



CLIMATE FINANCE MOBILIZATION IN UGANDA

THE MOST VIABLE OPTION



Robert Bakiika
Christine Mbatuusa
Anthony Mugeere, PhD
Anna Amumpiire

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LIST OF ACRONYMS AND ABBREVIATIONS

aBi	Agriculture Business Initiative
ACF	Agricultural Credit Facility
ACODE	Advocates Coalition for Development and Environment
AF	Adaptation Fund
BMCT	Bwindi Mgahinga Conservation Trust
BOU	Bank of Uganda
CBO	Community Based Organisation
CDKN	Climate and Development knowledge Network
CSO	Civil Society Organisation
EAC	East African Community
EMLI	Environmental Management and Livelihood Improved Bwaise Facility
ENR	Environment and Natural Resources
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FONAFIFO	National Forestry Financing Fund (in Spanish)
FONERWA	National Fund for Environment (in French)
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GNI	Gross National Income

IFMS	Integrated Financial Management System
LDCs	Least Developed Countries Fund
LG	Local Government
LULUCF	Land Use and Land Use Change and Forestry
MDA	Ministry, Department and Agency
MoFPED	Ministry of Finance, Planning and Economic Development
MRV	Measurement, Reporting and Verification
MTEF	Medium Term Expenditure Framework
MWE/CCD	Ministry of Water and Environment/Climate Change Department
NAMA	Nationally Appropriate Mitigation Actions
NAPA	National Adaptation Plans of Actions
NARO	National Agriculture Research Organisation
NCCP	National Climate Change Policy
NCFs	National Climate Funds
NCGF	National Climate Green Fund
NDCs	Nationally Determined Contributions
NDP	National Development Plan
NEF	National Environment Fund
NEMA	National Environment Management Authority
NFA	National Forestry Authority
NCFs	National Climate Funds
NFTPA	National Forestry and Tree Planting Act
NGOs	Non-governmental Organisations
NPA	National Planning Authority

NSSF	National Social Security Fund
ODA	Overseas Development Assistance
OECD	Overseas Economic Cooperation for Development
OPM	Office of the Prime Minister
PES	Payment for Ecosystem Services
PFM	Public Finance Management
PSFU	Private Sector Foundation of Uganda
REDD	Reducing Emissions form Deforestation and Forest Degradation
SCCF	Special Climate Change Fund
SDGs	Sustainable Development Goals
SIDS	Small Island Development States
UDBL	Uganda Development Bank Ltd
UECCC	Uganda Energy Credit Capitalisation Company
UGGDS	Uganda Green Growth Development Strategy
UGX	Uganda Shilling
UNDP	United Nations Development Programme
UNFCCC	United Nations Convention to Combat Climate Change
UNMA	Uganda National Meteorology Authority
UNRA	Uganda National Roads Authority
URF	Uganda Road Fund
USD	United States Dollar
USAID	United States Agency for International Development
UWA	Uganda Wildlife Authority
WWF	World Wildlife Fund

EXECUTIVE SUMMARY

The government of Uganda will in the next 15 years require ‘new and additional’ finances to meet its growing cost of addressing climate change. Due to the over dependence on natural resources to meet the country’s development aspirations, Uganda remains very vulnerable to the impacts of climate change. The 2019 German Watch’s Global Climate Risk Index ranked the country in the 85th position out of 149 in 2017.

The cost of inaction over the period 2010-2050 has been estimated between USD 273 - 437 billion. Positively, the country put in place enabling environment to address climate change – the National Climate Change Policy and the Implementation Strategy (2015) and the Nationally Determined Contributions (NDCs) among others. In order to foster implementation of policy and strategies related to climate change, the country envisages to progressively commit 30 percent of national resources whereas 70 percent is expected from international sources. However, no explicit strategy is in place to guide the mobilization of the required sources.

This report seeks to contribute to informing the mobilization of climate finance in light of the climate change impacts across all sectors. The report highlights the operating policy, legal and institutional framework on public climate finance, makes reference to country case studies on climate finance mobilization, proposes various options for climate finance mobilization based on stakeholders consulted and ranks the most efficient option.

A basic analysis has been done of existing financing arrangements - (i) Bwindi and Mgahinga Conservation Trust; (ii) aBi Trust, (iii) the Road Fund, (iv) Uganda Energy Credit Capitalisation Company; (v) the National Environment Fund; (vi) the Tree Fund; (vii) Uganda Wildlife Fund; (viii) the Agricultural Credit Facility administered on behalf of government through Bank of Uganda ;(ix) Yield Uganda Fund managed by Capital Partners Ltd; (x) the Agricultural Insurance Scheme;(xi) Uganda Biodiversity Fund and (xii) ECOTRUST. Generally, most of the arrangements have leveraged resources, built necessary public private partnership to meet the objectives of establishment, for example, the Road Fund has significantly contributed to stabilizing road maintenance financing

compared to traditional budgeting allocations from central governments.

Lessons on climate finance architecture from countries such as Bangladesh, Indonesia, Guyana, Rwanda, Ethiopia, Mali, Benin, South Africa, Maldives and Kenya, revealed growing patterns of country ownership and targeted investment in climate actions – mitigation and adaptation. No doubt, country climate funds have added value to the climate finance mobilization efforts although many are still challenged with leveraging the required finances from multiplicity of sources and instruments such as green bonds, equity among others.

Based on the consultations with CSOs, research and academia, policy makers and development partners, 4 options emerged in context of exploring the climate finance mobilisation;

- a) National budget under MoFPED (business as usual);
- b) Dedicated and ring-fenced National Climate Green Fund under MoFPED;
- c) National Climate Green Fund under Uganda Development Bank Ltd and;
- d) National Climate Green Fund under an autonomous agency.

The options were analysed against 6 parameters namely;

- i. Capitalization and resource mobilization potential;
- ii. Governance and institutional efficiency;
- iii. Utilization;
- iv. Monitoring, reporting and verification;
- v. Country ownership and policy alignment and;
- vi. Impact potential

The potential option for mobilization of climate finance based on the suggested definition - new and additional financial flows above official development assistance for supporting climate actions is the option of a dedicated National Climate Green Fund under autonomous agency under the oversight of the Permanent Secretaries of the MoFPED and MWE. Therefore, in alignment with one of the specific objectives of the National Climate Change Policy, this option may serve as one of the ways to mobilise climate finance.

However, further studies should be conducted on viable climate financing mechanisms with respect to evolving global climate finance architecture and development of Green growth financing strategy.

1. BACKGROUND TO THE STUDY

1.1 Introduction

It is unequivocal that climate change is occurring and its impacts are negatively impacting the achievement of long-term sustainable economic growth in Uganda. According to MWE (2015), the estimated economic impacts of climate change in the agriculture, water, infrastructure and energy sectors collectively amount to 2-4 percent of Gross Domestic Product (GDP) between 2010 and 2050. In addition, the costs of inaction between the periods 2010-2050 has been estimated between USD 273 - 437 billion. Such impacts are not only detrimental to the realization of the growth and development but also threaten livelihoods of the population.

Cognizant of need to act on climate change, the Government of Uganda developed the National Climate Change Policy (2015) and its implementation strategy to ensure harmonized and coordinated approach towards a climate- resilient and low-carbon development path for sustainable development in Uganda. In addition, Uganda, established a dedicated climate change department in the Ministry of Water and Environment (MWE), developed the Nationally Determined Contributions (NDCs) running up to 2030 and number of sector strategies responding to climate change.

1.2 Problem statement

Noting that the country has put in place policies, plans and strategies to address climate change and its impacts, no explicit strategy has been put in place to guide the mobilization of the required sources as enshrined in the policy to implement climate actions with 30 percent of national resources and 70 percent from international sources. Approx. USD 3.9 billion (USD 258 million per annum) is required to implement climate actions listed in the policy yet the current levels of funding are still way below the estimated annual target.

1.3 Rationale

Despite the policy highlighting major means through which the additional funds could be obtained, inter alia, national budget, dedicated funding

from bilateral and multilateral sources, private sector finance, carbon markets, payment for ecosystem services (PES) among others, funding needs out-way available financial resources.

In addition, the policy tasked the Ministry of Finance, Planning and Economic Development (MoFPED) to facilitate the introduction of relevant financial mechanisms and tools to support financial resource mobilization and investment for the implementation of the climate actions, however, the slow pace of operationalizing this policy action, demands more work on potential financial tools and mechanisms.

Promisingly, the National Climate Change Bill 2017¹ makes provision for financing climate change; however, discussions are still on-going.

1.4 Objectives and tasks

It is against the above background that Advocates Coalition for Development and Environment (ACODE) and the Environmental Management for Livelihood Improvement Bwaise Facility (EMLI) commissioned a consultancy for a study that seeks to explore the feasibility of establishing a National Green Climate fund as one of the possible climate finance mobilization mechanisms.

The specific tasks of the consultancy were to:

- a) Review and analyze literature on policy, legal and institutional framework on public financing and climate finance
- b) Conduct stakeholder consultations with support from ACODE/ EMLI to solicit views on purpose, form, eligibility and functionality
- c) Identify efficient options for operation of mechanism for climate finance mobilization
- d) Design a monitoring, reporting and verification framework for climate finance in Uganda

1.5 Methodology and approach

This report is based on review of information on climate financing across global, regional and national landscapes. In addition face-to-face interviews and focus group discussions with representatives from: Ministries, Agencies and local governments; Parliament, non-state

¹ The Version as of February, 2018

actors, private sector and development partners.

To tailor the study, 6 criteria groups in *Table 1* were used cutting across the pillars of governance, capitalisation/resource mobilisation, Governance and institutional efficiency, fund utilisation and monitoring and reporting mentioned above, as well as country ownership and alignment and impact potential.

Table 1. Criteria groups and aspects used to assess alternative climate financing options

Criteria group	Specific aspects
1. Capitalization/resource mobilization potential	<ul style="list-style-type: none"> • Ability to attract climate finance from domestic sources • Ability to attract climate finance from bilateral and multilateral partners • Ability to leverage private sector resources
2. Governance and institutional efficiency	<ul style="list-style-type: none"> • Attractiveness for representation in oversight and decision making by different stakeholders • Ability to achieve operational efficiency
3. Utilization	<ul style="list-style-type: none"> • Potential to engage a wide number and scope of stakeholders across the country • Potential to stimulate innovative, bankable and potentially scalable climate action models
4. Monitoring, reporting and verification	<ul style="list-style-type: none"> • Degree of knowledge and capacity on MRV (mitigation, adaptation and climate finance) • Degree of openness to independent verification and audit
5. Country ownership and policy alignment	<ul style="list-style-type: none"> • Degree of accountability for implementing relevant strategies • Capacity to foster mainstreaming of climate change in other government bodies • Ability to coordinate across a wide range of activities and actors
6. Impact potential	<ul style="list-style-type: none"> • Ability to direct funding towards high-quality, impactful projects(adaptation, mitigation and co-benefits) • Institutional capacity to ensure high quality service delivery

1.6 Limitations

The main limitation of the study was lack of operation terminology of climate finance because this is considered a relatively new financing scheme with few practitioners. On the other hand, ring-fencing the areas

of climate finance mobilization to National Climate Green Fund stated as the terms of reference, narrowed the responses.

2. CLIMATE CHANGE AND CLIMATE FINANCING NEEDS IN UGANDA

2.1 Climate change and its dimensions

Climate change is unequivocal. Climate change and environmental risks are now among the top 5 global risks in terms of both impact and likelihood (WEF, 2019). The burden related to impacts of climate change is expected to be borne disproportionately by developing countries that have historically not greatly contributed to its causes. For example, Uganda, whose average annual Greenhouse gas (GHG) emissions are still very low compared to other emitting countries, yet climate impacts cannot spare it.

According to EMLI (2016), Uganda's vulnerability is attributed to the over dependency on natural resources especially, primary sectors e.g. agriculture, water, energy and fisheries, and which are highly vulnerable to impacts of climate change. Uganda has been ranked in the 85th position in the Global Climate Risk Index in 2017 (Germanwatch, 2019). There is growing literature on climate displacements in Uganda although not sufficient to link it to growing refugee situation.

Promisingly, the country is reducing its vulnerability and building its readiness to address climate change. Partly, this is evident with its ratification of the Paris Agreement and earlier climate relevant protocols and agreements thus demonstrating the political will to climate action. However, such global commitment come with cost implications. It has been noted that Uganda is in arrears of meeting its regular contributions for several international agreement/conventions and protocols it has signed to the tune of UGX 166 billion².

2 Pers. Comm. with Hon. Lawrence Biyika Songa, Chairperson Parliamentary Climate Change Committee.

2.2 Financing needs to address climate change impacts

According to the Costed Adaptation Strategy of the National Climate Change Policy, the financing needed to respond to climate change by 2030 is approx. USD 3.9 billion. However, the cost of inaction is estimated at around US USD 3.1-5.9 billion a year by 2025, greater than the financing needs. Additionally, the cost of implementation of the country's first NDC has been estimated at USD 5.523 billion of which USD 3.093 billion, equivalent to 56 percent of total cost of implementation allocated to adaptation costs.

Like other developing countries, Uganda's NDC features unconditional and conditional contributions however, no clear differentiation exists on nature of contributions. In communicating the NDC, the country pledged to continue its financial mobilization commitment under the National Climate Change Policy, of 30% national sources to cover incremental costs and 70% assumed to originate from international sources.

3. LESSONS FROM GLOBAL CLIMATE FINANCE ARCHITECTURE AND NATIONAL CLIMATE FUNDS

3.1 Understanding climate finance

Although there is no universal definition of climate finance, UNFCCC through its Subsidiary Body for Scientific and Technological Advice (SBSTA) body has initiated a process to define climate finance. However, related definition provides for local, national or transnational financing—drawn from public, private and alternative sources of financing that seeks to support mitigation and adaptation actions that will address climate change³. For purposes of this study, the suggested definition - new and additional financial flows above official development assistance for supporting climate actions, is recommended.

³ <https://unfccc.int/topics/climate-finance/the-big-picture/introduction-to-climate-finance>

3.2 Global financing windows for climate action

The Financial Mechanism of the UNFCCC provides for provides for a framework for the provision of financial resources on a grant or concessional basis, including for the transfer of technology. The mechanism has been entrusted to one or more existing international entities, for example, the Global Environment Facility (GEF) with its Special Climate Change Fund (SCCF) and Least Developed Countries Fund (LDCF) and the Green Climate Fund (GCF) and Adaptation Fund (AF). In 2009, developed countries unpacked climate finance by committing to a goal of mobilizing jointly USD 100 billion dollars a year by 2020 to address the needs of developing countries. Similarly, the Paris Agreement, in enhancing the implementation of the UNFCCC, provides for making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

Additionally, the Paris Agreement, intends to set a new collective quantified goal from a floor of USD 100 billion per year.

3.3 LDCs responses to mobilizing climate finance and their drivers

While much attention has been directed at the international commitments to assist developing countries respond to climate change through the establishment of GCF as an envisaged main multilateral vehicle for mobilizing increased climate finance and reaching the USD 100 billion by 2020, less attention has been paid to how such finance may be managed within recipient countries (Bird, N. 2015).

A number of developing countries have devised various approaches for climate finance mobilization. National Climate Funds have emerged as key distinct ways of mobilizing the needed financing for climate action. Most of the NCFs have recorded good progress, although some complexity in operation have been attributed to inter alia, the various standards and requirements related to accessing climate finance and the loose boundaries between climate and development interventions⁴. By implication, mobilizing public and private finance and delivering financial

4 Report on the 2018 Forum of the Standing Committee on Finance-Climate finance architecture: enhancing collaboration, seizing opportunities (<https://unfccc.int/topics/climate-finance/events-meetings/scf-forum/2018-forum-of-the-standing-committee-on-finance>)

resources to meet the needs and priorities of developing countries from such complex (and sometimes expensive system) requires keeping in mind the complex and evolving nature of the climate finance architecture globally and country-specific circumstances. It is no wonder, countries like Benin have established standalone legislations to establish such funds, for example, the Benin Fund for Environment and Climate Change established in 2017.

At regional levels, there is growing pattern in favour of Climate Finance Funds generally. The East African Community (EAC) has called for international support in the capitalisation of the EAC Climate Change Fund through pioneering the accreditation of EAC as a Regional Implementing Entity under the Adaptation Fund and the Green Climate Fund⁵. Similarly, the EAC climate change policy establishes the EAC Climate Change Fund with the aim of mobilizing financial resources for the implementation of the Policy and instruments of implementing the Policy including the EAC Climate Change Strategy and Master Plan.

Table 2: Examples of NCFs by specific financing function

Main Functions								
National Climate Fund by Country	Attract, mobilise and manage resources	Catalyse/leverage private funds, loans and equity	Catalyse results-based payments	Mainstream climate change in development process	Blend public and private finance	Coordinate partnerships and collaboration	Provide support/technical assistance/capacity building	Improve environment management for climate resilient development
Rwanda's FONERWA	√	√			√	√	√	
Kenya Climate Change Fund	√	√			√	√	√	
Mali Climate Fund								
Benin National Environment and Climate Change Fund	√	√			√			√
Climate Resilience Green Economy Facility	√	√	√		√		√	√
Bangladesh Climate Change and Resilient Fund	√	√				√		

⁵ <http://www.eac.int/news-and-media/press-releases/20151211/eac-secretary-general-cautions-climate-change>

Main Functions								
Indonesia Climate Change Trust Fund	√	√		√				
Guyana REDD+ Investment Fund	√		√				√	

Table 3: Prioritisation of investments eligible from selected NCFs

Country's NCF	Funding windows/priorities
Rwanda's FONERWA	<ul style="list-style-type: none"> • Conservation and sustainable management of natural resources • Research and Development and technology transfer and implementation • Environment and climate change mainstreaming • Environmental impact assessment, monitoring and enforcement
Mali Climate Fund	<ul style="list-style-type: none"> • Alternative sources of energy and forestry • Agriculture, livestock and Fisheries • Water Resources • Economic Diversification • Research and Capacity Building
South Africa Green Fund	<ul style="list-style-type: none"> • Green Cities and Towns • Low Carbon Economy • Natural Resources Management
Ethiopia's RCGF	<ul style="list-style-type: none"> • Strategic Window-For Investment Plans and Associated Institutional Building Requirements generated through the strategic planning process • Responsive Window-Demand—driven Investments and capacity building initiatives developed outside the government investment planning process and from a range of stakeholders
Bangladesh Climate Change Resilient Fund	<p>Six pillars, namely:</p> <ul style="list-style-type: none"> • Food security, social safety and health • Comprehensive disaster management • Climate proofing of investments • Research and Knowledge Management • Mitigation and Low Carbon Development • Capacity Building

Country's NCF	Funding windows/priorities
Indonesia Climate Change Trust Fund	<ul style="list-style-type: none"> • “Innovation Fund” that serves to overcome barriers and facilitate the Gol’s NAMAs • “Transformation Fund” to assist in market penetration. This fund will act as a revenue-generating revolving investment facility, which may utilize funding mechanisms including public-private partnerships, CSR, Government Budget and world capital markets sources that could mobilize private-sector finance

3.4 Impacts, value addition and lessons of NCFs in south

NCFs have been reported to mobilize additional financial resources from various sources, according to ODI (2011), over USD 1.35 billion has been pledged to NCFs. NCFs have fostered decentralisation of the international climate finance architecture thus extending climate finance to lower levels of the society whilst building local long-term capacity in mobilization and provision of climate finance.

NCFs serving as National implementing entities (NIEs) have been reported to be cost effective in management of climate finance. According to GermanWatch (2014), project management fees charged by NIEs in Africa where less than those of multilateral implementing entities (MIEs), which charged 8.5% of total project value.

4. LESSONS OF OTHER FINANCIAL ARRANGEMENTS IN UGANDA

4.1 Case studies of selected financing arrangements in Uganda

Lessons have been drawn from the following financing arrangements: (i) Bwindi and Mgahinga Conservation Trust; (ii) Agricultural Business Initiative (aBi) Trust, (iii) the Road Fund, (iv) Uganda Energy Credit Capitalization Company; (v) the National Environment Fund; (vi) the Tree Fund; (vii) Uganda Wildlife Fund; (viii) the Agricultural Credit Facility administered on behalf of government through Bank of Uganda; (ix) Yield Uganda Fund managed by Capital Partners Ltd; (x) the Agricultural

Insurance Scheme; (xi) Uganda Biodiversity Fund and (xii) ECOTRUST.

4.1.1 National Environment Fund, Wildlife Fund and National Tree Fund

Due to low levels of funding to the environment and natural resources sub sector in Uganda over the years, the so called natural resources funds were established by and under respective legal regime for management of a particular natural resource. The National Environment Fund (NEF) under the National Environment Act (NEA); the Wildlife Fund under the Wildlife Act and the Tree Fund under the National Forest and Tree Planting Act (NFTPA).

The national environment fund and the wildlife fund remain operational as opposed to the National Tree Fund, which has never been operationalized since 2004 due to failure by government to allocate funds and establishing its operating procedures.

In 2008, cabinet proposed small levy tax of 0.0005% of the market value of resources generated out of hydroelectricity and the production of hydrocarbons towards the Tree Fund but the decision was never been effected (Naluwairo et.al., 2014). Experiences from Costa Rica's Tree fund - FONAFIFO provide good lessons of natural resource funds. Government of Costa Rica forfeited 3.5% of fuel tax and 25% of the water tariff, and transferred to FONAFIFO mobilizing over USD 20 million and USD 4.88 million respectively. Consequently, FONAFIFO has facilitated the increase in forest cover from 21% in 1987 to 54% by 2015.

4.1.2 Road Fund

The establishment of the Uganda Road Fund by Act of Parliament in 2008, allowed the fund to operate as a second generation fund with objective of financing routine and periodic maintenance of public roads from mainly reserved road user charges.

The Road Fund is capitalized by local users charge including fuel levy, transit fees, road license, axle load fines, tolls, distance charges and traffic and road safety fines and has a vote thus entitled to budgetary allocation every year.

The Road Fund has made significant achievement including; better roads, lower maintenance costs, and encouragement of local construction industry, reduced transport costs and improved enabling environment

for doing business. The fund and its success are premised predictability and timely provision of funds. Some stakeholders, while appreciating the Road Fund have argued that oil and gas on which the government is prioritizing its current capital expenditure yet is non-renewable, should be planned as a potential source of revenue for some of these financial arrangements.

4.1.3 Uganda Energy Credit Capitalization Company

In 2009, the government established Uganda Energy Credit Capitalisation Company (UECCC) under company law by Guarantee to: serve as credit support institution and to promote private sector led renewable energy infrastructure development; provide financial and technical support and introduce new and innovative financing modalities to reduce risk.

With initial grant from World Bank of USD 3.5 million and GEF of USD 3.1 million as seed capital, government contributed USD 0.53 million (equivalent to UGX 1.2Billion) in 2010. This enabled UECCC unlock capital from private sector, financial institutions and micro-finance institutions under its 3 products: standby or Refinance facility, partial Risk Guarantee Facility and Solar Refinance to MFIs/Banks (GoU, 2015). UECCC is piloting a Biogas Financing Facility or domestic biogas digesters with EBO SACCO Ltd in order to address barrier associated with high upfront costs of acquiring domestic biogas digesters for cooking and lighting. It should be noted that Ministry of Finance Planning and Economic Development is represented on the board of UECCC.

4.1.4 aBi Trust, Agricultural Credit Facility, Yield Uganda Fund and Agricultural Insurance Scheme

In the agricultural sector, government established aBi Trust, again under Company Law by Guarantee in partnership with Dutch Government (as promoters) to support agribusiness development in the private sector. aBi operates as a multi donor entity which provides financing and technical support in selected agricultural value chains and offers an integrated approach on value chain development.

Similarly, government also established in 2009 Agricultural Credit Facility (ACF), which is administered by Bank of Uganda on its behalf for commercialization of agriculture through provision of medium and long term financing to projects engaged in agriculture, agro-processing, modernization and mechanization.

Government also established the Yield Uganda Investment Fund as an equity fund with the European Union (EU) Delegation to Uganda and the International Fund for Agricultural Development (IFAD), who has provided an initial funding of Euro 10 million, providing first loss protection to equity investors along with NSSF Uganda providing Euro 2 million. Investment areas in small and growing agribusiness positioned in agricultural supply chains in Uganda, for over 10 years. The fund offers both equity and debt and is managed by Pearl Capital Partners, as an independent investment fund manager.

In 2016, government entered into a public-private partnership (PPP) arrangement with a consortium of 10 Insurance companies under a Uganda Insurers Association (UIA) and formed the Uganda Agricultural Insurance Scheme for a five-year period. The scheme protects small and large farmers from the effects of agricultural risks (especially the production risk). Under the scheme, small and large farmers in high risk areas are earmarked up to 80% subsidy, while small and large scale farmers elsewhere get 50% and 30% subsidy respectively. The product range now include drought index insurance for crops only, multi-peril insurance for crops and livestock and aquaculture insurance for farms, grow out operations and institutions. Operations of the scheme have been enabled by satellite data, whose access is being supported by the Government of Netherlands. Unfortunately, UIA has not developed an insurance product against forest fire due to lack of re-insurance for forestry.

4.1.5 Bwindi Mgahinga Conservation Trust (BMCT)

Uganda established the Bwindi Mgahinga Conservation Trust (BMCT) as an Endowment Fund with initial support from GEF of USD 4 million in 1994. Revenue generated by the Trust was programmed for community projects (60%), ecological monitoring (20%) and administrative cash (20%). Despite the global financial crisis in 2008, the Trust has leveraged additional resources and ensured that both Mgahinga and Bwindi central forest reserve are well conserved, whose gorilla flagship tourism accounts for over 60% of UWA's revenue. The Trust is catalyzed tourism potential, with tourism positioned as one of the key growth sectors of the economy.

4.1.6 Environmental Conservation Trust (ECOTRUST) and Uganda Biodiversity Fund

ECOTRUST was established in 1999 as continuation of the then USAID Grant management Unit targeted for CSOs, vulnerable communities and household in conservation financing and continues to operate as a financing arrangement through its endowment fund. Recently, through the carbon community fund, Ecotrust paid out USD 278,338 to farmers from Kasese, Masindi, Rubirizi, Hoima and the Mt. Elgon region.

The Uganda Biodiversity Trust Fund, commonly known as the Uganda Biodiversity Fund was registered in 2016 under the Trustees Incorporation Act of 1939 to mobilize, manage and channel financial resources for the conservation of Uganda's biodiversity and sustainable use of natural resources nation-wide. The Uganda Biodiversity Fund has set a mobilisation target of USD 80 million over the next 10 years but is not well capitalised. Currently, the fund has provided grant support to 6 organization for biodiversity conservation and climate change adaptation and resilience.

4.2 Emerging lessons form case studies

An quick analysis of the aforementioned financing arrangements highlights that stand alone funds established in Uganda have to a large extent served the purpose and provided multiplier effects thus from addressing specific challenge to catalyzing economic growth (case of BMCT and Wildlife fund).

5. ASSESSMENT OF VIABLE CLIMATE FINANCE MECHANISM FOR UGANDA

5.1 Voices from some stakeholders

Diverse views of stakeholders among others, emphasized need for national commitment to funding, making financing predictable and innovative; holding implementing entities accountable for results; improved awareness on climate change among others.

Some stakeholders highlighted the need to shift from budget allocations for climate action, changing requirements for funding for climate action which is requires counter-funding among others.

5.2 Basic enabling factors for a national climate financing mechanism

The key enabler for national climate financing mechanism is the National Climate Change Policy (2015) which aims to ensure a harmonized and coordinated approach toward a climate-resilient and low-carbon development path for sustainable development. The Policy provides for the institutional structure and policy options for climate action. The Policy provides for the Policy Committee on Environment to manage and provide policy guidance on matters related to climate change. The Policy establishes the National Climate Change Advisory Committee (NCCAC) a multi-stakeholder body charged with providing technical guidance on matters related to climate change. The policy provides for facilitation of the mobilisation of financial resources to address climate change in Uganda, with MoFPED tasked with the lead role to introduce relevant financial mechanisms and to support financial resource mobilisation and investment for the implementation of the policy. The operationalization of the provision of the policy awaits passing of the Climate Change Bill.

Second enabler, systematic integration of climate change in planning and budgeting frameworks and formulation of strategies, plans to promote climate change responsiveness. Ministry of Water and Environment/ Climate Change Department in collaboration with National Planning Authority have developed climate change mainstreaming guidelines to integrated issues of climate change in Ministries, Agencies and local government. In addition, MoFPED has issued budget call circulars guiding government on budgeting for climate action. Consequently, funding such activities requires a clear source of funding which the national climate financing mechanism intends to serve. In addition, the formulation of Third National Development Plan (NDP III), Uganda Green Growth Development Strategy (UGGDS), Nationally Determined Contributions (NDCs) and other climate responsive plans, creates demand for predictable funding mechanism.

Third enabler, establishment of National Designated Authority of the Green Climate Fund (NDA GCF) under MoFPED and accreditation of Ministry of Water and Environment as National Implementing Entity for GCF and Adaptation Fund. Through such growing within both Ministries, conceptualization of climate change issues has been improved thence the growing demand to coordinate and manage climate finance

holistically.

Fourth, the Public Finance Management Act, 2015. The Act, among others, provides for; fiscal and macroeconomic management, the Charter for Fiscal Responsibility, the Contingencies Fund and the establishment of the Petroleum Fund. The Act highlights government preferred model of financing mechanism – Fund. Secondly, the Act reveals government mechanism for cash, assets and liability management including mobilization of financial resources. Specifically, through taxes, fees, charges and other impositions, in achieving the objectives of the Charter for Fiscal Responsibility. Climate finance has the potential to support achievement of the objectives of the Charter of Fiscal Responsibility through mobilization and provision of new and additional financing. For example, carbon market mechanisms.

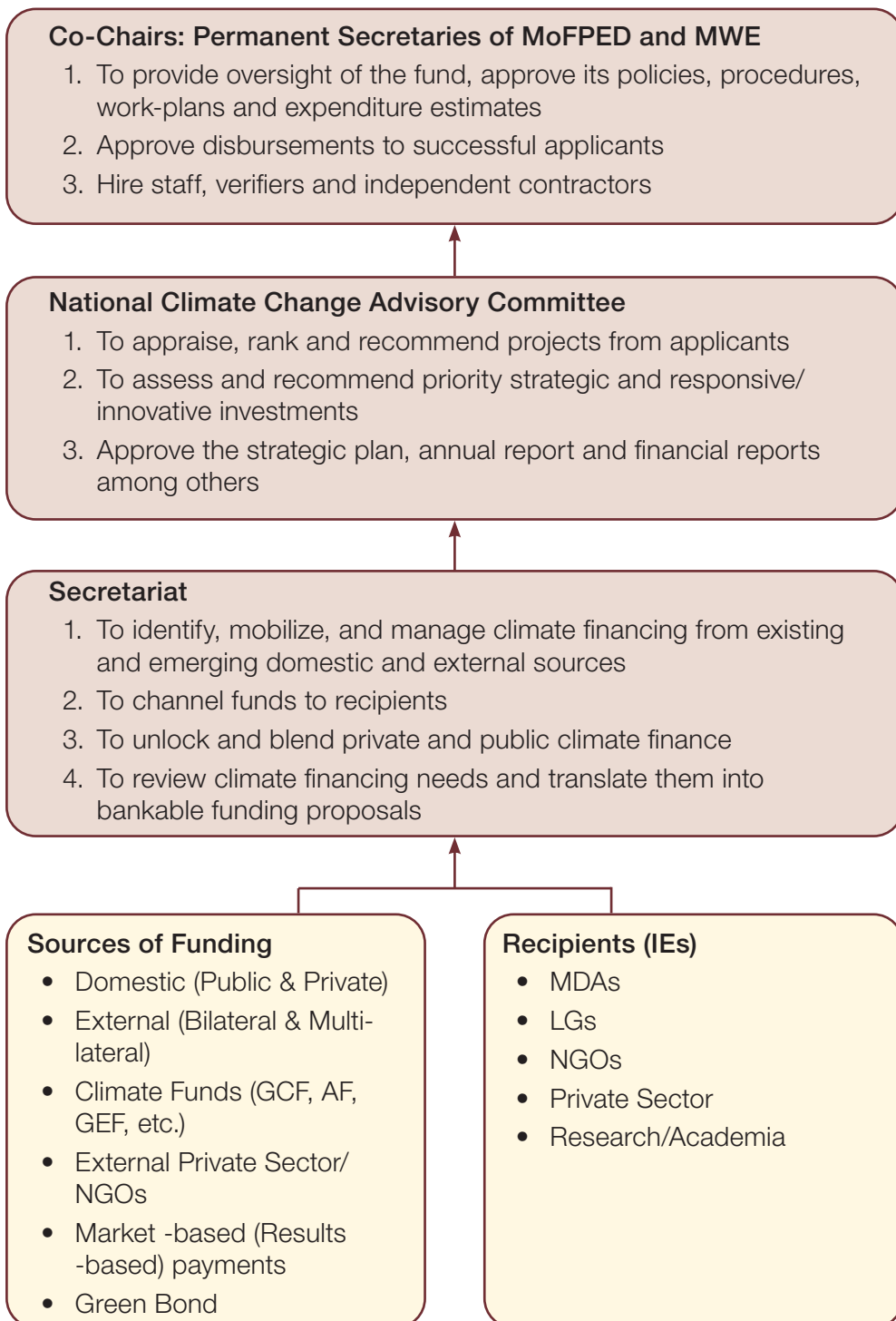
5.3 Scope, functions and structure of a national climate financing mechanism

An ideal climate finance mechanism must be anchored on strategic goals on climate change and derive resources to national climate change activities, such as mitigation, adaptation, among others. It should mingle with existing structures and should not add burden to existing public management.

With the above in context, a national climate financing mechanism would not be a substitute to exiting financing mechanisms like the national budget, but complement it. Therefore, the National Climate Finance mechanism should mobilise, manage and blend public and private climate finance from domestic and external sources for use by public and non-state actors toward a climate-resilient and low-carbon development path for sustainable development.

The structure in *figure 1* highlights the proposed different decision making organs and their relationships, the sources of climate finance, users and uses.

Figure 1: Ideal National Climate Finance Mechanism



5.4 Evaluating options for suitability national climate financing mechanism

This section builds on proposed structure in *figure 1* to evaluate suitable institutional delivery mechanisms for climate finance. No doubt many institutions in the country will continue to access climate finance from different sources. The 4 options are derived from the consultations:

- a) The national budget, by MoFPED
- b) A dedicated/ring-fenced National Climate Green Fund (NCGF) by MoFPED
- c) A NCGF, administered by UDBL
- d) A NCGF, administered by a semi-autonomous agency

The Criteria group used in the soliciting for pros and cons against each alternative have been highlighted. In terms of ranking (without) attaching any weights to the six criteria groups, and ensuring that the maximum score was 4 and the lowest was 1 across all the four options, Option 2 of the Dedicated NCGF under MFPEP and Option 4 of NCGF under autonomous agency score equally in total at 20 points out of a maximum 24 points. However, they differ in strengths on some criteria across all the 4 options as shown in *figure 2*. On consideration of capitalisation/resource mobilization, Option 4 would take the lead.

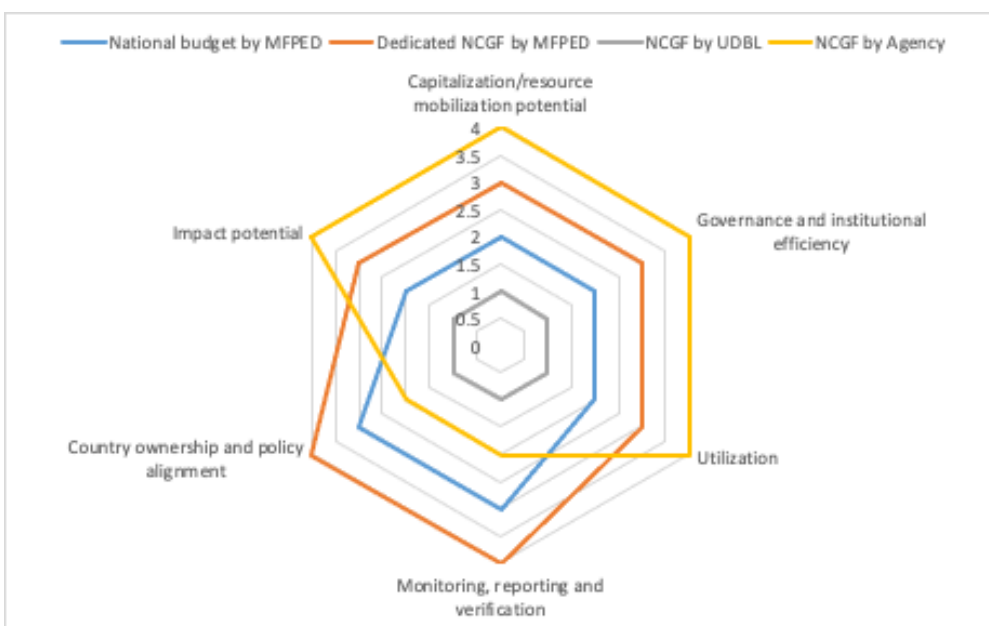
There has been concern and discussions in Uganda aimed at discouraging the creation of more funds as measures to cut down on government expenditures. However, there is no law banning creation of funds nor a policy directive on the same matter.

It is not very certain how the debate is likely to evolve in the short and medium term. While that be case, it is good to note that some countries too have gone a step to cap the administrative expenditures of their National Climate Funds so that they remain very cost-effective. For example, Kenya has set has set the administration cost of the Fund at maximum 3% of the Fund's total budget.

It is worthy noting that the demands for capitalisation, good governance, fund utilisation, MRV for climate finance and capacity building to improve access to climate financing remain valid, irrespective of the preferred

option. Furthermore, of all the 4 options assessed, it would be Option 2 and 4 to go the extra rigour of design thus the need to conduct further studies.

Figure 2 Comparative assessment of alternative climate finance delivery mechanisms



It is also important to note that even when countries have established National Climate Funds, they sometimes cannot raise some of climate finance because they may lack the scale to absorb such funds. Accordingly, multilaterals entities like the World Bank and regional banks can raise funds form the stock market or green bonds more cost-effectively because once raised, such funds could be accessible by several countries for a given period.

5.5 Relationship between preferred climate financing mechanism and the Tree Fund

The relationship of the preferred climate financing mechanism above that would have a bearing to the Tree Fund or other existing funds in the NCGF under an agency. It has already been observed that scope exists for government to rationalise funds even under the current regime. If government chose the NCGF, it would be difficult to promote it parallel

to the Tree Fund not yet capitalised.

Even if this was to happen in the short run (since in any case the NCGF would have to go through lengthy process of legislation and design), it has been argued by stakeholders that the best approach would be to create financing windows within the NCGF by which strategic sectors can benefit for example, renewable energy access, climate smart agriculture, Forestry Landscape Restoration among others. Most countries have taken this route to optimise impact of climate finance.

5.6 Ways to support capitalization of the national climate financing mechanism

The following are some of the ways government can support the capitalisation of the national climate financing mechanism.

- a) Government contribution directly through the budget or as subvention from the budget to the dedicated climate fund within the budget (Kenya's Model) or to an established/delegated agency.
- b) Tapping into global climate funds, bilateral and multilaterals financing initiatives. Government should continue to compete through proposal development and submission to global funds like GEF and GCF among others. In addition, government should be on the watch and available to benefit from climate financing initiatives by bilateral and multilateral entities. Promising, with the accreditation of successive national entities to climate financing entities like GCF, government is envisaged to leverage more resources at scale.
- c) Earmarked Funds from known sources and stipulated by legislation in case of a semi-autonomous agency, over and above the subvention above. For example, government should explore how to tap in the funds listed in the Public Management Act whilst exploring new taxes, for example, carbon taxes and/or aviation levies.
- d) Market-based or results-based payments. Article 6 of the Paris Agreement provides for market and non-market approaches. The country may gain experience on functionality of such market mechanisms and develop national mechanism to mirror them. In the NDC, government communicated that it will explore international

carbon markets and Payment for Ecosystem Services to finance its NDC action. On a positive note, Uganda has domesticated some of these potentially market or results-based payments. The National Environment Act, 2019 under Article 67 stipulates that the Authority (NEMA) shall, in consultation with the relevant lead agency, identify activities and set up mechanisms for payment for ecosystem services and that the Authority may issue guidelines and prescribe measures for the payment for ecosystem services, among others. As some stakeholders argued, some of such schemes should be piloted in such places as River Rwizi Catchment between the many private industries and upstream farmers and Enyaw River Catchment between upcoming Arua City Residents and upstream farmers, and in Mt. Elgon and Mt. Rwenzori regions, among others.

- e) Green Bonds have emerged as a mechanism to leverage public or private sector funds with explicit environmental goals. The Green Bond market has multiplied more than fivefold from 2013 to 2017 and grew by 92% from 2015 to 2017 (ALCB Fund 2018). However, the African Green Bond market is significantly underdeveloped, with the exception of innovations in South Africa and Nigeria. Perhaps, Uganda Development Bank limited and Bank of Uganda may join efforts to initiate operationalization of green bonds so as to absorb risk, and leverage private capital.

6. CLIMATE FINANCE CAPITALIZATION AND MRV FOR CLIMATE FINANCE

6.1 Capacity and capitalization

Developing countries like Uganda lack the necessary capacity to mobilise climate financing. In 2017, capacity building in resource mobilization featured among government of Uganda requests to the NDC Partnership. It has been documented in various literature, that Uganda does not have a robust functional National Measurement Reporting and Verification (MRV) system to aid tracking and monitoring of climate finance. However, with support from World Bank through the NDC Partnership Plan, MoFPED has established the Climate Change Budget

Tagging process to report on budget allocation and expenditures on climate action.

Noting that the country is still in infant stages of developing strategies and plans for climate finance mobilization, implementation of national climate actions requires political will and strong approach built on whole of government ownership and leadership.

The above approach would require rapid government's financial contribution coupled with variety of partnerships with private sector and non-state actors who may also be motivated to counter-match some investments when they do not necessarily have adequate resources.

The increase in climate change funding opportunities makes it important for countries to consider how to attract and leverage different types of climate finance instruments, including that from private sources. With private sector financing expected to extend government funding, a key action for countries will be to use scarce public funds to attract private investment.

6.2 MRV for climate finance

MRV for support, especially climate finance is still complex due to lack of universally agreed definition on what counts as climate finance. However, there are on-going initiatives under the enhanced transparency framework for action and support. One such initiative is the Common Tabular Formats (CTF) on financial, technology development and transfer, capacity building support provided and mobilized as well as support needed and received.

At national level, Uganda is building an MRV system although most attention has been paid to MRV of emissions. Positively, the mandatory UNFCCC reporting i.e. National Communications and Biennial Update Report are shaping government reporting in the direction to also provide information related to climate finance (needed and received). More studies should be conducted while building on existing MRV framework to enhance the MRV of support so as to effectively measure, report and verify – climate finance (needed and received), technology transfer and capacity building.

Table 4 Elements of MRV of climate finance ‘received’

Title	Prog/Proj descript	Channel	Recipient entity	Implementing entity	Amount received (Domestic currency/USD)	Timeframe	Financial instrument	Status	Type of support	Sector	Subsector	Contribution to TD & TT objectives	Contribution to capacity building objectives	Status of activity	Use, Impact and estimate results
		Multilateral Bilateral Regional Other (specify)					Grant Concessional loan Non-concessional loan Equity Guarantee Other (Specify)	Committed Received	Mitigation Adaptation Cross-cutting [Loss & Damage]			Yes No (tick box)	Yes No (tick box)	Planned Ongoing Completed	

7. RISKS AND THEIR MITIGATION MEASURES

There are two types of risks that are considered here, the first one being the risk associated with climate fund under each of the aspects of governance, capitalisation, utilisation and monitoring and evaluation, ownership and policy alignment and impact potential while the second type of risk which arise from a change from the baseline situation of using predominantly the national budget to deliver climate finance to national climate financing mechanism. The first category of risks is given in Table 5

Table 5 Potential high risks and mitigation measures of the alternative NCGF

Risk type	Brief description	Potential mitigation measures
Governance		
Fraud and corruption risk	This could arise out of conflict of interest, collusion, solicitation of favour	<ul style="list-style-type: none"> • Commit all members of Fund, including staff and consultants / service providers to sign statement on conflict of interest. • Institutionalise free toll line for reporting fraud, corruption and whistle blowing right from start
Capitalisation		
Undercapitalisation and budget cuts	Funding from the Single Account (i.e. CF) is sometimes cut within a fiscal year	<ul style="list-style-type: none"> • Ring fence the Fund and/or commit by law/regulations percentage of government contribution for climate financing or seed capital and annual increment rates.
Change in priorities of DPs	Cooperation frameworks are revised periodically and funding could be overtaken by other emerging priorities, e.g. immigration, refugees, humanitarian assistance	<ul style="list-style-type: none"> • Prioritise the capitalisation of the Fund from Government and co-funding from national level entities and corporations(e.g NSSF)
Utilisation		

Risk type	Brief description	Potential mitigation measures
Financial and operational risk	Serving smallholder farmers, households and individuals increases the transaction costs and reduces efficiency	<ul style="list-style-type: none"> • Promote linkages between big and small beneficiaries, group support and participation of Community – Based Organisations to optimise economies of scale • Partner with Lower Local Governments, SACCOs, banks in delivering climate finance • Use competent intermediaries to deliver climate finance
Political risk	Pressure to serve/supply categories of beneficiaries when their own ownership and commitment is in doubt	<ul style="list-style-type: none"> • Follow the principle of ‘demand driven’ and as far as possible, encourage counter-fund contribution • Publish periodically beneficiaries by their application identification codes, names and location • Ensure robust fiduciary management system.
Loss and damage risk	Use of climate finance could create more impacts, loss and damage	<ul style="list-style-type: none"> • Subject all suspects to rigorous climate proofing and Environmental impact assessment
Oversight, M&E		
Reputational risk	Doubt about the integrity of Fund managers	<ul style="list-style-type: none"> • Develop and enforce a vetting system for any senior staff to the Fund

The second type of risk, involving some change from the baseline basically relates to the risk of failure to demonstrate benefits/impact from the change, and thereby curtailing the confidence among the different stakeholders that would have been mobilised to patronize the fund or to benefit from it as implementing parties.

Box 1 Proposed Content for a potential climate financial mechanism

- Interpretation
- Scope and objectives of the mechanism
- Eligible activities to be funded
- Capitalisation level and Sources
- Oversight, Advisory and Management Functions
- Competences and responsibilities of key staff
- Budget cap for overhead/operations as a percentage of annual budget
- Proposal submission guidelines, norms, eligibility criteria
- Evaluation and approval process, times times and review of grievances
- Funding agreement
- Disbursement procedures, standards, and co-financing terms and conditions
- Repayments (for concessional loans/revolving funds)
- Eligible and ineligible costs/expenditure
- Reporting requirements, standards and frequency
- Use of service providers, independent auditors and verifiers
- Approval of reports
- Offences and sanctions
- Winding up of the mechanism

8. CONCLUSION

It is imperative for countries like Uganda to verify their share of the developed countries joint mobilization goal of USD 100 billion dollars a year by 2020. This way, the country will ably display the role of its mandated institutions on matters related to climate change. There is no doubt that the country is in high gear to mobilise finances for national climate action. Initiatives such as: GCF readiness support to enhance direct access of national institutions through accreditation to international financing entities; development of Green growth financing strategy; capacity enhancement in proposal development under the leadership of NPA and Ministry of Water and Environment depict the country aspiration to tap in opportunities under global financing for climate change, and the efforts by Uganda Development Bank limited to explore green financing options, portray the country's aspiration towards low greenhouse gas emissions and climate-resilient development.

The proposed climate finance definition in this study - new and additional financial flows above official development assistance for supporting climate actions, may stimulate public debate during Parliamentary debate on National Climate Change Bill.

The viable option for national climate financing mechanism is a dedicated National Climate Green Fund under autonomous agency with MoFPED and MWE oversight. This option emerged as the win-win option for a number of stakeholders especially the non-state actors and private sector consulted. In addition, it opens the mechanism to third party scrutiny, which is a key parameter is transparent MRV of climate finance. The option fits within the current operating environment and strengthens current structures especially the National Climate Change Advisory Committee. The option is in line with the EAC climate change policy provision on mobilization of financial resources through the EAC Climate Change Fund.

Therefore, studies should be conducted to inform the viable climate financing mechanism while building on the option of a National Climate Green Fund under autonomous agency providing secretariat and administrative functions but with oversight of Permanent Secretaries of MoFPED to ensure public finance management and MWE to ensure responsiveness to NDCs and other climate action strategies and plans.

REFERENCES

- ALCfUND. (2018). *Understanding African Green Bond Market*.
- Bird N, Billet S and Colon C. (2011). *Direct Access to climate finance: experiences and lessons learned*. Discussion Paper. New York: UNDP, London: ODI.
- Bird, N. (2015). *Climate finance and public finance management*. GSDRC Professional Development Reading Pack no. 16. Birmingham, UK: University of Birmingham
- MWE. (2015). *Economic Assessment of the Impacts of Climate Change in Uganda*
- Ellis, J., R. Caruso and S. Ockenden (2013), "Exploring Climate Finance Effectiveness", OECD/IEA Climate Change Expert Group Papers, No. 2013/04, OECD Publishing, Paris.
- FAO. (2015). *Towards effective national forest funds*
- Flynn, C. (2011). *Blending climate finance through national climate funds: A guidebook for the design and establishment of national funds to achieve climate change priorities*. New York: UNDP. (Chapter 2 on designing a national climate fund).
- Gareth Porter, Neil Bird, Nanki Kaur and Leo Pesket (2008). *New Finance for Climate Change and Environment*
- Glemarec Catalyzing Climate Finance (2011): *A Guidebook on Policy and Financing Options to Support Green, Low-Emission and Climate-Resilient Development*. United Nations Development Programme, New York, NY, USA. Yannick (2011).
- Halimanjaya, A., Nakhooda, S., & Barnard, S. (2014). *The effectiveness of climate finance: a review of the Indonesia Climate Change Trust Fund*. Working Paper. London: ODI.
- Heinrich Böll Stiftung/ODI 2011: *The evolving global climate finance architecture*
- Irawan, S., Heikens, A., & Petrini, K. (2012). *National Climate Funds: Learning from the experience of Asia-Pacific countries*. Discussion Paper. New York: UNDP
- Kumari Rigaud, Kanta, Alex de Sherbinin, Bryan Jones, Jonas Bergmann, Viviane Clement, Kayly Ober, Jacob Schewe, Susana Adamo, Brent McCusker, Silke Heuser, and Amelia Midgley. 2018. *Groundswell: Preparing for Internal Climate Migration*. The World Bank. Pg 2. <https://openknowledge.worldbank.org/handle/10986/29461>
- Laura Schäfer, Alpha Kaloga, Sönke Kreft, Michael Jennings, Liane Schalatek, Fadzai Munyaradzi (2014). *Learning from Direct Access Modalities in Africa*.
- Marcela Jaramillo (2015). *Payment for Ecosystem Services in Costa Rica*
- MoFPED (2017) *Uganda National Climate Finance Strategy (Draft Report)*
- Miller (2012). *Making Sense of Climate Finance*, UNDP Asia Pacific Regional Office, Bangkok.
- Miller, M. (2012). *Climate Public Expenditure and Institutional Reviews (CPEIRs) in the Asia-Pacific Region: What have we learned?* Prepared for the UNDP and the Capacity Development for Development Effectiveness (CDDE) Facility.

- Müller, B. 2013: *(Enhanced) direct access through (national) funding entities*.
- MWE. (2015b). *Uganda National Climate Change Policy*. Ministry of Water and Environment
- MWE. (2019). *Standard National Climate Change Indicators and Indicator Reference Sheets*
- Naluwairo, R., et.al. (2014). *Operationalization of the Uganda National Tree Fund: A Process Audit and Call for Action*. ACODE Policy Briefing Paper
- OECD, (2019). *Climate Finance Provided and Mobilized by Developed Countries in 2013-2017*
- Sáni Ye Zou and Stephanie Ockenden. (2016). *What Enables Effective International Climate Finance in the Context of Development Co-operation?*
- Smita Nakhlooda (2013) *The Effectiveness of International Climate Finance*.
- Thornton, N. (2011). *Realizing the potential -making the most of climate finance in Africa: a synthesis report from six country stories; Cameroon, Ghana, Kenya, Morocco, South Africa and Tanzania*. Prepared for the African Development Bank and the Organisation for Economic Co-operation and Development.
- UNDP [2016] *Developing country support needs for the implementation of nationally determined contributions (INDCs)*
- UNDP (2011). *Blending Climate Finance through National Climate Funds: A Guidebook for the Design and Establishment of National Climate Funds to Achieve Climate Change Priorities*.
- World Bank. (2017). *Results-based climate finance in practice: Delivering climate finance for low-carbon development*
- World Bank Group (2014). *Climate Change Public Expenditure and Institutional Review Sourcebook*. Washington DC: The World Bank (Chapter 6 on financial management).
- World Economic Forum (2019). *Global Risk Outlook for 2019*
- Yvonne Pang, Glen Thistlethwaite, John Watterson, Shoko Okamura, James Harries, Adarsh Varma, Emily Le Cornu (2018). *How To Set up National MRV Systems Draft*
- OECD (2018), *Making Blended Finance Work for the Sustainable Development Goals*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264288768-en>

ANNEX: List of Respondents Interviewed

	Respondent	Organisation/Title	Date Interviewed
1.	Dr. Arthur Bainomugisha	ED/ACODE	23/8/2019
2.	Dr. Anthony Mugerere	Research Fellow/ACODE	23/8/2019
3.	Robert Bakika	ED/EMLI	23/8/2019
4.	Dr. Andrew Williams	Technical Advisor/NFA	4/9/2019
5.	Onesimus Mugenyi	Deputy Ed/ACODE	4/9/2019
6.	Xavier Mugumya	Alternate Designate/ REDD+ Project	5/9/2019
7.	Dr. Peter Ngategize	Technical Advisor/ MFPED/ PSDU	10/9/2019
8.	Sarah Kibenge Kabasinguzi	M&E Coordinator/ MFPED/ PSDU	10/9/2019
9.	Godber Tumushabe	Associate Director/GLISS	11/9/2019
9.	Christine Kaaya	Coordinator/Parliamentary Forum on Climate Change	12/9/2019
10.	Robert Bagyenda	Project Management Specialist(ENR)/USAID	13/9/2019
11.	Leuben Tusiime	Senior Credit Officer/UDTB	16/9/2019
12.	Wilbrod Owor	Chairperson/ Uganda Bankers Association	16/9/2019
13.	Moses Ogwal	Private Sector Foundation	17/9/2019
14.	Sarah Namubiru	District Agricultural Officer/ Luwero	17/9/2019
15.	John Begumana	NFMS/MRV Expert/ Uganda REDD+/FAO	18/9/2019
16.	Dr. John Callist Tindimugaya	Commissioner, WRM/MWE	19/9/2019
17.	James Kawase	Asst. Commissioner, Planning	19/9/2019
18.	Margaret Muliika	Corporate Banking/NC Bank	20/9/2019
19.	Maris Wanyera	Ag. Director/MFPED	24/9/2019
20.	Juvenal Muhumuza	Assistant Commissioner/ MFPED	24/9/2019
21.	Andrew Masaba	Principal Economist/MFPED	24/9/2019
22.	Mugagga	Principal Economist/MFPED	24/9/2019
23.	Patricia Ojangole	Executive Director/ UDBL	25/9/2019
24.	Dr. Enerlyn Komuntalo	USAIDII Project /NARO	25/9/2019
25.	Dr. Onesimus Semalulu	NARO	25/9/2019
26.	Frederick	DENIVA	25/9/2019

	Respondent	Organisation/Title	Date Interviewed
27.	Jackson Muhindo	Country Resilience Coordinator/OXFAM	26/9/2019
28.	Dick Kamuganga	Executive Secretary/ UFFA	26/9/2019
29.	Dr. Joshua Zake	National Coordinator/ ENR-CSO/Environmental Alert	26/9/2019
30.	Joseph Kayita	Programme Intern, Natural Resources/ Environmental Alert	26/9/2019
31.	Richard Kimbowa	National Coordinator/ UCSD	26/9/2019
32.	Anthony Wolimbwa	Advisor/ Climate Action Network-Uganda	27/9/2019
33.	Sarah Margiotta	Climate Smart Agriculture Program/IITA	30/9/2019
34.	David Mukasa	Research Officer-Coffee/IITA	30/9/2019
35.	Diana Kirungi	Communication Officer/IITA	30/9/2019
36.	Davis Kyeyune Sengozi	Investment Officer/ Global Green Growth Institute	1/10/2019
37.	Ronald Kaggwa	Head-Production, Tourism and Trade Planning/NPA	1/10/2019
38.	Proscovia Namugugu	Climate Change Specialist/ OPM	1/10/2019
39.	Roland Bless Taremwa	Senior Policy Analyst/OPM	1/10/2019
40.	Susan Nanduddu	African Centre for Trade and Development	1/10/2019
41.	Joanita Okedi	Open Society Initiative for East Africa	2/10/2019
42.	Penina Atwine	Climate Change Reference Group/EMLI	3/10/2019
43.	Magara Siragi	CSBAG	3/10/2019
44.	Saul Daniel Dumba	Makerere University	3/10/2019
45.	Sven Marc Egbers	Head-Global Carbon Markets/GIZ	7/10/2019
46.	John Kasita Ssemulema	Project Manager	7/10/2019
47.	Munya Jaka	Technical Manager/ Uganda Insures Association/Agro-Consortium	8/10/2019
48.	John Makosya	Consortium Officer	8/10/2019
49.	Juliet Kyokunda	ED/ Uganda Biodiversity Fund	9/10/2019
50.	Tom Okello	Executive Director/NFA	10/10/2019
51.	Allan Ssenyondwa	Manager HEST/Policy/UMA	14/10/2019

	Respondent	Organisation/Title	Date Interviewed
52.	Simon Peter Weredwong	Conservation Manager/WWF	14/10/2019
53.	Jacob Etuganan	WWF	14/10/2019
54.	Dr. Festus Luboyera	Executive Director/ UNMA	15/10/2019
55.	Joseph Luzige	President/ ULGA & Chairman Mityana District	15/10/2019
56.	Hon. Lawrence Biyika Songa	Chairperson, Climate Change Committee/Parliament of Uganda	18/10/2019

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Advocates Coalition for Development and Environment
Plot 96, Kanjokya Street, Kamwokya.
P. O. Box 29836, Kampala. Tel: +256 312 812150
Email: acode@acode-u.org; library@acode-u.org.
Website: www.acode-u.org