**REPUBLIC OF UGANDA**

**CLIMATE INVESTMENT FUNDS**

# FOREST INVESTMENT PROGRAM FOR UGANDA

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|---|---|---|
| **MINISTRY OF WATER AND ENVIRONMENT** | WORLD BANK GROUP | AFRICAN DEVELOPMENT BANK GROUP |

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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 loos 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*

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

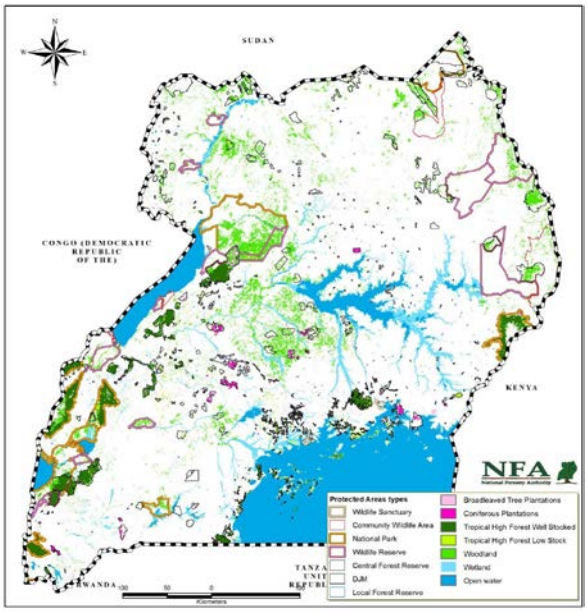



**Figure 1: Status of forests in Uganda**

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).

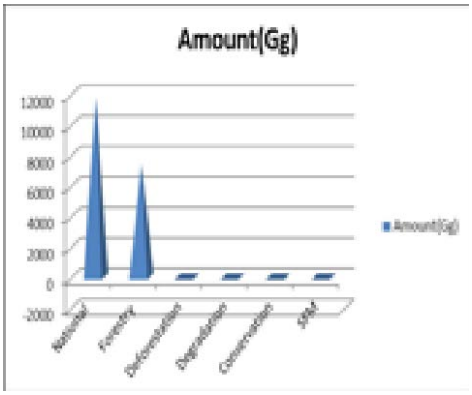



**Figure 2. Sources of GHGs in Uganda**

### 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 establish an

[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) 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

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

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 increasing revenues available for management of natural forests, in particular those in

[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.

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<br>♣ Measures for integrating forestry on macro-economic policy and other sectors | Sector /institutional Reports<br>Non-forestry Sector Investment Plans |
| **Outcomes** | | |
| Enhanced forest and livelihoods resilience to climate change | ♣ Climate change adaptation strategies and actions in the targeted landscapes<br>♣ Changes in quantities of water from protected catchments | Sector Reports |
| Improved enabling environment for sustainable management of forests | ♣ No of policy reforms initiated/concluded<br>♣ 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<br>♣ Size of biodiversity corridors restored row hoe management has improved | MRV Reports<br>Institutional Reports |
| Sustainable use of forest resources for livelihoods and economic development | ♣ Size of forest estate under collaborative forest management arrangements<br>♣ Size of forest area managed as private commercial forests | Sector Reports<br>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<br>♣ % increase in value of ecotourism investments | Sector Reports<br>Statistical Reports (UBOS) |
| Forest sector contribution to livelihoods and poverty reduction increased | ♣ % increase in incomes at household level in targeted landscapes | Sector Reports<br>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<br>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 $30^0$C. The northern and eastern regions experience higher temperatures, often exceeding $30^0$C, 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 4**Error! 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).

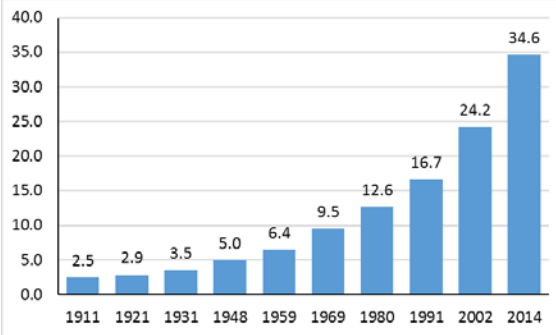



**Figure 4: Uganda population (1911-2014)**

[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.

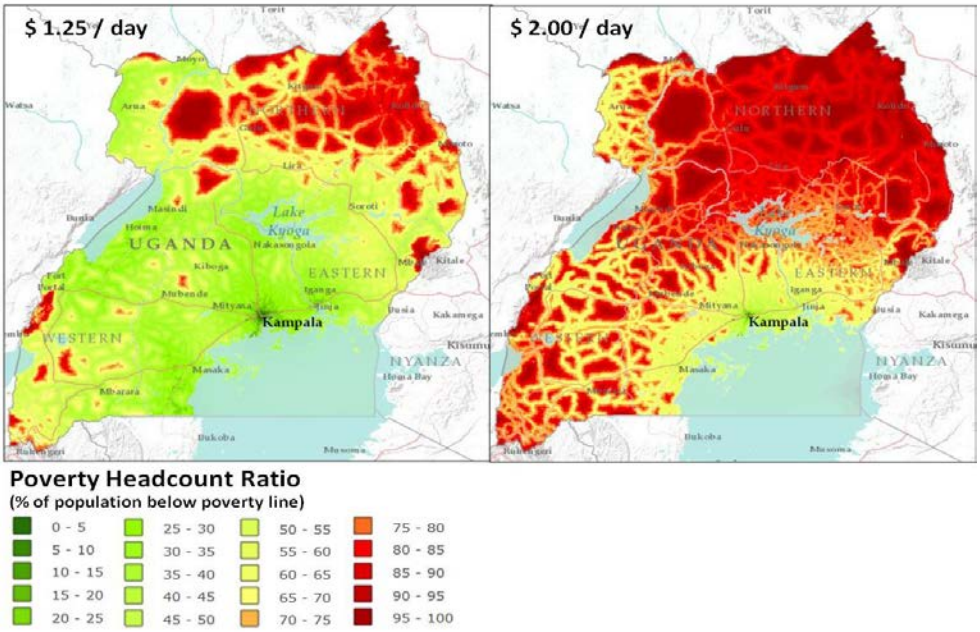



**Figure 5: Poverty headcount ratio in Uganda**[19]

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).

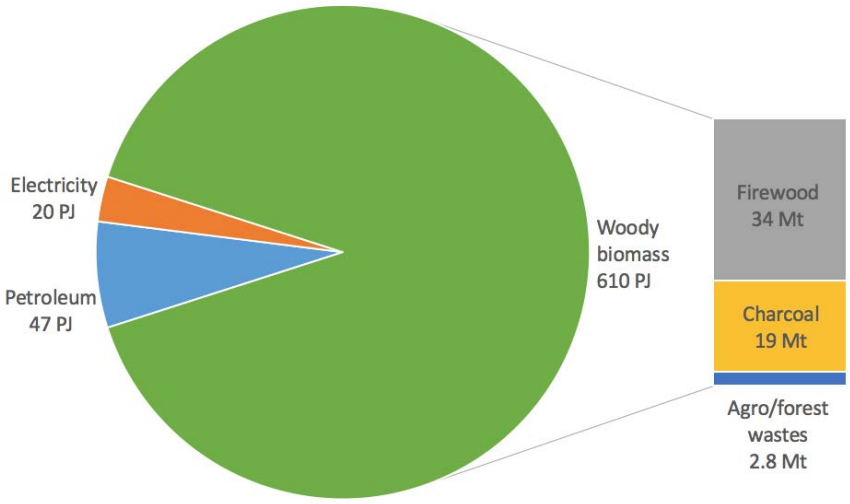



**Figure 6: Primary energy demand in Uganda (2016)**

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).

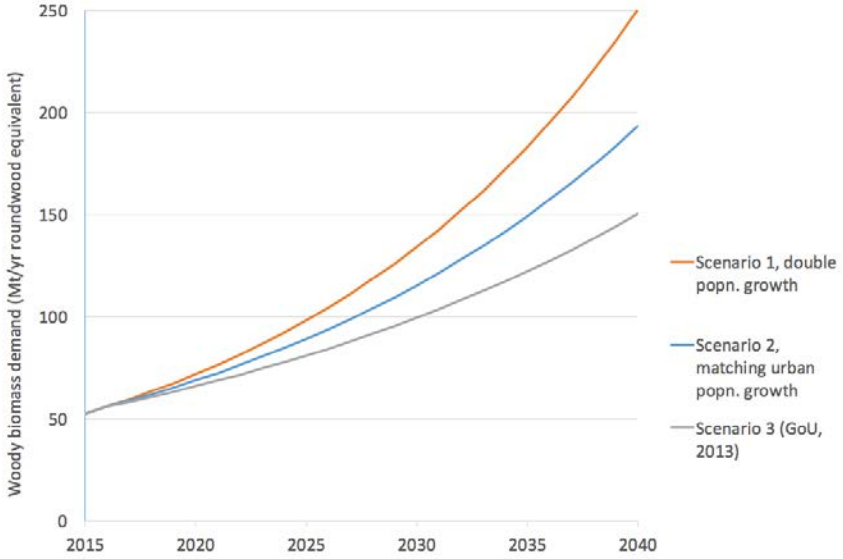



**Figure 7: Projected demand for woody biomass energy in Uganda, 2015-2040[29]**

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.

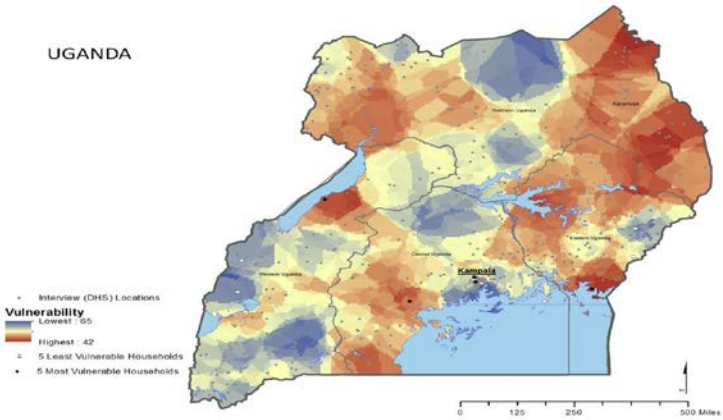



**Figure 8: Household vulnerability to climate change in Uganda**

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 to realise its Nationally

[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.*

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.

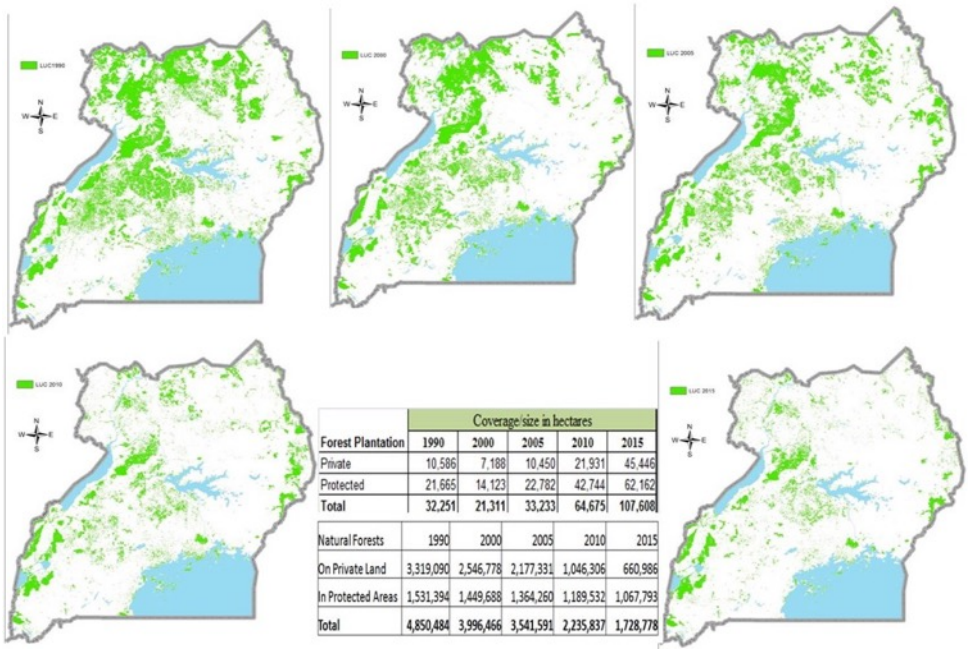
### 1.2.2 Forest types and trends

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 Impenetrable, Mgahinga, Mt. Rwenzori, Mt. Elgon, Kibale and Semuliki). Low-stocked THF is found

[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.*

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).



| Forest Plantation | Coverage size in hectares | | | | |
|---|---|---|---|---|---|
| | 1990 | 2000 | 2005 | 2010 | 2015 |
| Private | 10,586 | 7,188 | 10,450 | 21,931 | 45,446 |
| Protected | 21,665 | 14,123 | 22,782 | 42,744 | 62,162 |
| **Total** | **32,251** | **21,311** | **33,233** | **64,675** | **107,608** |

| Natural Forests | 1990 | 2000 | 2005 | 2010 | 2015 |
|---|---|---|---|---|---|
| On Private Land | 3,319,090 | 2,546,778 | 2,177,331 | 1,046,306 | 660,986 |
| In Protected Areas | 1,531,394 | 1,449,688 | 1,364,260 | 1,189,532 | 1,067,793 |
| **Total** | **4,850,484** | **3,996,466** | **3,541,591** | **2,235,837** | **1,728,778** |

**Figure 9: Trends in natural forest cover in Uganda (1990-2015)**

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 |
|---|---|

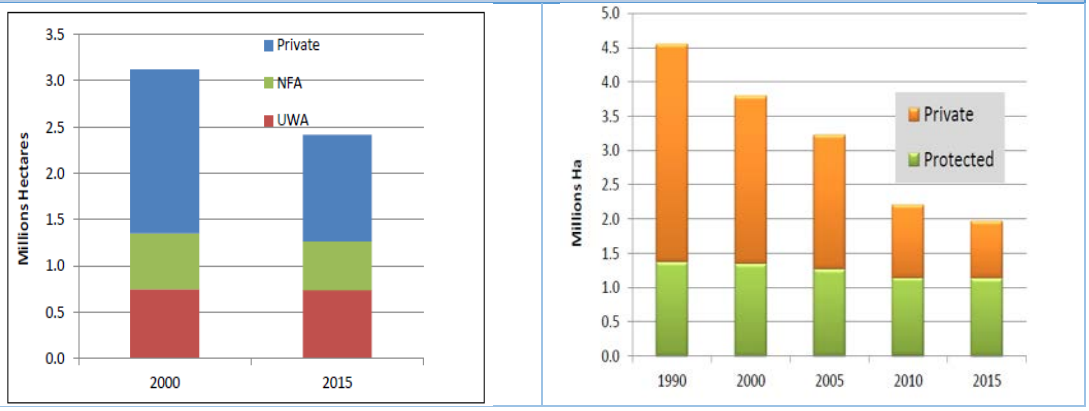



**Figure 10: Changes in vegetation cover according to forest management categories**

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 effects

[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.*

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)** |
| a. | Program 3: Restoration and conservation of natural forests. |

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

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.

**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:

[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*.

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 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.

[54] Uganda made the first submission to UNFCCC in January 2017.
[55] GoU (2016): *REDD+ Annual Report to FCPF (July 2015-June 2016).*

## 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).

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:

[56] www.mwe.org: FIP Stakeholder Engagement Strategy

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).

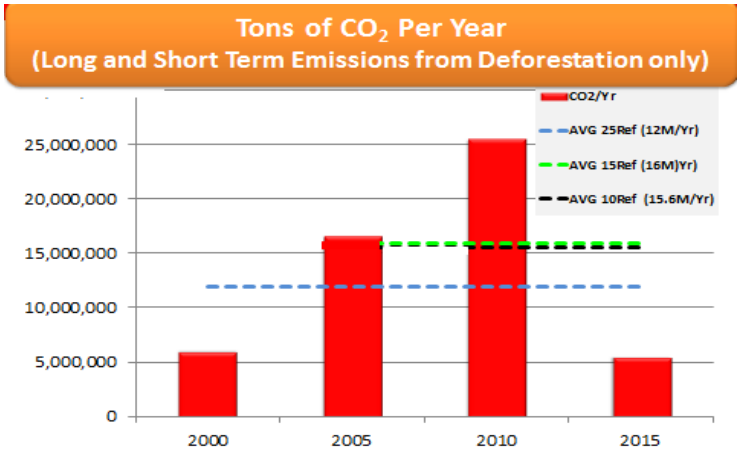



**Figure 11: Sources of $CO_2$ Emissions in Uganda**

## 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:

a. Ensure full and effective implementation of current policies and laws.

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

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 management

[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.*

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 electricity, high tariffs and low generation capacity are among the reasons why most Ugandans use biomass

[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.*

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 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

[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.*

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

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

technical resources available to them at a given time, and by weak coordination mechanisms with other organizations and with government institutions.

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

[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

networking and increase connectivity in the respective value chains and industry-specific knowledge and information.

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 $tCO_2$per 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

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

compliance (rather than avoidance) and new 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 and IP2: 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.

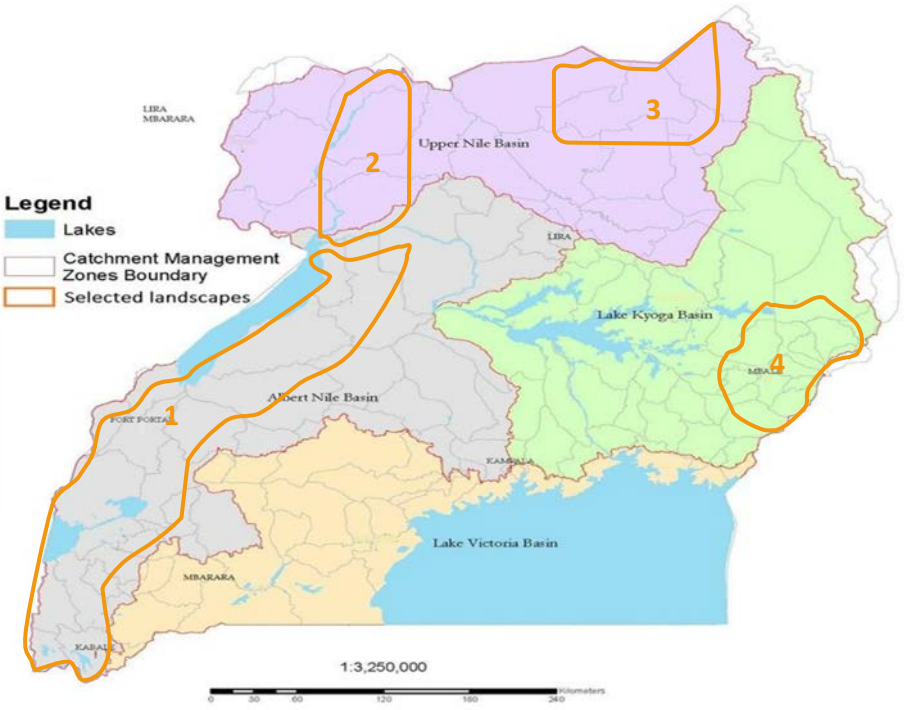
b. High potential for carbon abatement and conservation of forest biodiversity.

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**

### A: Lake Albert WMZ

[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

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.

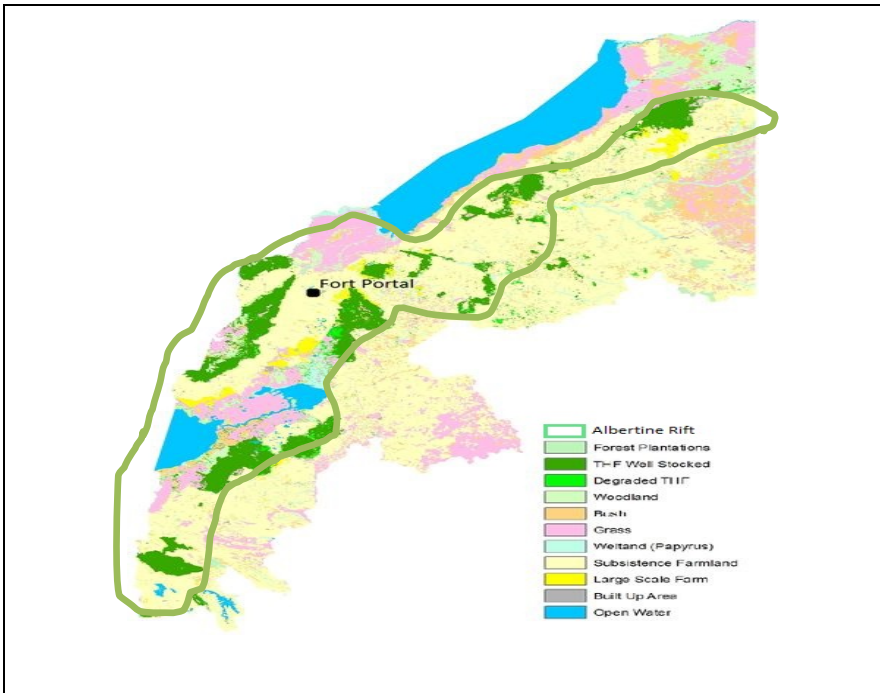



**Figure 13: Network of THF in Albertine Rift**

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.

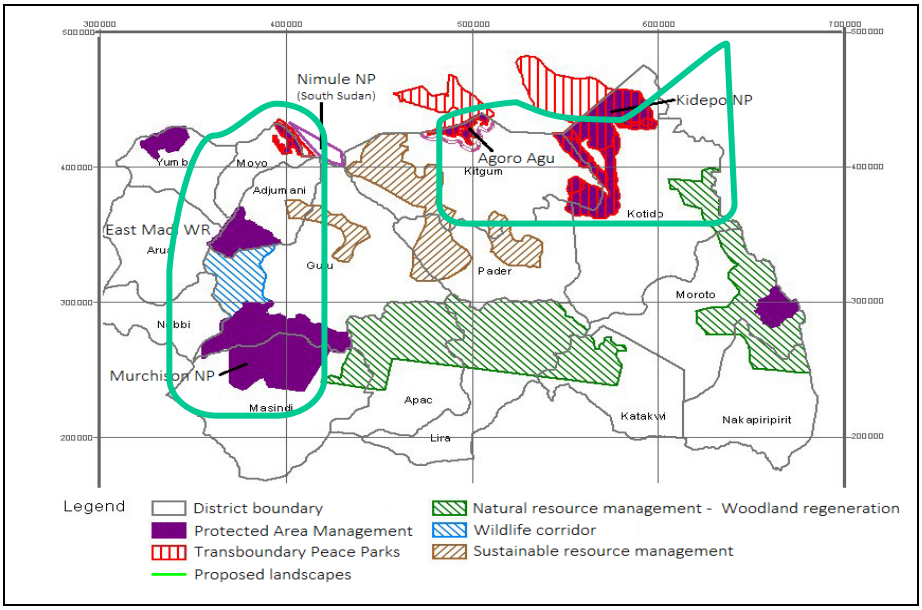
The region experiences significant economic growth related to the developing oil sector and large scale hydropower projects under development and proposed. These projects are both a threat – economic development resulting in higher pressure on natural resources – as well as an

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

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.

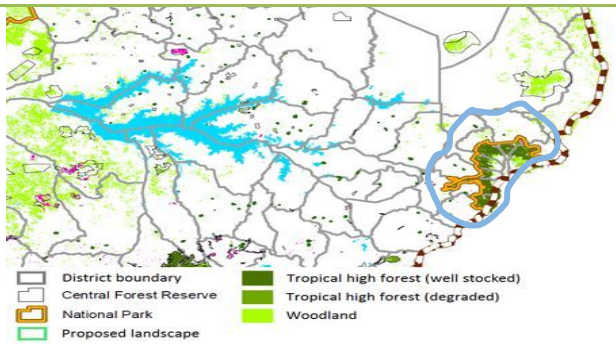
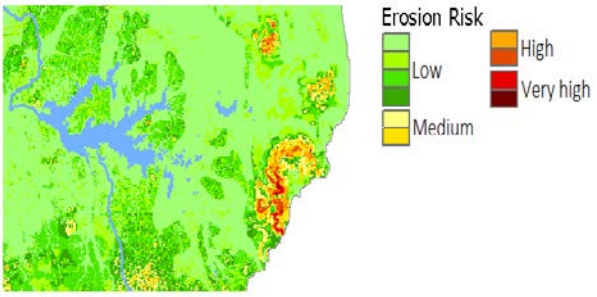



[119] Adapted from Nampindo S, Phillips GP and Plumptre A (2005) *The impact of conflict in Northern Uganda on the environment and natural resource management.*
[120] UBOS (2015) *Statistical Abstract 2015.*
[121] MWE (2013) *Water Resources Assessment Report.*

**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.

| | |
|---|---|
|  | 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. |

[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.*

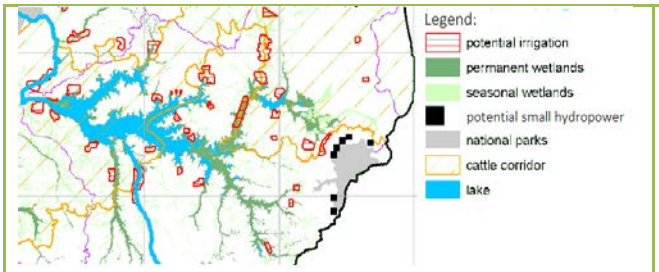



**Figure 15: Features of the Mt. Elgon landscape, Lake Kyoga WMZ**

### 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<br>▪ Development and implementation of catchment management plans[123]<br>▪ Establishment and operations of WMZ stakeholder forums<br>▪ Establishment and operations of sub-catchment management committees<br>▪ 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<br>▪ Districts have capacity for forests sector coordination, forestry resources management and forest revenue management.<br>▪ Roles and responsibilities for implementation of plans are clear and finance to implement them is available or has been identified<br>▪ Availability of data and information on water resources.<br>▪ Catchment based Water resources management processes (IWRM) adequately addressing land based interventions<br>• Increased knowledge on water resources potential in the targeted sub catchments<br>• 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.<br>▪ Demonstration of the ecological and aesthetic values to the economy and livelihoods.<br>▪ Capacities and processes for forest management and catchment management within and among Government, NGOs/CSO, Communities, land owners and private sector players<br><br>▪ Multi-stakeholder processes supporting integrated landscape and catchment management processes across the WMZ |
| **Component 2: Strengthening forest conservation** | | |
| • Management of five forested national parks<br>• Biodiversity and ecological data collection and analysis and management<br>• Conservation and restoration of forest/biodiversity corridors<br>• Establishment and operations of multi-stakeholder processes for forestry governance<br>• Up scaling collaborative management and benefit sharing initiatives between UWA and NFA, and communities<br>• Supporting management of central and local forest reserves<br>• Strengthening sustainable use of forest resources<br>• Capitalization of the Uganda Biodiversity Fund | ▪ 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<br>▪ Degraded and sensitive areas on private land have been reforested by land owners/users alone or in public-private partnership.<br>▪ Availability of data and information on forests, wildlife resources.<br>▪ Degraded forest areas within PAs have been restored.<br>▪ Markets for diversified and improved forest products, including green charcoal<br>▪ CFM and CRM is in place and functional in the selected gazetted areas<br>▪ Stakeholders engaged in management of targeted forest reserves (participatory forest management processes)<br>▪ Enhanced resilience of ecosystems and status of biodiversity<br>▪ Reduced GHG emission from deforestation and forest degradation. | |

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

| | | |
|---|---|---|
| • Combatting wildlife crimes and timber theft<br>• Promoting forest resources-based livelihoods<br>• Improved efficiency in use of biomass fuel<br>• Strengthening wood and wood fuel value chains | ▪ Reduced threats to forested national parks<br>▪ Increased contribution of forest resources to national economy and livelihoods<br>▪ Increased incomes from forest/wood products.<br>▪ Increased biodiversity funding opportunities | |
| **Component 3: Restoring land, forest and other ecosystems in key sub-catchments** | | |
| ▪ Up scaling successful forest and land restoration pilots<br>▪ Incentives for production forestry within forest reserves and on private land<br>▪ Incentives for maintaining natural forest on private land<br>▪ Restoring forests and other critical ecosystems in key biodiversity corridors<br>▪ Promoting and developing resource management agreements, on-farm tree-agriculture based production systems | ▪ Restored forest lands and forest and biodiversity corridors<br>▪ Private land with natural forests<br>▪ Production forest in PAs and on private land<br>▪ Enhanced resilience of ecosystems and livelihoods to effects of climate change.<br>▪ Improved livelihoods of the households in the project areas. | |
| **Component 4: Nature-based tourism development** | | |
| ▪ Marketing and promotion of Uganda's nature-based tourism<br>▪ Wildlife and forest based (eco) tourism concession management<br>▪ Investments in key infrastructure to 'unlock' wildlife and nature based tourism potential<br>▪ Support to increase community participation in nature-based tourism<br>▪ Strengthening effectiveness of revenue sharing schemes | ▪ Increased contribution of tourism to national economy and livelihoods<br>▪ Increased incomes from tourism to private sector and PA agencies | |
| **Component 5: Project monitoring and management** | | |
| ▪ Project management and implementation team<br>▪ Program operations<br>▪ 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.<br>▪ Demonstration of the ecological and aesthetic values to the economy and livelihoods.<br>▪ Capacities and processes for forest management and catchment management within and among Government, NGOs/CSO, Communities, land owners and private sector players<br>▪ Multi-stakeholder processes supporting integrated landscape and catchment management processes across the WMZ<br>▪ Capacities and processes for integrated land and watershed management |
| ▪ Mapping, analysis and geospatial support at WMZ and catchment level<br>▪ Development and implementation of catchment management plans[124]<br>▪ Establishment and operations of WMZ stakeholder forums<br>▪ Establishment and operations of sub-catchment management committees<br>▪ 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<br>▪ Districts have capacity for forests sector coordination, forestry resources management and forest revenue management.<br>▪ Roles and responsibilities for implementation of plans are clear and finance to implement them is available or has been identified<br>▪ Availability of data and information on water resources.<br>▪ Catchment based Water resources management processes (IWRM) adequately addressing land based interventions<br>• Increased knowledge on water resources potential in the targeted sub catchments<br>• Increased funding /funding opportunities for Catchment management plans | |
| **Component 2: Strengthening forest conservation** | | |
| • Management of five forested national parks<br>• Biodiversity and ecological data collection and analysis and management<br>• Conservation and restoration of forest/biodiversity corridors<br>• Establishment and operations of multi-stakeholder processes for forestry governance<br>• Up scaling collaborative management and benefit sharing initiatives between UWA and NFA, and communities<br>• Supporting management of central and local forest reserves<br>• Strengthening sustainable use of forest resources | ▪ 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<br>▪ Degraded and sensitive areas on private land have been reforested by land owners/users alone or in public-private partnership. | |

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

| | | |
|---|---|---|
| • Capitalization of the Uganda Biodiversity Fund<br>• Combatting wildlife crimes and timber theft<br>• Promoting forest resources-based livelihoods<br>• Improved efficiency in use of biomass fuel<br>• Strengthening wood and wood fuel value chains | ▪ Availability of data and information on forests, wildlife resources.<br>▪ Degraded forest areas within PAs have been restored.<br>▪ Markets for diversified and improved forest products, including green charcoal<br>▪ CFM and CRM is in place and functional in the selected gazetted areas<br>▪ Stakeholders engaged in management of targeted forest reserves (participatory forest management processes)<br>▪ Enhanced resilience of ecosystems and status of biodiversity<br>▪ Reduced GHG emission from deforestation and forest degradation.<br>▪ Reduced threats to forested national parks<br>▪ Increased contribution of forest resources to national economy and livelihoods<br>▪ Increased incomes from forest/wood products.<br>▪ Increased biodiversity funding opportunities | |
| **Component 3: Restoring land, forest and other ecosystems in key sub-catchments** | | |
| ▪ Up scaling successful forest and land restoration pilots<br>▪ Incentives for production forestry within forest reserves and on private land<br>▪ Incentives for maintaining natural forest on private land<br>▪ Restoring forests and other critical ecosystems in key biodiversity corridors<br>▪ Promoting and developing resource management agreements, on-farm tree-agriculture based production systems | ▪ Restored forest lands and forest and biodiversity corridors<br>▪ Private land with natural forests<br>▪ Production forest in PAs and on private land<br>▪ Enhanced resilience of ecosystems and livelihoods to effects of climate change.<br>▪ 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<br>▪ Investments in key infrastructure to 'unlock' wildlife and nature based tourism potential<br>▪ Support to increase community participation in nature-based tourism<br>▪ 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.<br>▪ Rainwater harvesting and on-farm water harvesting for domestic use.<br>▪ Development of water delivery channels (pipes; canals etc.) to water stressed areas.<br>▪ Supporting development of sanitation facilities to improve sanitation and hygiene as part of improved livelihood resilience against outbreaks of water-borne diseases.<br>▪ Land based interventions for protecting water sources.<br>▪ Promote efficient water use at households and for commercial uses (agriculture, aquaculture) and management of water sources (watershed) for sustaining supply of water.<br>▪ Pilot the use of solar pumps for irrigation in selected irrigation schemes which is environmentally friendly.<br>▪ 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.<br>▪ 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).<br>▪ Promoting agroforestry practices to increase tree cover in farming systems. | ▪ Enhanced resilience of ecosystems and livelihoods to effects of climate change<br>▪ Improved livelihoods of households in the project areas through increase access to water, improved sanitation, improved land and agriculture productivity<br>▪ Technologies and practices for efficient water harvesting and use for domestic and agricultural production | |

| | | |
|---|---|---|
| ▪ Promoting conservation agriculture (soil and water conservation).<br>▪ Scaling up technologies for irrigation by medium and large scale farming in selected sub-catchments.<br>▪ Scaling up technologies for aquaculture in selected sub-catchments.<br>▪ Construction of flood control channels and check dams to store water for productive use | | |
| **Project monitoring and management** | | |
| ▪ Project management and implementation team<br>▪ Program operations<br>▪ 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.<br>▪ Supporting active participation of NGOs/CSOs, private sector and indigenous/forest dependence people in stakeholder platforms in forestry sector national level planning and governance.<br>▪ Strengthening NFA, FSSD and UWA management/administrative systems, facilities, skills and human resources for improved enforcement, supervision and compliance.<br>▪ 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.<br>▪ 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. | ▪ Adequate coordination of lead agencies, mandated institutions and other stakeholders in the forestry sector at national levels.<br>▪ Formal involvement of NGOs/CSO, private sector and indigenous/forest dependent people in forest governance.<br>▪ Comprehensive forestry data and forest sector information is available and accessible<br>▪ Improved forest revenue from permits, licenses and fees issued transparently at national and district levels and revenue/income generated predictable.<br>▪ Improved forestry regulation<br>▪ Increased skilled manpower in wood processing and wood science | ▪ Improved forestry policy performance<br>▪ Improved forestry sector coordination and development<br>▪ High forest values and premiums for wood products |

| Activity | Outcome | Transformational impact |
|---|---|---|
| ▪ 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.<br>▪ Strengthening capacity of Nyabyeya Forest 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<br>▪ Wood value chains and timber markets<br>▪ Forestry industry market research and product development and dissemination.<br>▪ 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<br>▪ Stronger and reliable markets<br>▪ Improved technologies and utilization efficiency | |
| **Project monitoring and management** | | |
| ▪ Project management and implementation team<br>▪ Program operations<br>▪ 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.<br>♣ Linkages with national development priorities and institutional mandates have been entrenched in the design and implementation plans.<br>♣ 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.<br>♣ Incentives for policy reforms and implementation targeting private land owners have been embedded in the design and investments.<br>♣ Capacity building through training and demonstration actions.<br>♣ 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<br>♣ 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<br>♣ Measures for integrating forestry on macro-economic policy and other sectors | Sector /institutional Reports<br>Non-forestry Sector Investment Plans |
| **Outcomes** | | |
| Enhanced forest and livelihoods resilience to climate change | ♣ Climate change adaptation strategies and actions in the targeted landscapes<br>♣ Changes in quantities of water from protected catchments | Sector Reports |
| Improved enabling environment for sustainable management of forests | ♣ No of policy reforms initiated/concluded<br>♣ 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<br>♣ Size of biodiversity corridors restored row hoe management has improved | MRV Reports<br>Institutional Reports |
| Sustainable use of forest resources for livelihoods and economic development | ♣ Size of forest estate under collaborative forest management arrangements<br>♣ Size of forest area managed as private commercial forests | Sector Reports<br>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<br>♣ % increase in value of ecotourism investments | Sector Reports<br>Statistical Reports (UBOS) |
| Forest sector contribution to livelihoods and poverty reduction increased | ♣ % increase in incomes at household level in targeted landscapes | Sector Reports<br>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<br>Sector Reports |

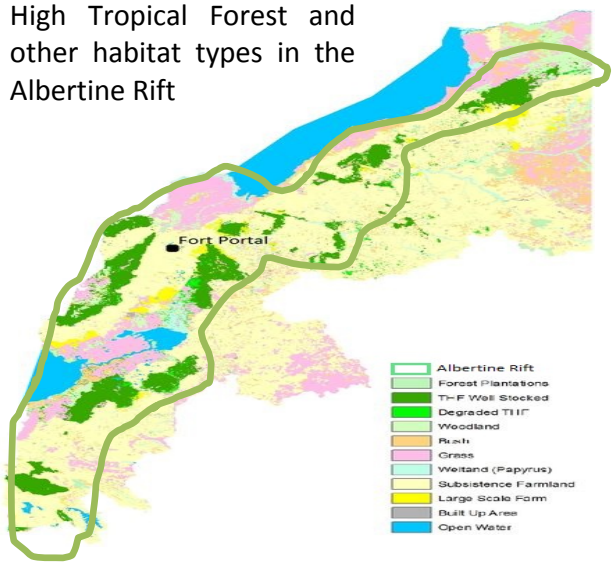
# Annex 1: FIP Investment Projects

## 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<br>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<br>National Forest Authority |

| Status summary | | Source | Contribution |
|---|---|---|---|
| Short Project Name | Albertine Rift Landscape Program | GCF, GEF **and other Climate Funds**<br>FIP<br>PPCR<br>GoU<br>Other funding | USD 45.0 million<br><br>USD 18.0 million<br>USD 15.0 million<br>USD 1.0 million<br>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.

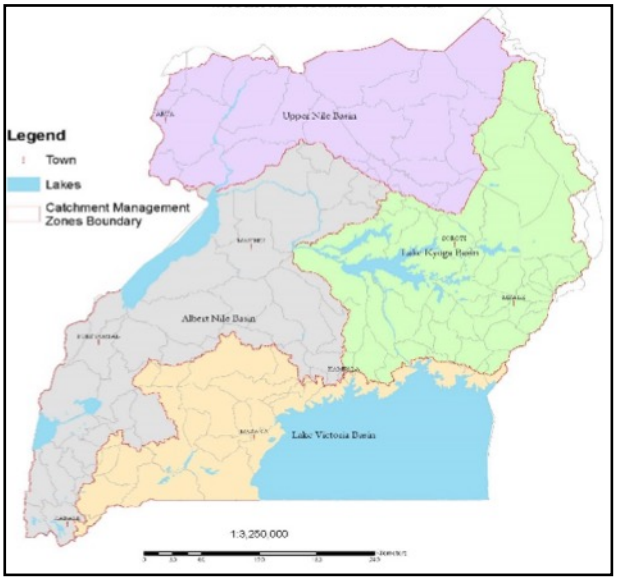
GoU seeks to mobilize CIF, GCF, GEF and other sources for additional support. IDA loans and forest carbon financing are also potential source of funding. Uncertainty over the scale of the project and availability of financing requires the design of the IP to be 'scaleable' and phased.

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

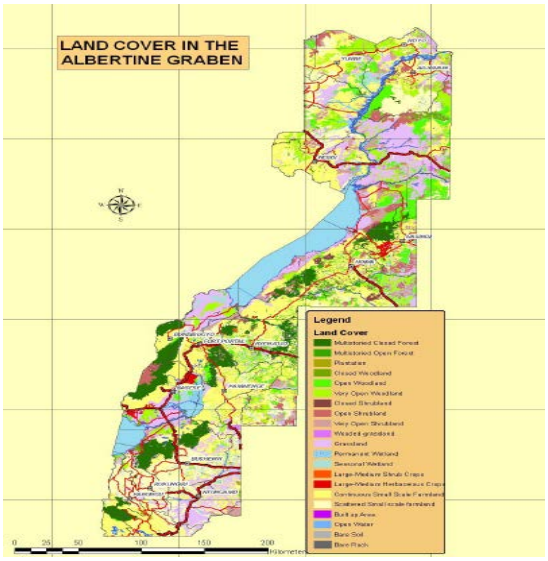
## 1. BACKGROUND AND JUSTIFICATION

**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, 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-

[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.

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**
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

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

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

**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

[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.

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<br>▪ Development and implementation of catchment management plans[135]<br>▪ Establishment and operations of WMZ stakeholder forums<br>▪ Establishment and operations of sub-catchment management committees<br>▪ 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<br>▪ Districts have capacity for forests sector coordination, forestry resources management and forest revenue management.<br>▪ Roles and responsibilities for implementation of plans are clear and finance to implement them is available or has been identified<br>▪ Availability of data and information on water resources.<br>▪ Catchment based Water resources management processes (IWRM) adequately addressing land based interventions<br>• Increased knowledge on water resources potential in the targeted sub catchments<br>• 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.<br>▪ Demonstration of the ecological and aesthetic values to the economy and livelihoods.<br>▪ Capacities and processes for forest management and catchment management within and among Government, NGOs/CSO, Communities, land owners and private sector players<br><br>▪ Multi-stakeholder processes supporting integrated landscape and catchment management processes across the WMZ |
| **Component 2: Strengthening forest conservation** | | |
| • Management of five forested national parks<br>• Biodiversity and ecological data collection and analysis and management<br>• Conservation and restoration of forest/biodiversity corridors<br>• Establishment and operations of multi-stakeholder processes for forestry governance<br>• Up scaling collaborative management and benefit sharing initiatives between UWA and NFA, and communities | ▪ 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<br>▪ Degraded and sensitive areas on private land have been reforested by land owners/users alone or in public-private partnership.<br>▪ Availability of data and information on forests, wildlife resources.<br>▪ Degraded forest areas within PAs have been restored. | |

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

| | | |
|---|---|---|
| • Supporting management of central and local forest reserves<br>• Strengthening sustainable use of forest resources<br>• Capitalization of the Uganda Biodiversity Fund<br>• Combatting wildlife crimes and timber theft<br>• Promoting forest resources-based livelihoods<br>• Improved efficiency in use of biomass fuel<br>• Strengthening wood and wood fuel value chains | ▪ Markets for diversified and improved forest products, including green charcoal<br>▪ CFM and CRM is in place and functional in the selected gazetted areas<br>▪ Stakeholders engaged in management of targeted forest reserves (participatory forest management processes)<br>▪ Enhanced resilience of ecosystems and status of biodiversity<br>▪ Reduced GHG emission from deforestation and forest degradation.<br>▪ Reduced threats to forested national parks<br>▪ Increased contribution of forest resources to national economy and livelihoods<br>▪ Increased incomes from forest/wood products.<br>▪ Increased biodiversity funding opportunities | |
| **Restoring land, forest and other ecosystems in key sub-catchments** | | |
| ▪ Up scaling successful forest and land restoration pilots<br>▪ Incentives for production forestry within forest reserves and on private land<br>▪ Incentives for maintaining natural forest on private land<br>▪ Restoring forests and other critical ecosystems in key biodiversity corridors<br>▪ Promoting and developing resource management agreements, on-farm tree-agriculture based production systems | ▪ Restored forest lands and forest and biodiversity corridors<br>▪ Private land with natural forests<br>▪ Production forest in PAs and on private land<br>▪ Enhanced resilience of ecosystems and livelihoods to effects of climate change.<br>▪ Improved livelihoods of the households in the project areas. | |
| **Nature-based tourism development** | | |
| ▪ Marketing and promotion of Uganda's nature-based tourism<br>▪ Wildlife and forest based (eco) tourism concession management<br>▪ Investments in key infrastructure to 'unlock' wildlife and nature based tourism potential<br>▪ Support to increase community participation in nature-based tourism<br>▪ Strengthening effectiveness of revenue sharing schemes | ▪ Increased contribution of tourism to national economy and livelihoods<br>▪ Increased incomes from tourism to private sector and PA agencies | |
| **Project monitoring and management** | | |
| ▪ Project management and implementation team | ▪ Effectively managed IP | |

| | | |
|---|---|---|
| ▪ Program operations<br>▪ Monitoring, evaluation and reporting | | |

## 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)**

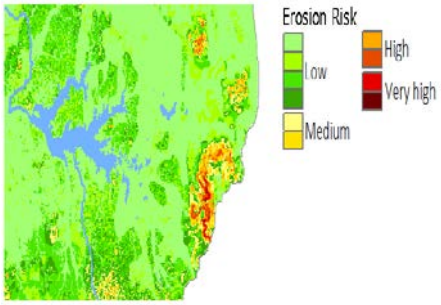
| **Components** | **GoU commitment** | **FIP request** | **PPCR request** | **TOTAL (indicative and scalable)** | | | TOTAL |
|---|---|---|---|---|---|---|---|
| | | | | **GCF** | **GEF** | **IBRD /WB** | |
| Component 1: Strengthening integrated water catchment management | 0.2 | 2 | 3 | 8 | 0 | 0 | 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]

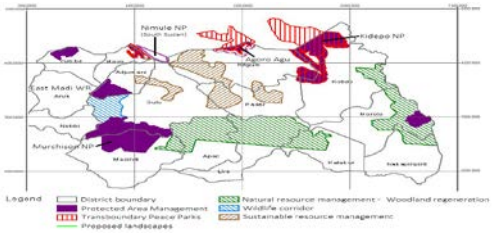
| Investment Project Role | Institution |
|---|---|
| Lead Implementing MDB | African Development Bank |
| Supporting MDB and Technical Agency(s) | IBRD/WB<br>Food And Agriculture Organisation |
| Lead national entity | Ministry of Water and Environment, Ministry of Agriculture and Animal Industry |
| Supporting national implementing entities | Ministry of Wildlife, Tourism and Antiquities<br>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<br>PPCR<br>FIP<br>AfDB<br>GoU | USD 30.0 million<br>USD 16.0 million<br>USD 12.0 million<br>USD 20.0 million<br>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.

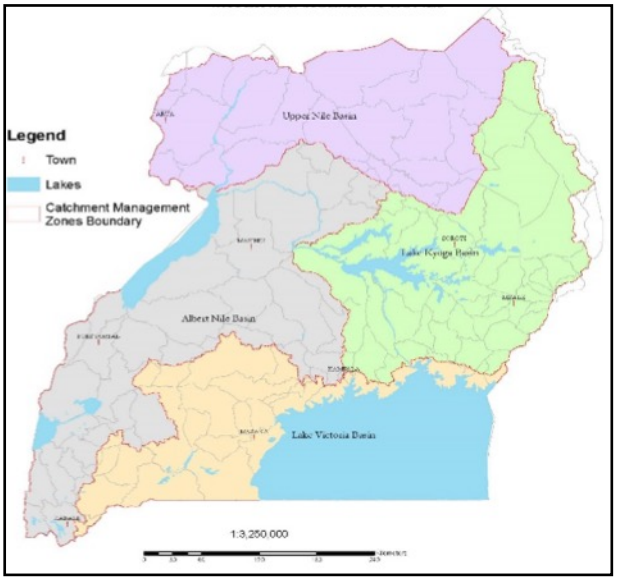
GoU seeks to mobilize CIF, GCF, GEF and other sources for additional support. AfDB loans and forest carbon financing are also potential source of funding. Uncertainty over the scale of the project and availability of financing requires the design of the IP to be 'scaleable' and phased.

[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
f. Supporting management of central and local forest reserves

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

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.

**Component 6: Project monitoring and management**

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

[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,

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** | | ▪ Reduced pressure on forest resources |
| ▪ Mapping, analysis and geospatial support at WMZ and catchment level | ▪ The selected WMZs Offices have the capacity to design, plan and coordinate land management projects at landscape level | |

| | | |
|---|---|---|
| ▪ Development and implementation of catchment management plans[144]<br>▪ Establishment and operations of WMZ stakeholder forums<br>▪ Establishment and operations of sub-catchment management committees<br>▪ Support national and WMZ institutions and local stakeholders to deliver integrated water catchment management interventions | ▪ Districts have capacity for forests sector coordination, forestry resources management and forest revenue management.<br>▪ Roles and responsibilities for implementation of plans are clear and finance to implement them is available or has been identified<br>▪ Availability of data and information on water resources.<br>▪ Catchment based Water resources management processes (IWRM) adequately addressing land based interventions<br>• Increased knowledge on water resources potential in the targeted sub catchments<br>• Increased funding /funding opportunities for Catchment management plans | through improvements in land use, restoration of forest lands and corridors.<br>▪ Demonstration of the ecological and aesthetic values to the economy and livelihoods.<br>▪ Capacities and processes for forest management and catchment management within and among Government, NGOs/CSO, Communities, land owners and private sector players<br><br>▪ Multi-stakeholder processes supporting integrated landscape and catchment management processes across the WMZ<br><br>▪ Capacities and processes for integrated land and watershed management |
| **Component 2: Strengthening forest conservation** | | |
| • Management of five forested national parks<br>• Biodiversity and ecological data collection and analysis and management<br>• Conservation and restoration of forest/biodiversity corridors<br>• Establishment and operations of multi-stakeholder processes for forestry governance<br>• Up scaling collaborative management and benefit sharing initiatives between UWA and NFA, and communities<br>• Supporting management of central and local forest reserves<br>• Strengthening sustainable use of forest resources<br>• Capitalization of the Uganda Biodiversity Fund<br>• Combatting wildlife crimes and timber theft<br>• Promoting forest resources-based livelihoods<br>• Improved efficiency in use of biomass fuel<br>• Strengthening wood and wood fuel value chains | ▪ 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<br>▪ Degraded and sensitive areas on private land have been reforested by land owners/users alone or in public-private partnership.<br>▪ Availability of data and information on forests, wildlife resources.<br>▪ Degraded forest areas within Pas have been restored.<br>▪ Markets for diversified and improved forest products, including green charcoal<br>▪ CFM and CRM is in place and functional in the selected gazetted areas<br>▪ Stakeholders engaged in management of targeted forest reserves (participatory forest management processes)<br>▪ Enhanced resilience of ecosystems and status of biodiversity<br>▪ Reduced GHG emission from deforestation and forest degradation.<br>▪ Reduced threats to forested national parks<br>▪ Increased contribution of forest resources to national economy and livelihoods<br>▪ Increased incomes from forest/wood products.<br>▪ Increased biodiversity funding opportunities | |
| **Component 3: Restoring land, forest and other ecosystems in key sub-catchments** | | |
| ▪ Up scaling successful forest and land restoration pilots<br>▪ Incentives for production forestry within forest reserves and on private land | ▪ Restored forest lands and forest and biodiversity corridors<br>▪ Private land with natural forests<br>▪ Production forest in Pas and on private land | |

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

| | | |
|---|---|---|
| ▪ Incentives for maintaining natural forest on private land<br>▪ Restoring forests and other critical ecosystems in key biodiversity corridors<br>▪ Promoting and developing resource management agreements, on-farm tree-agriculture based production systems | ▪ Enhanced resilience of ecosystems and livelihoods to effects of climate change.<br>▪ Improved livelihoods of the households in the project areas. | |
| **Component 4: Nature-based tourism development** | | |
| ▪ Marketing and promotion of Uganda's nature-based tourism<br>▪ Wildlife and forest based (eco) tourism concession management<br>▪ Investments in key infrastructure to 'unlock' wildlife and nature based tourism potential<br>▪ Support to increase community participation in nature-based tourism<br>▪ 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.<br>▪ Efficient water use, rainwater harvesting and on-farm water harvesting for domestic use and agriculture (including aquaculture).<br>▪ Development of sanitation facilities to improve sanitation and hygiene.<br>▪ Land based interventions for protecting water sources.<br>▪ Development of small to medium scale irrigation schemes.<br>▪ 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<br>▪ Improved livelihoods of households in the project areas through increase access to water, improved sanitation, improved land and agriculture productivity<br>▪ 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<br>▪ Program operations<br>▪ 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<br>Local Governments (Districts), National Forest Authority, Uganda Wildlife Authority |

| Status summary | | Source | Contribution |
|---|---|---|---|
| Short Project Name | Forestry policy and sector performance | TBD<br>GoU | USD 20 million<br>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<br>▪ Improved forestry sector coordination and development<br>▪ 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.<br>▪ Supporting active participation of NGOs/CSOs, private sector and indigenous/forest dependence people in stakeholder platforms in forestry sector national level planning and governance.<br>▪ Strengthening NFA, FSSD and UWA management/administrative systems, facilities, skills and human resources for improved enforcement, supervision and compliance. | ▪ Adequate coordination of lead agencies, mandated institutions and other stakeholders in the forestry sector at national levels.<br>▪ Formal involvement of NGOs/CSO, private sector and indigenous/forest dependent people in forest governance.<br>▪ Comprehensive forestry data and forest sector | |

| | | |
|---|---|---|
| ▪ 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.<br>▪ 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.<br>▪ 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.<br>▪ Strengthening capacity of Nyabyeya Forest College (NFC) with training infrastructure, facilities and trainers to conduct short term, tailor made training modules. | information is available and accessible<br>▪ Improved forest revenue from permits, licenses and fees issued transparently at national and district levels and revenue/income generated predictable.<br>▪ Improved forestry regulation<br>▪ Increased skilled manpower in wood processing and wood science | |
| Efficient and sustainable forest-based industry | | |
| ▪ Efficient conversion technologies and value addition<br>▪ Wood value chains and timber markets<br>▪ Forestry industry market research and product development and dissemination.<br>▪ 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<br>▪ Stronger and reliable markets<br>▪ 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** |

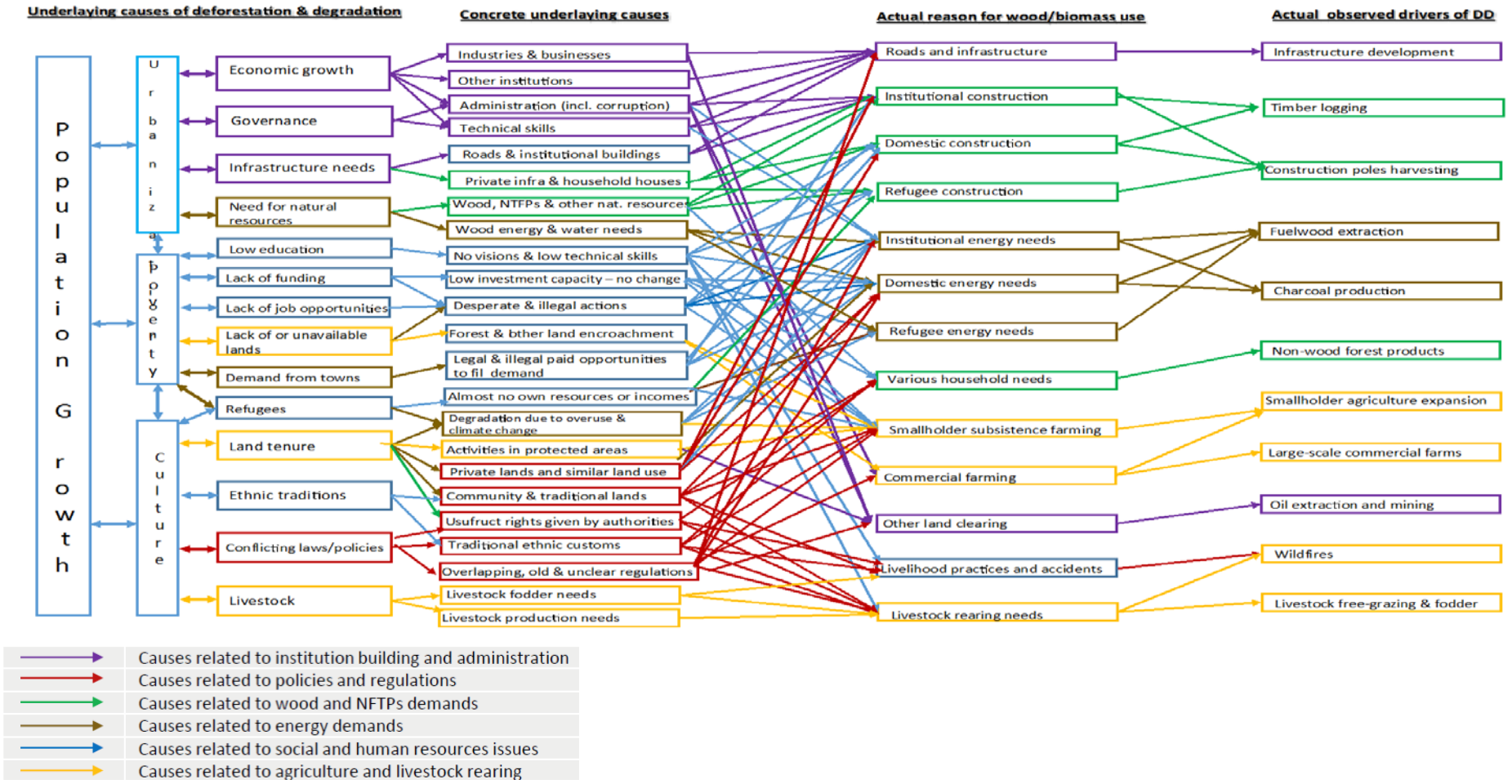
# Annex 2: Strategy for Stakeholder Engagement in FIP formulation

Reference: www.mwe.org

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

Pending (REDD+ Strategy design ongoing)

# 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 |
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| 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.<br>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).<br><br>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 |
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| 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 likely area of | | **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. |

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| 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.<br><br>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.<br><br>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?<br><br>c. Given the scale of use of biomass energy, some more detail also possible interventions to improve biomass productivity, charcoal production, and | The IP1 and IP2 description provides information on candidate forests, biodiversity 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.<br><br>**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.<br><br>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.<br><br>**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.<br><br>**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, charcoal use efficiency and increasing biomass for provision of charcoal and wood fuel. However, |

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| fuel-efficient stoves would be helpful, drawing on past experience.<br><br>d. Regarding project 3, are the expected outcomes on forest industry consistent with the scale of the interventions, which are very modest? | 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.<br><br>**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<br>1. | green | |
| FIP architecture is sound and transformative, if it can be implemented.<br><br>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 of policy and on-the-ground actions, e.g. in the form of reality checks of any adjustments to policies and regulations | 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. | |

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| 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) | |

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| 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.<br><br>The results framework is clear, and includes indicators on tonnes of GHG sequestered and reductions in area/volume of forest degraded/destroyed; as well as indicators on | | Please see above on further responses re: implement-ability.<br><br>The results framework has been further revised and simplified; in particular, the following indicators have been revised:<br>a. Change in the contribution of forest resources to livelihoods<br>b. Change in the contribution of forest resources at the catchment/WMZ level.<br>c. State of biodiversity in protected natural forests<br><br>Scale (and benefits) will be confirmed during investment project preparation phase. |

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| 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,<br><br>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. |

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| 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 impacts of any resettlement.<br>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 | | 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 considerations. |

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| beneficiary populations, and no discussion of male or female gender issues.<br>Since funding has not yet been secured (see below) a social/beneficiary assessment may be premature, and may raise false expectations (see below). | |

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| 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).<br><br>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. |

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

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| 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.<br><br>With regard to coordination, it would be helpful to understand what sustainable agricultural and improved livestock management initiatives are ongoing in the project areas.<br><br>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. | 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 |

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| 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.<br>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. |

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| J. Cost effectiveness of proposed investments | red | |

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| 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.<br><br>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.<br>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.

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| 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 support* | green | |
| 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 | | |

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| 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.<br><br>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.<br><br>There may also be scope for cross country learning | | Agreed…integration to be achieved as indicated during implementation of IP3 |

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| 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 |

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

[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

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| **FIP Criteria (FIP design document, additions as per FIP Investment Criteria and financial modalities**:<br><br>*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:<br>(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?;<br>(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 all important stakeholders, including | green | |

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| 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 unit costs or on the scale of interventions | | As indicated in responses under Part A and B above, some information on scale of intervention has been added to the revised document, and further clarity will be achieved at the project formulation stage. |

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| (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 FIP project area with access to modern sources of energy | The FIP does not support access to modern energy; however it does support improved biomass | *Not applicable* | |

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| | | production, marketing and utlization | | |
| | 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 supports sustainable forest management and*** | a)Evidence that legal framework & implementation provide for non-discriminatory land tenure rights and land use systems and | This is the intention of legal frameworks. The FIP seeks improved implementation | *green* | |

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| ***rights of local communities and indigenous peoples*** | 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.<br><br>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,<br>projects and policies impacting community areas | The FIP seeks to use participatory processes in land use planning | *green* | |
| | c)Improved access to effective | This area will be better defined during detailed project preparation | *yellow* | Thank you, this area will be better articulated during detailed project preparation. |

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| | justice/recourse systems | | | |
| ***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<br>♣ High rates of forest loss due to changes in land use due to competing values and returns from land | ♣ Incentives for forestry development<br>♣ Incentives for sustainable use of natural forests |

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

# Annex 7: Policy, legal and institutional frameworks

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

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| | ♣ Promote sustainable development of commercial forestry plantations and industry including value addition<br>♣ Promote implementation of sustainable management of forests through restoration of natural forests on protected and private land<br>♣ Promote forestry research and development<br>♣ Develop markets for forest products and services<br>♣ Develop National REDD+ Strategy and costed Plan<br>♣ Develop Forest Emissions Reference Levels and Forest Reference Levels<br>♣ Develop a Robust and functional National Forest Monitoring System (NFMS) for monitoring and reporting of REDD+ activities in the REDD+ Strategy<br>♣ Promote Forestry in Urban Development Planning<br>♣ Scale up agroforestry – based alternative livelihoods |
| National Forest Plan (2014) | ♣ Forest law enforcement and governance (FLEG)<br>♣ Strengthening of institutions responsible for forest management<br>♣ Planted trees and forests<br>♣ Restoration of degraded natural forests<br>♣ 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<br>♣ Coordination and supervision of technical support and training to LGs<br>♣ Inspection and monitoring of LGs and NFA performance in forest sector<br>♣ Co-ordination of the NFP and cross-sectoral linkages<br>♣ Mobilization of funds and other resources for the sector<br>♣ Promotion, public information and advocacy for the forest sector |
| FSSD | ♣ Formulation and oversight at appropriate policies, standards, and legislation for the forest sector;<br>♣ coordination and supervision of technical support and training to local governments;<br>♣ inspection and monitoring of local governments;<br>♣ monitor NFA using a performance contract<br>♣ coordination of the National Forest Plan (NFP) (the sector's investment plan) and cross-<br>♣ Sectoral linkages. |
| NFA | ♣ Management of CFRs in partnership with private sector and local communities<br>♣ Advisory, research or commercial services on contract<br>♣ Seed supply<br>♣ 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<br>♣ Offer permits, and collect fees |

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| | ♣ Mobilise funds for forestry development<br>♣ Develop and enforce bye-laws<br>♣ Support and quality control of forestry extension<br>♣ Manage LFRs in partnership with communities and private investors<br>♣ Land administration, surveying, approval of Community Forests |
| UWA | ♣ Management of the forest resources in Wildlife Conservation Areas<br>♣ Joint-management with NFA of some central forest reserves under this management status |
| MAAIF | ♣ Provide agriculture and forestry interface<br>♣ Deliver advisory services – to mainstream forestry in NAADS<br>♣ Provide enabling policies, laws and regulations and standards for agricultural practices that enhance sustainable land management<br>♣ Promotion of agro-forestry practices |
| NaFFORI | ♣ Research and development<br>♣ Promotion of forestry technologies |
| NEMA | ♣ Control of forestry activities in relation to environmental legislation<br>♣ Provide environmental planning framework<br>♣ Supports local governments in the development and implementation of the District<br>♣ Environment Action Plans<br>♣ Provides guidance and advice on forestry EIAs |
| MEMD | ♣ Formulate Policies, laws, regulations, standards and guidelines for sustainable production<br>♣ and provision of energy from various sources.<br>♣ Promote biomass energy conservation technologies<br>♣ 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.<br>♣ Supply of the capital base (natural resource and biodiversity) on which the industry is based.<br>♣ Formulate regulations, guidelines, standards and provisions for management of biodiversity and promotion of tourism industry. |
| MoFPED | ♣ Set Sector budget allocations and ceilings<br>♣ Mobilise funds and other resources<br>♣ 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<br>♣ Law and Order Sector and within civil society for community management of ecosystems<br>♣ Enforcement of forest laws |
| Ministry of Public Service | ♣ Public sector reforms<br>♣ Strengthening staffing levels of FSSD and DFS<br>♣ Monitoring sector institutional performance |

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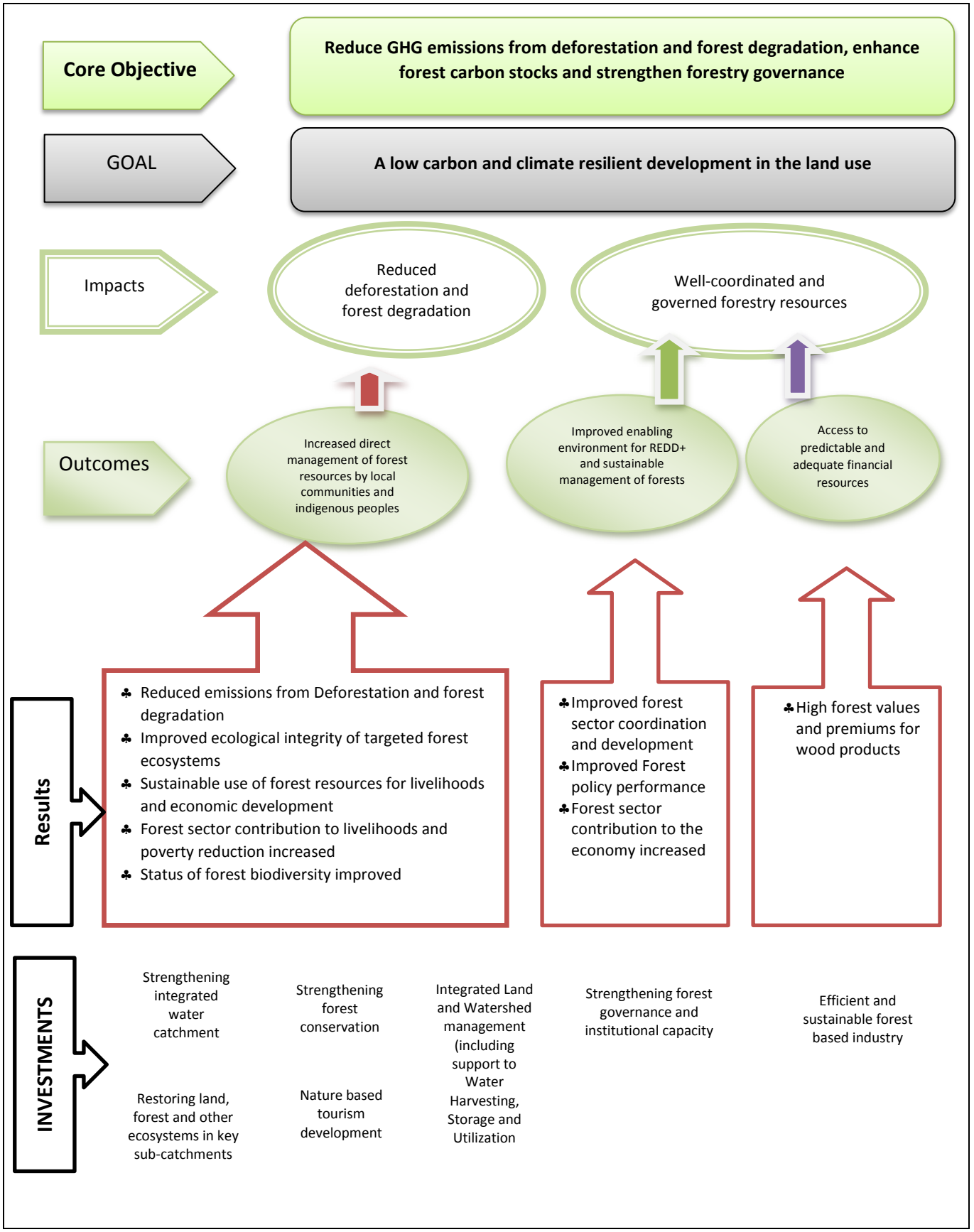
| Ministry of Education and Sports | ♣ Integration of forestry management in formal education for sustainable development through development of curriculum |
| Private Sector | ♣ Forest management and tree farming investments on private land<br>♣ Forest investments in CFRs on rented land<br>♣ Collaborative Forest Management of CFRs<br>♣ Wood and NWFP processing<br>♣ Trade in forest products |
| NGOs/CSOs | ♣ Advocacy for increased understanding of the role of forests in national and local development<br>♣ Promotion of government accountability in forest management<br>♣ Participating in management and utilization of forests<br>♣ Public education, information dissemination,<br>♣ Training of local communities, private forest owners and resource managers<br>♣ Action research<br>♣ Advisory service delivery<br>♣ 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 |

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| 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 |

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| 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 |

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| 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 |

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|---|---|---|---|---|
| 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. Officer | Hoima DLG |
| 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 |

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|---|---|---|---|---|
| 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 |

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| 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 |

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| 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. Officer | Kamwenge DLG |
| 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 |

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| 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 |

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| 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 |

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| 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 |

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| 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 |

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| 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 |

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| 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 |

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| 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 |

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| 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 Organization (NARO) |
| 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 |

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| 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 Focal Point | Uganda Wildlife Authority |
| 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 |

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| 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 |

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| 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 |

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| 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 |

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| 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 |

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| 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 |

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| 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 |

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| 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

Reference: www.mwe.org