.	Kansiime Caroline	M	Forest Supervisor	National Forest Authority
443.	Munisya Lawrence	M	Swagen	National Forest Authority
444.	Tumuhimbise Edward	M	Patrolman, Rwoho	National Forest Authority
445.	Zikanga Danare	M	Patrolman, Rwoho	National Forest Authority
446.	Mugarura Dickson	M	Patrolman, Rwoho	National Forest Authority
447.	Biryomumaisho Denis	M	Security	National Forest Authority
448.	Maguzu Patrick	M	Forest Worker	National Forest Authority
449.	Mushafiri Musa	M	Forest worker	National Forest Authority
450.	Bruno Okwir	M	Plantation Manager	National Forest Authority
451.	Silagi Magyezi	M	Patrolman, Rwoho	National Forest Authority
452.	Kabaireho Moses	M	Sector Manager/ Budongo	National Forest Authority
453.	Ndyajunwoha Bernard	M	Patrolman, Rwoho	National Forest Authority
454.	Nuwakuuma Joram Change	M	C/Person	National Forest Authority
455.	Leo Twinomuhangi	M	Range Manager, Lakeshore	National Forest Authority
456.	Michael Ojja	M	Sector Manager, Mabira	National Forest Authority
457.	Mugisha Louis	M	Team Leader	KYOGA WMZ
458.	Kasozi Wilson	M	Forest Supervisor	National Forest Authority

459.	Atuhaire Evelyn	F	Economist	Forest Sector Support Department
460.	Irene Kambedha	F	Senior Forestry Officer	Forest Sector Support Department
461.	Patience D. Proscovia	F	Sociologist	Forest Sector Support Department
462.	Omuko Gladys	F	Asst. Admin Secretary	Forest Sector Support Department
463.	Nabukenya Maria	F	Asst. Admin Secretary	Forest Sector Support Department
464.	Magumba Sarah	F	Environmentalist	Forest Sector Support Department
465.	Edith Nakayiza	F	Plantation Officer	Sawlog Production Grant Scheme project
466.	Bedijo Nelly Grace	F	Senior Plantation Officer	Sawlog Production Grant Scheme project
467.	Zainabu Kakungulu	F	Technical Services Manager	Sawlog Production Grant Scheme project
468.	Arinetwe B. Valence	M	SFO	Forest Sector Support Department
469.	Issa Katwesige	M	Senior Forest Officer	Forest Sector Support Department
470.	Alex Muhweezi	M	LTA/FIP	Forest Sector Support Department
471.	Valence Arineitwe	M	Senior Forest Officer	Forest Sector Support Department
472.	Issa Katwesige	M	SFO	Forest Sector Support Department
473.	Omulala Samuel	M	Environmentalist	Forest Sector Support Department
474.	Nambaza Jackson	M	Forest Officer	Forest Sector Support Department
475.	Agaba Joseph	M	Economist	Forest Sector Support Department
476.	Odeke Charles	M	PDM	Sawlog Production Grant Scheme project
477.	Mawenu William	M	Plantation Officer	Sawlog Production Grant Scheme project
478.	Bahizi Peter	M	Senior Plantation Officer	Sawlog Production Grant Scheme project
479.	Josephat Kawooya	M	Senior Plantation Officer	Sawlog Production Grant Scheme project
480.	Ahimbisibwe Henry	M	Plantation Officer	Sawlog Production Grant Scheme project
481.	Odur Sam Denis	M	Plantation Officer	Sawlog Production Grant Scheme project
482.	Andrew Akasiibayo	M	Plantation Officer	Sawlog Production Grant Scheme project
483.	Francis Ssali	M	Plantation Officer	Sawlog Production Grant Scheme project
484.	Collins Oloya	M	Commissioner WMD	Ministry of Water and Environment
485.	Semambo Muhammad	M	SCCO, Adaptation	Ministry of Water and Environment
486.	Mutemo Charles	M	Principal Environment Officer	Ministry of Works and Transport

487.	Emmanuel Olet	M	Principal Water Officer	Ministry of Water and Environment
488.	Consolata Acayo	M	Ag. ACIC	Ministry of Agriculture Animal Indurstry and Fisheries
489.	Lumama Abel Kayemba	M	Physical Planner	Ministry of Lands Housing and Urban Development
490.	Emmanuel Omene	M	Senior Economist	Ministry of Lands Housing and Urban Development
491.	Bob Natifu	M	PCCO	Ministry of Water and Environment
492.	Francis Ojara	M	Climate Change Officer	Ministry of Water and Environment
493.	Bob Kazungu	M	Senior Forest Officer	Ministry of Water and Environment
494.	Faith Bagandunda	M	Public Health Specialist	Ministry of Water and Environment
495.	Mutabazi Hillary	M	BM/WSDF-SW	Ministry of Water and Environment
496.	Richard Musota	M	Team Leader	Ministry of Water and Environment
497.	Chebet Maikut	M	UNFCCC NFP/ Commissioner	Ministry of Water and Environment
498.	Katunguka Ketrah	F	Commissioner	Ministry of Justice and Constitutional Affairs
499.	Edith Kateme-Kasajja (Mrs)	F	Deputy Executive Director	National Planning Authority (NPA)
500.	David O. Obong	M	Permanent Secretary and CCPC Chair	Ministry of Water and Environment
501.	David Okwii	M	Economist	Ministry of Finance Planning and Economic Development
502.	Koma Stephen	M	Senior Inspector	Ministry of Local Government
503.	Ogwang Jimmy	M	Senior Disaster Mgmt. Officer	Office of the Prime Minister
504.	Namanya B. Didacus	M	Geographer	Ministry of Health
505.	Muwaya Stephen	M	UNCCD Focal Person & Senior Range Ecologist,Directorate of Animal Resources	Ministry of Agriculture, Animal Industry and Fisheries
506.	James Baanabe	M	Commissioner Energy Department	Ministry of Energy and Mineral Development
507.	Charles Mutemo	M	Principal Environmental Officer	Ministry of Works and Transport
508.	Paul Isabirye	M	UNFCCC Focal Point	National Meteorological Authority
509.	Chebet Maikut	M	Ag. Commissioner	Climate Change Department
510.	Sanyu Jane Mpagi	M	Director, Gender and Community Development	Ministry of Gender
511.	Denis David Kavuma	M	Uganda Tree Growers Association	Private sector
512.	Margaret Lomonyang	M	Karamoja Women's Cultural Group	TOBARI/KWCC Indigenous groups
513.	Ofwono Opondo	M	Executive Director	Uganda Media Centre
514.	Ambrose Agona (PhD)	M	Director General	National Agricultural Research

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515.	Andrew G. Seguya	M	Executive Director	Uganda Wildlife Authority (UWA)
516.	Vincent Byendaimira Atenyi	M	Commissioner for Land Use Regulation and Compliance	Ministry of Lands, Housing and Urban Development
517.	Onesmus Muhwezi	M	UNDP	ENR /CC Donor Partners subgroup/UN-REDD
518.	Tom Okurut	M	Executive Director	National Environment Management Authority
519.	Michael Mugisa	M	Executive Director	National Forestry Authority (NFA)
520.	Margaret Adata	M	Commissioner	Forestry Sector Department (FSSD)
521.	Paul Mafabi	M	Director	Director, Environmental Affairs
522.	James Lutalo	M	Commissioner Wildlife Conservation	Ministry of Tourism Wildlife and Antiquities
523.	David Duli	M	World Wide Fund for Nature	CSO (International)
524.	Achilles Byaruhanga	M	Nature Uganda	CSO (Local)
525.	Mrs. Gertrude Kenyangi	F	Southern CSO/IP representative at the CIF/FIP	Indigenous People / SWAGEN
526.	Ms. Margaret N. Carol Kizibaziba	F	Principal Envt. Officer / Coordinator / Environment Inspector	Buganda Kingdom Cultural Institution
527.	Jalia Kobusingye	F	Programme Officer	Development Partner (EU)
528.	Virginie Leroy	F	Manager	Development Partner (French)
529.	Mr. James Kaweesa	M	Asst Commissioner	Policy and Planning Department (MWE)
530.	Mr. Stephen Mugabi	M	Asst Commissioner	Department of Environment Support Services (MWE)
531.	Mr. Issa Katwesige	M	Senior Forest Officer	Department of Forestry Support Services (MWE)
532.	Mr. Muhammad Sssemambo	M	Senior Climate Change Officer	Department of Climate Change (MWE)
533.	Mr. Andrew Masaba	M	Senior Economist	Ministry of Finance, Planning and Economic Development
534.	Mr. Okwii David	M	Desk Officer (Water and Environment)	Ministry of Finance, Planning and Economic Development
535.	Mr. Mark Amanya	M	Economist	Ministry of Finance, Planning and Economic Development
536.	Mr. Omene Emmanuel	M	Senior Economist	Ministry of Lands, Housing and Urban development
537.	Jimmy Ogwang	M	Disaster Preparedness Officer (Vulnerability & Risk Assessment)	Office of Prime Minister
538.	Mr. Tom Rukundo	M	Director, Natural Forests	National Forestry Authority
539.	Mr. Francis Ogwal	M	Biodiversity Specialist/ CBD Focal Point	National Environment Management Authority
540.	Mr. Richard Kapere	M	Climate Change	Uganda Wildlife Authority

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541.	Mr. Abudallah Matovu	M	Asst. Commissioner	Directorate of Water Resources Management
542.	Mr. John Tumuhimbise	M	Asst Commissioner, Renewable Energy	Department of Renewable Energy (MEMD)
543.	George Owoyesigire	M		Department of Wildlife (MTWA)
544.	Kavuma Dennis David	M	General Manager	Private Sector (UTGA)
545.	Mr. David Walugembe	M	Uganda Forestry Association	CSO National
546.	Fred Mugisha	M	Bitegyengyere	Murubindi
547.	Habyarimana	M	Bitegyengyere	Murubindi
548.	Benon Mudishiri	M	Bitegyengyere	Murubindi
549.	Wilber Sabiti	M	Bitegyengyere	Murubindi
550.	Wilber Kaara	M	Bitegyengyere	Murubindi
551.	Rauben Kaberu	M	Bitegyengyere	Murubindi
552.	Bernard Ndishwye	M	Bitegyengyere	Murubindi
553.	Bosco Bavakura	M	Bitegyengyere	Murubindi
554.	Judith Maudi	F	Bitegyengyere	Murubindi
555.	Verario Hop	F	Bitegyengyere	Murubindi
556.	Mwerinde	M	Bitegyengyere	Murubindi
557.	Judith Nairobi	F	Bitegyengyere	Murubindi
558.	Ivas Nyamarwa	F	Bitegyengyere	Murubindi
559.	Hope Nyirakacaca	F	Bitegyengyere	Murubindi
560.	Kedreth	F	Bitegyengyere	Murubindi
561.	Midias Habyara	F	Bitegyengyere	Murubindi
562.	Kedreth Kobusingye	F	Bitegyengyere	Murubindi
563.	Peace Ruzabera	F	Bitegyengyere	Murubindi
564.	Joy	F	Bitegyengyere	Murubindi
565.	Nyasande	F	Bitegyengyere	Murubindi
566.	Annet Arinaitwe	F	Bitegyengyere	Murubindi
567.	Jovia Nyirasaba	F	Bitegyengyere	Murubindi
568.	Kazida	F	Bitegyengyere	Murubindi
569.	Enosi	M	Bitegyengyere	Murubindi
570.	Mani	M	Bitegyengyere	Murubindi
571.	Meburo Nshemereirwe	M	Kagano	Muko
572.	Kifende	M	Kagano	Muko
573.	Promise Nyamihanda	F	Kagano	Muko
574.	Ngenerasi Baranga	M	Kagano	Muko
575.	Nohiri Banegura	M	Kagano	Muko
576.	Nora Basigirenda	F	Kagano	Muko
577.	Jacklini Kampire	F	Kagano	Muko
578.	Meburo Charity	F	Kagano	Muko
579.	Joseph Bazima	M	Kagano	Muko
580.	John Sesavu	M	Kagano	Muko
581.	Jackson Kikuka Shekabuhoro	M	Kagano	Muko
582.	Hope Cleave	F	Kagano	Muko
583.	Benon Serugyendo	M	Kagano	Muko
584.	Fiona	F	Kagano	Muko
585.	John Kurikira	M	Kagano	Muko

586.	Jackson Boringo	M	Kagano	Muko
587.	Edinasi Zomukunda	F	Kagano	Muko
588.	Kedress Nteziki	F	Rwamahano	Muko
589.	Molly Bisara	F	Rwamahano	Muko
590.	Sylivia Banduse	F	Rwamahano	Muko
591.	Hadi Nyiramasaka	F	Rwamahano	Muko
592.	Rebecca Bicenyeri	F	Rwamahano	Muko
593.	Jaribu Tigeta	F	Rwamahano	Muko
594.	Fayida duda	F	Rwamahano	Muko
595.	Kabara Bagurinzira	F	Rwamahano	Muko
596.	Prudence Kisasi	F	Rwamahano	Muko
597.	Yohana Biraro	M	Rwamahano	Muko
598.	Nora Ngiragacaca	F	Rwamahano	Muko
599.	James Ntifayo	M	Rwamahano	Muko
600.	Happy Mukyenzimana	M	Rwamahano	Muko
601.	Ambrose Bayenda	M	Rwamahano	Muko
602.	Paulina Batumanyaho	F	Rwamahano	Muko
603.	Lydia Hope Nyiramahane	F	Rwamahano	Muko
604.	Priska Nyirarurwiro	F	Rwamahano	Muko
605.	Filimoni Rwanyarare	M	Rwamahano	Muko
606.	Kaboroga Boy	M	Rwamahano	Muko
607.	Robert Byarugaba	M	Rwamahano	Muko
608.	Vastah Nyirasagamba	F	Giyebe	Murora
609.	Zenah Nyirabikari	F	Giyebe	Murora
610.	Jackline Nyiramugisha	F	Giyebe	Murora
611.	Kezia Mahoro	F	Giyebe	Murora
612.	Allen Nyiradone	F	Giyebe	Murora
613.	Jeninah Nyirarukundo	F	Giyebe	Murora
614.	Anthony Nizeyimana	M	Giyebe	Murora
615.	Amos Basenti	M	Giyebe	Murora
616.	Bosco Karwemera	M	Giyebe	Murora
617.	John Yotamu	M	Giyebe	Murora
618.	James Ntabugabumwe	M	Giyebe	Murora
619.	Livi Hagumaimana	F	Giyebe	Murora
620.	Daniel Ndimubakunzi	M	Giyebe	Murora
621.	Lohane Semahane	M	Giyebe	Murora
622.	James Rukongi	M	Giyebe	Murora
623.	Jovia Nyamvura	F	Giyebe	Murora
624.	Peninah Maniriho	F	Giyebe	Murora
625.	Patience Karanzambye		Giyebe	Murora
626.	Wari Muhawe	M	Giyebe	Murora
627.	Annet Mahoro	F	Giyebe	Murora
628.	Robert Bakaine	M	Biizi and Rugeshi	Murora
629.	John Byarugaba	M	Biizi and Rugeshi	Murora
630.	Kedress Ntawiha	F	Biizi and Rugeshi	Murora
631.	Medius Bakuza	M	Biizi and Rugeshi	Murora
632.	Richard Zimbihire	M	Biizi and Rugeshi	Murora
633.	Elda Mahugire	F	Biizi and Rugeshi	Murora
634.	Mateeke Ruzabarande	M	Biizi and Rugeshi	Murora

635.	Sylivia Nyirabayazana	F	Biizi and Rugeshi	Murora
636.	Scovia Nyiransaba	F	Biizi and Rugeshi	Murora
637.	Elkana Sebudunduri	M	Biizi and Rugeshi	Murora
638.	Violet Mukamuganga	F	Biizi and Rugeshi	Murora
639.	Mebra Ntamusobera	F	Biizi and Rugeshi	Murora
640.	Edward Gakombe	M	Biizi and Rugeshi	Murora
641.	Annet Twinobusingye	F	Biizi and Rugeshi	Murora
642.	Enock Byarugaba	M	Biizi and Rugeshi	Murora
643.	Abel Mugabe	M	Biizi and Rugeshi	Murora
644.	Francis Sembagare	M	Birara	Kanaba
645.	Pasikazia Nyirakaromba	M	Birara	Kanaba
646.	Aireti Furaha	M	Birara	Kanaba
647.	Buderiya	M	Birara	Kanaba
648.	Efrasi Gashanga	M	Birara	Kanaba
649.	Ntawenderundi	M	Birara	Kanaba
650.	Vestina Ayinkamiye	F	Birara	Kanaba
651.	Justine Tumuhimbise	F	Birara	Kanaba
652.	Olivius Mugabirwe	F	Birara	Kanaba
653.	Jolly Night	F	Birara	Kanaba
654.	Nyirakarasha	M	Birara	Kanaba
655.	Rosette Tumuhimbise	F	Birara	Kanaba
656.	Jeska Burora	F	Birara	Kanaba
657.	Yohana Bizagaja	M	Birara	Kanaba
658.	Spina Karihungu	F	Birara	Kanaba
659.	Zadoka Mawazi	M	Birara	Kanaba
660.	Peter Bizimana	M	Birara	Kanaba
661.	Gelida Senziga	F	Birara	Kanaba
662.	Robert Twishuche	M	Birara	Kanaba
663.	Richard Birihanza	M	Birara	Kanaba
664.	Wini Mugabirwe	F	Kitahurira	Kanaba
665.	Justus Kamara	M	Kitahurira	Kanaba
666.	Annah Mparana	F	Kitahurira	Kanaba
667.	Milton Tumwebaze	M	Kitahurira	Kanaba
668.	Scovia Akaasa	F	Kitahurira	Kanaba
669.	D. Kakuru	M	Kitahurira	Kanaba
670.	Godiriva Ntereye	M	Kitahurira	Kanaba
671.	Ariura	F	Kitahurira	Kanaba
672.	Prize Tindimwebwa	F	Kayonza	Kanaba
673.	Iren Tindimwebwa	F	Kayonza	Kanaba
674.	David Kajura	M	Kayonza	Kanaba
675.	Mary Nshekanabo	F	Kayonza	Kanaba
676.	Annet Kesande	F	Kayonza	Kanaba
677.	Dan Bijutsya	M	Kayonza	Kanaba
678.	Jolly Nyiranenza	F	Kayonza	Kanaba
679.	Banader Rutandekire	M	Kayonza	Kanaba
680.	Trust Byamugisha	M	Kayonza	Kanaba
681.	Isabera Kyomuhendo	F	Kayonza	Kanaba
682.	Grace Tindimurekura	F	Kayonza	Kanaba
683.	Burni Moses	M	Bikuto	Kanaba

684.	Grolia	F	Bikuto	Kanaba
685.	Baseme Bibi	M	Bikuto	Kanaba
686.	Catherine Tumwikirize	F	Bikuto	Kanaba
687.	Allen Kembabazi	F	Bikuto	Kanaba
688.	Lex Tambi	M	Bikuto	Kanaba
689.	Gadise Nyabitaka	F	Bikuto	Kanaba
690.	Jecent Mutume	F	Bikuto	Kanaba
691.	Ledia Baseme	F	Bikuto	Kanaba
692.	Naume Nyakakye	F	Bikuto	Kanaba
693.	Jani Nyabahika	F	Bikuto	Kanaba
694.	Christine Nyinakuza	F	Bikuto	Kanaba
695.	Simon Maniho	F	Bikuto	Kanaba
696.	Justus Kamuhanda	F	Bikuto	Kanaba
697.	Gerald Arinaitwe	M	Bikuto	Kanaba
698.	Barnard Maguru	M	Bikuto	Kanaba
699.	Yamalenye	M	Bikuto	Kanaba
700.	Ishmeal Tumuhimbise	M	Bikuto	Kanaba
701.	Julius Tumwikirize	M	Bikuto	Kanaba
702.	Isaiah Wycliffe	M	Bikuto	Kanaba
703.	Medius Kyarisiima	M	Bikuto	Kanaba
704.	Florence	F	Karehe	Kanaba
705.	Jackline	F	Karehe	Kanaba
706.	Firida	F	Karehe	Kanaba
707.	Jolly	F	Karehe	Kanaba
708.	Shalon	F	Karehe	Kanaba
709.	Milton Baryakareba	M	Karehe	Kanaba
710.	Sifa Jackline	F	Karehe	Kanaba
711.	Nosi Nyamabayivu	F	Karehe	Kanaba
712.	Peninah	F	Karehe	Kanaba
713.	Confidence	F	Karehe	Kanaba
714.	Peterenia Kyitarinyeba	F	Karehe	Kanaba
715.	Longoli Zackart	M	Lokiyoto	Kamion
716.	Lojore Philiphs	M	Lokwakarame Centre	Kamion
717.	Lomera Meri	M	Natipem	Kamion
718.	Dakae Loritong	M	Nawadon	Kamion
719.	Ariko Mario	M	Lokiyoto	Kamion
720.	Lotila Thomas	M	Kaiteba	Kamion
721.	Lukawa Luka	M	Lukwakarame Centre	Kamion
722.	Lemukol Paul	M	Nachakunet	Kamion
723.	Moding Mathew	M	Natipem	Kamion
724.	Lojure Pasqwale	M	Nachakunet	Kamion
725.	Locham Martine	M	Moruatap	Kamion
726.	Locham Santos	M	Lokiyoto	Kamion
727.	Ariko Peter Pex	M	Kapalu	Kamion
728.	Narot Christine	F	Kapalu	Kamion
729.	Nangoli Monica	F	Kapalu	Kamion
730.	Loyukei Teresa	F	Kapalu	Kamion
731.	Natomoe Mara	F	Kapalu	Kamion
732.	Ekales Madline	F	Kapalu	Kamion

733.	Namongo Monica	F	Kapalu	Kamion
734.	Ekitakia Teresa	F	Kapalu	Kamion
735.	Lonya Joseph	M	Kapalu	Kamion
736.	Lomuria Veronica	F	Kapalu	Kamion
737.	Nakiru Sabina	F	Kapalu	Kamion
738.	Nacham Esther	F	Kapalu	Komion
739.	Nasur Philips	M	Lodoi	Kamion
740.	Tayal Alod	M	Kapalu	Kamion
741.	Loyuk James	M	Kanaro	Kamion
742.	Lochap Largo	M	Kanaro	Kamion
743.	Ngorok Simon	M	Domok	Kamion
744.	Komol Marko	M	Domok	Kamion
745.	Lopuwa Peter	M	Kololo	Kamion
746.	Lomongin Abraham	M	Domok	Kamion
747.	Kochi Joseph	M	Kapalu	Kamion
748.	Ngorok Joseph	M	Domok	Kamion
749.	Lopuwa Raphael	M	Kapalu	Kamion
750.	Machu Beatrice	F	Lokiyoto	Kamion
751.	Kunume Veronica	F	Moruatap	Kamion
752.	Loyukei Madalina	F	Natipem	Kamion
753.	Kunume Lucia	F	Natipem	Kamion
754.	Lemu Cicilia	F	Natipem	Kamion
755.	Napoliso Lucia	F	Nawadou	Kamion
756.	Nangoli Rose	F	Nachakunet	Kamion
757.	Napoliso Anna	F	Lotinyam	Kamion
758.	Nachiam Lokitare	F	Lotinyam	Kamion
759.	Amida Zachary	M	Napitem	Kamion
760.	Ilukal Francis	M	Lokwakarame Centre	Kamion
761.	Dakae Cypriano	M	Moru-Tap	Kamion
762.	Menya John	M	Nawadou	Kamion
763.	Acheiro David	M	Karinga	Moruita
764.	Achia Mary	F	Karinga	Moruita
765.	Chepokireto Amasilee	F	Karinga	Moruita
766.	Lopusikwang Loparinga	M	Karinga	Moruita
767.	Nakit Kolil	M	Naoyapuru	Moruita
768.	Apalongiro Balu	M	Sukudik	Moruita
769.	Lorot Gregory	M	Sukudik	Moruita
770.	Aleper Maritina	F	Sukudik	Moruita
771.	Leese Josephine	F	Karinga	Moruita
772.	Limlim Alice	F	Naoyapuru	Moruita
773.	Chemita Lucy	F	Ututu	Moruita
774.	Loput Tony	M	Ututu	Moruita
775.	Lobur Gabriel	M	Naturumrum	Iriiri
776.	Angella Simon Peter	M	Sinapeilet	Iriiri
777.	Lokut	M	Iriiri	Iriiri
778.	Lokawa Joseph	M	Lobulepeded	Iriiri
779.	Lorot John	M	Napeiley	Iriiri
780.	Ayoo Agnes	F	Iriiri	Iriiri
781.	Lorot John Lonyangaluk	M	Napeiley	Iriiri

782.	Yeno Philiph	M	Napeiley	Iriiri
783.	Longora Paul	M	Apeipuke	Iriiri
784.	Lokwi Mary	F	Lojom	Iriiri
785.	Teko Peter	M	Kodike	Iriiri
786.	Telo Robert	M	Losikait	Iriiri
787.	Obura Jimmy	M	Losikait	Iriiri
788.	Lomilo Lucius	M	Naroo	Katikekile
789.	Aguma Josephat	M	Singila	Katikekile
790.	Longura William	M	Naroo	Katikekile
791.	Keem Simon Peter	M	Singila	Katikekile
792.	Akol Lilly	F	Singila	Katikekile
793.	Lobokan Celementina	F	Aremgechoto	Katikekile
794.	Lokee John Robert	M	Naroo	Katikekile
795.	Lokoru Bosco	M	Nabuin	Katikekile
796.	Lotee Logong	M	Musupo	Katikekile
797.	Nangiro S. Nakol	F	Singila	Katikekile
798.	Namayiba Medi	M	Singila	Katikekile
799.	Lotus Lokabuka	M	Nabuni	Katikekile
800.	Lomer Kalisto	M	Nabokat	Katikekile
801.	Lolem Engonat	M	Lomurere	Katikekile
802.	Loput Anthony	M	Naroo	Katikekile
803.	Lokawua Michael	M	Nabuin	Tepeth
804.	Mr. Lokoru Paul	M	Apurichino	Katikekile
805.	Angela Lodin	M	Lorulepe	Katikekile
806.	Lokawa Lokapelbok	M	Nachocha	Katikekile
807.	Akol Micheal	M	Singila	Katikekile
808.	Omeri Simon	M	Singila	Katikekile
809.	Olinga John	M	Singila	Katikekile
810.	Anyakun Addagh	F	Singila	Katikekile
811.	Lokiru Sisto Dodoth	M	Akariwon	Tapac
812.	Achia John	M	Akariwon	Tapac
813.	Nakowi Anna	F	Akariwon	Tapac
814.	Lolem Erengeduka	M	Timingorok	Tapac
815.	Logwee Raphael	M	Seget	Tapac
816.	Nabur Magaret	F	Lonyilik	Tapac
817.	Adonga Monica	F	Akariwon	Tapac
818.	Konyen Maria	F	Akariwon	Tapac
819.	Lomokol Veronica	F	Akariwon	Tapac
820.	Lokoodo John	M	Lonyilik	Tapac
821.	Nate Jenifer	F	Akariwon	Tapac
822.	Lokiru Bakari	M	Alamal	Tapac
823.	Orode Timothy	M	Akariwon	Tapac
824.	Moses Twalla	M	Sabu	Kwosir
825.	Soyekwo Bosco	M		Kwosir
826.	Chemutai Rogrs	M		Benet
827.	Musobo Francis	M		Kwosir
828.	Cherukut Steven	M	Yatui	Kwosir
829.	Cyprass Alex	M	Yatui	Kwosir
830.	Chemrita Martin	M	Yatui	Kwosir

831.	Kwororoia Alex	M	Yatui	Kwosir
832.	Chesang Nathan	M	Yatui	Kwosir
833.	Matul Moses	M	Yatui	Kwosir
834.	Chcrukut Robert	M	Yatui	Kwosir
835.	Kibet Martin	M	Yatui	Kwosir
836.	Kariisa. A. Sali	M	Yatui	Kwosir
837.	Cheptalach Patrick	M	Yatui	Kwosir
838.	Mande David	M	Sabu	Kwosir
839.	Sophy Chemunwa	F	Arkut	Kwosir
840.	Mary Yeko	F	Muthswet	Kwosir
841.	Vaseline Kisumu	F	Sabu	Kwosir
842.	Winny Kusuro	F	Sabu	Kwosir
843.	Kokop Geofrey Masai	M	Arukut	Kwosir
844.	Kibet James	M	Kabortin	Benet
845.	Judith Kikai	F	Chemukula	Kwosir
846.	Estine Chemos	F	Sutuk	Kitawoi
847.	Chemusto Alex	M	Sutuk	Kiterwei
848.	Soruwon Adilu	M	Susomo	Kapchorwa
849.	Chekwel Simon	M	Seeior Qtr	Kapchorwa
850.	Nyawgas Simon	M	Kutowoy	Kutowoy
851.	Cherotin Patrick	M	Kaptulel	Ngenge
852.	Arapta Benna	F	Kabortin	Benet
853.	Soyekwo Bosco	M	Yatui	Kwosir
854.	Chemutai Betty	F	Kamasaren	Benet
855.	Moses Mwanga	M	Sinoptumpo	Kwosir
856.	Kaptengan Alfred	M	Tulwo West	Kwosir
857.	Salija Fred	M	Chepchaben	Kapchesombe
858.	Silkei Mike Chemusto	M	Rorok	Kapchesombe
859.	Musobe Salya David	M	Chepchabein	Kapchesombe
860.	Akuson Henry	M	Tulwo	Kapchesombe
861.	Twala Satya Edward	M	Kapsewui	Kapchesombe
862.	Chepkwurui Judith	F	Chepchabein	Kapchesombe
863.	Chebet Benna	F	Tulwo	Kapchesombe
864.	Chebet Lenney	F	Chepchabein	Kwosir
865.	Chelimo K. Richard	M	Kabortin	Benet
866.	Kuko Stephen	M	Sukut	Kitawoi
867.	Yesho Moses	M	Sukut	Kitawoi
868.	Irene Kaberwa	F	Upper Tarago	Benet
869.	Chelangat Fredmark	M	Kakween	Benet
870.	Chemanga Alfred	M	Kapchorwa	Benet
871.	Chemutai Rogers	M	Kapchorwa	Benet
872.	Mwenge Tom	M	Sukut	Kween
873.	Sange Jackline	M	Sukut	Kitawoi
874.	Sande Martin	M	Yatui	Kwosir
875.	Cheret .M	F	Kwoti	Kwosir
876.	Maniara Samuel	M	Kwoti	Kitawoi
877.	Kapkurot Dan	M	Kwoti	Kwosir
878.	Akuson	M	Kwoti	Kween
879.	Mutai Issal	M	Kwoti	Kwosir

Annex 10: Record of stakeholder inputs into FIP

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