EAST AFRICAN CIVIL SOCIETY FOR SUSTAINABLE ENERGY & CLIMATE ACTION

(EASE-CA)

UGANDA NATIONAL BASELINE STUDY

SEPTEMBER 2019

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Cover photo: Woman cooking using a biogas stove – Mount Elgon region (Uganda). Photo by UCSD

Abbreviations

ACODE	Advocates Coalition for Development and Environment
ADA	Austrian Development Agency
AE	Accredited Entities
AF	Adaptation Fund
BAU	Business-As-Usual
CCD	Climate Change Department
CDM	Clean Development Mechanism
COP	Conference of Parties
CSA	Climate Smart Agriculture
CSO	Civil Society Organization
EU	European Union
ENR	Environment and Natural Resources
EASE & CA	East African Civil Society for Sustainable Energy & Climate Action Project
FAO	Food and Agriculture Organization
GCF	Green Climate Fund
GEF	Global Environmental Facility
GHG	Green House Gases
GOU	Government of Uganda
INFORSE	International Network for Sustainable Energy
IPCC	Intergovernmental Panel on Climate Change
IPCC	Inter-Governmental Panel on Climate Change
JEEP	Joint Energy and Environment Projects
KCCA	Kampala City Council Authority
LCDS	Low Carbon Development Strategies
LECB	Low Emission Capacity Building
LEDS	Low Emission Development Strategies
MAAIF	Ministry of Agriculture, Animal Husbandry and Fisheries
MRV	Measurement, Reporting, and Verification
MWE	Ministry of Water and Environment
NAMAs	Nationally Appropriate Mitigation Actions
NAP	National Adaptation Plan
NCCP	National Climate Change Policy
NDA	National Designated Authorities
NDCs	Nationally Determined Contribution (NDCs)
NGOs	Non- Governmental Organization
NFRE	Nordic Folkecenter for Renewable Energy
NIEs	National Implementing Entities
ODA	Overseas Development Assistance
PIPA	Project: Promoting Implem. of Paris Agreement in East Africa
SIDS	Small Island Developing States
SLM	Sustainable Land Management
SDG	Sustainable Development Goal
SusWatch Kenya	Sustainable Environmental Development Watch - Kenya
TaTEDO	Tanzania Traditional Energy Development Organization
UCSD	Uganda Coalition for Sustainable Development
UGGDS	Uganda Green Growth Development Strategy

UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNMA	Uganda National Meteorological Authority
UNSDGs	United Nations Sustainable Development Goals
USAID	United States Agency for International Development
USD	United States Dollars
WRI	World Resources Institute

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This EASE-CA National Baseline Study is part of a series of Baseline Studies made by the NGO cooperation Project: "East African Civil Society for Sustainable Energy & Climate Action (EASE &CA)" in 2019-22.

The Baseline Studies are based on the Studies of the NGO cooperation Project "Promoting the Implementation of the Paris Agreement in East Africa (PIPA) in 2017-18.

The series of the EASE-CA Baseline Studies are:
- National Baseline Studies: Uganda, Kenya, and Tanzania
- East Africa Regional International Baseline Study.
- Local Baseline Study for three districts in Uganda

EASE-CA Project Partners are: UCSD, JEEP, SusWatch Kenya, TaTEDO, INFORSE & INFORSE-East Africa, and Nordic Folkecenter for Renewable Energy.

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More on the EASE-CA Project: www.inforse.org/africa/EASE.htm

Executive Summary

This EASE-CA Uganda National Baseline Study is an update of the one done before the Project Implementation of the Paris Agreement (PIPA) in East Africa carried out in February – March 2017.

Overall objective of the East African Civil Society for Sustainable Energy & Climate Action (EASE-CA) Project (July 2018 – June 2022) is increased access to sustainable energy and other climate solutions to local communities in Uganda, Kenya and Tanzania with both women's and men's full and effective participation and leadership for improved livelihoods and reduction of poverty. This will be realised by combining Civil Society Organization (CSO) activities on local, national and international levels in ways, where they reinforce each other. The project primarily works towards Sustainable Development Goal (SDG) 1 (poverty), SDG5 (gender), SDG7 (clean energy), SDG 13 (climate action), SDG 17 (partnerships).

In relation to UCSD, the EASE-CA project has 2 immediate objectives:
To strengthen national CSO networking and advocacy for increased targets and financing of local, sustainable, pro-poor, and gender responsive climate and energy solutions in national development strategies and their implementation in Kenya, Tanzania, and Uganda. The strategies shall include Nationally Determined Contributions (NDCs) and Long-term low Emission Development Strategies (LEDS) to the Paris Agreement, as well as national activities to implement SDG7 (clean energy), including the Sustainable Energy for All strategies; and
To strengthen networking and participation of East African CSOs for exchange of experiences and to give voice to East African CSOs to influence development of the international framework for the national strategies and for climate financing, including in the UN Climate Convention (UNFCCC).

This Baseline Study is based on a desk review updating the PIPA Baseline Study (2017), as well as views from the Environment and Natural Resources (ENR) CSO meetings (as Focus Groups).preparing for the 2019 Annual Water and Environment Joint Sector Review.

Nationally Determined Contributions (NDCs) are essentially the backbone of the Paris Agreement. While securing a deal in Paris was a huge success, the real challenge will be actual progress in tackling climate change, i.e. countries following through on the commitments they made at UNFCCC COP21. This is where NDCs are so important, as they provide an action plan going forward.

Uganda's mitigation and adaptation actions in the NDC are based on the country's National Climate Change Policy (NCCP) (2015), which is derived from the Constitution of the Republic of Uganda (1995, as amended in 2005 and 2015) and reflects Uganda Vision 2040 (2012).

Since 2017, a number of developments have happened that provide opportunities for the EASE-CA Project. These include rolling out Uganda's NDC Implementation Plan that has attracted several development partner support; institutional development including Uganda's Ministry of Water and Environment being accredited to the Adaptation Fund and recently the Green Climate Fund.

However, there remains several constraints to implementation of Uganda's NDC including reaching out to the subnational level, engagement of all actors including CSOs and private sector, need to emphasise cross-sector coordination in addressing climate change.
For mitigation, Uganda is to focus on implementation of a series of policies and measures in the energy supply, forestry and wetland sectors. In the business-as-usual (BAU) scenario the estimated emissions in 2030 will be 77.3 Million tons of carbon dioxide equivalents per year ($MtCO_2eq/yr$).

Uganda's NDCs commit to a 22% emission cuts on a business as usual basis by 2030 due to a series of policies and measures in the energy, forestry and wetland sectors and complimented by additional measures in climate smart agriculture and transport.

In order to achieve the emission targets proposed in the NDCs, Uganda has put in place a Green Growth Development Strategy (UGGDS), that seeks to operationalize the tenets of a green economy as espoused in the Uganda Vision 2040 and the National Development Plan and covers a time horizon of fifteen years. The UGGDS focuses on five core catalytic investment areas of agriculture, natural capital management, green cities (urban development), transport and energy. The envisaged outcomes of the UGGDS implementation are: income and livelihoods enhancement; decent green jobs; climate change adaptation and mitigation; sustainable environment and natural resources management; food and nutrition security; resource use efficiency; and social inclusiveness and economic transformation at the sub-national and national levels (GGGI, 2017). The Global Green Growth Institute has been assisting Uganda to develop an implementation roadmap/action plan of the UGGDS to sequence interventions for the short term, medium term and long term. In the absence of LEDS, the UGGDS (2017/18 – 2030/31)whose goal is to guide the country towards: "an inclusive low emissions economic growth process that emphasizes effective and efficient use of the country's natural, human, and physical capital while ensuring that natural assets continue to provide for present and future generations.", is an approximate. However, strategic outcome targets for GHG reductions, green jobs, sustainable services, air quality, ecosystem services, and enhanced adaptation to climate change are still being worked on.

Uganda's NDC document, the main policies and measures proposed to realise mitigation targets include building on existing Clean Development Mechanism (CDM) projects and Programmes of Activities pipeline; undertaking a number of policies and measures to support low-carbon development in key priority sectors (energy / power supply, forestry and wetlands); implementation of these policies and measures assumes the continuation of ongoing and planned international financial, technology transfer and capacity building support to complement domestic efforts as set out in the National Climate Change Policy.

In addition to the prioritised mitigation efforts outlined above, Uganda is prepared to under-take additional mitigation activities under the energy and agriculture sectors. However, the implementation of these additional activities is contingent upon receipt of sufficient international support.

Uganda with support from UNDP has also prioritised and developed concepts for 13 Nationally Appropriate Mitigation Actions (NAMAs) in four sectors, namely agriculture, energy, transport and waste management. While some have been funded many more await funding.

According to the NDC, the country will continue to work on reducing vulnerability in the following priority sectors: agriculture and livestock, forestry, infrastructure (with an emphasis on human settlements, social infrastructure and transport), water, energy and health.

Ahead of this, Uganda has made notable progress in adaptation including submission of its National Adaptation Programme of Action to UNFCCC secretariat in 2007; approval of a National Policy for Disaster Preparedness and Management in 2010; development of a National Climate Change Policy and its Costed Implementation Strategy in 2012/13; integration of climate change into the National Development Plans, as well as in sectoral policies, plans and programmes; production of climate change mainstreaming guidelines; development of a 10-year Climate Smart Agriculture Program (2015-2025); and development of a road map for the National Adaptation Plan.

There are also identified actions to address the cross-cutting issues of gender equality among others.

Uganda is planning to review its NDCs ambition by 2020 in line with the Paris Agreement, though there is no clear roadmap for this process, which according to the Ministry will take into account the progress made in its implementation (launch of the NDC Partnership, development partner commitments, projects launched from the GCF and AF, among others)

Uganda's long term targets in energy sector are seen through the SE4ALL. In addition, through the EU - UNDP's Low Emission Capacity Building (LECB), Uganda's technical and institutional capacity in the development of Green House Gas (GHG) inventory systems and Nationally Appropriate Mitigation Actions (NAMAs) with in-built Measuring, Reporting and verification (MRV) systems is being strengthened.

With regard to climate finance, Uganda's total expenditure on climate change-relevant actions has remained well below 1% of GDP, which is much less than the 1.6% the implementation strategy of the 2012 NCCP recommends (ODI, 2016). This suggests that significant additional financing will be required above what is currently spent on climate change-relevant actions if the climate change policy goals are to be met.

Uganda has moved steps to take advantage of the potential funding opportunities under the Green Climate Fund, despite several challenges in accessing it. For example, the Ministry of Finance Planning and Economic Development is a National Designated Authority (NDA) in Uganda supported by an Inter-ministerial Standing Committee; Uganda has about six accredited entities to the GCF; and has in place a country programme and strategic framework. Uganda has accessed several projects from the GCF and the Adaptation Fund while several others are in the pipeline.

Regarding internal climate financing, Uganda has committed to allocating modest resources to implement climate change-relevant strategies in mitigation and adaptation towards the target of 30 percent incremental costs in the next 15 years (MWE, 2015). The rest is conditional on receiving sufficient inter-national support by at least 70% that remains high, given the unpredictable nature of climate finance especially to the intended climate adaptation priorities.

The main actors involved in climate change action in Uganda are led by the Ministry of Water and Environment; and the Climate Change Department that has a 5-year strategic plan. Others include the Uganda Climate Change Resource Centre; the Uganda National Meteorological

Authority; the Ministry of Agriculture, Animal Industry and Fisheries (through a sector National Adaptation Plan (NAP) developed for agriculture with support from FAO); the Ministry of Energy and Mineral Development; Kampala City Council Authority (through the Kampala Climate Change Action Strategy (KCCAS); and a number of donors / development agencies.

There are a number of International NGOs, along a growing number of national CSOs and CSO Networks involved in climate policy in the Uganda with work ranging from information and education, policy and research work as well as advocacy work from local to the global (negotiation) processes. On another level, there are CSOs that are active in climate issues in projects ranging from renewable energy, energy efficiency, community awareness and education, and climate smart agriculture among others.

The main barriers to CSO involvement in climate policy include the narrowing space for advocacy work (sometimes seen as 'peddling foreign agenda'); lack of a structured way of engaging other actors due to limited information sharing coupled with managing expectations from communities; inadequate CSOs internal capacity, legitimacy and credibility that is key to effective fundraising; weak coordination within and with other actors; lack of adequate CSO participation for example in GCF operations that requires rigorous consultative processes.

Based on the views recorded during the CSO consultations the CSO Planning meeting for the Joint ENR sector review 2018/19 by the ENR CSO network and during the National Dialogue on Climate resilience by ACODE (both held in August 2019), key CSO stakeholders have highlighted Uganda's resilience to climate change remains low. Some of the examples are the recent case of Bududa landslides that led to loss of lives and property and the declined quantity of water resources like River Rwizi and Lake Victoria, changing rainfall patterns, including droughts and floods (*The New Vision*, 2019). In this regard, CSOs have put forward recommendations on capacity development to strengthen coordination of climate resilience work; strengthen the knowledge of natural resources departments subnational level on climate resilience and strengthening the capacities of the district and sub-county executive committee to initiate and enact (through their councils) ordinances and by-laws that include climate change and climate resilience in the local governments legal documents.

With regard to the Green Climate Fund, though progress in accessing funds and capacity building steps has been recorded by Uganda, there is a perceived need to get CSOs to be acquainted with it, take part in its operations through the available options and collectively keeping track of its performance. Moreover, Uganda places a high priority on accessing climate finance to assist in addressing its adaptation and mitigation funding needs.

Overall, Uganda's policy and legislative framework provides a conducive environment to implement the NDC (given the priorities set for adaptation and mitigation), but more efforts need to be made to strengthen the internal capacities of the mandated institutions, enable them to regularly consult with other actors so as to be in tandem with the expectations of the Paris Agreement.

This Baseline Study identifies opportunities for CSO engagement and participation, under the EASE-CA Project, in the following areas: NDC and implementation and improvements; SE4All plans; other national climate and energy plan developments; and Adaptation Fund and Green Climate Fund (GCF) projects.

1.0 Introduction

1.1 Uganda's current situation

Uganda is ranked as the 14th most vulnerable and 48th least ready country to address climate change by the ND-GAIN Country Index. The country's high vulnerability and lack of readiness pre-sent considerable development challenges, including exacerbating poverty, compromising the environment and curtailing economic growth.

Adapting to and mitigating the impacts of climate change remains a high priority for the Government of Uganda. Uganda's growing body of strategic plans and policies, such as the Vision 2040 strategy and the Second National Development Plan 2015/16-2019/20 demonstrate the commitment of the Government to ready the country to adapt to and mitigate climate change.

For example, Uganda's second National Development Plan (NDPII) recognizes that addressing the challenges of climate change is crucial to enhancing sustainable economic and social development. Uganda is not only vulnerable to the impacts of climate change but is also among the countries with the least capacity to adapt to climate change. Climate change is therefore, a threat to Uganda's fragile ecosystems, people's livelihoods and ultimately the national economic development efforts. As a result, climate change potentially poses one of the greatest challenges for Uganda to realize its Vision 2040.

In this regard, several key entities support the implementation of Uganda's climate change commitments. In order to create resilient cities, the Kampala Climate Change Action Strategy (KCCAS) was designed to ensure Kampala City's development path takes a low emission approach, builds resilience and maximizes the co-benefits of efficiency, economic diversity and human wellbeing.

Intended Nationally Determined Contribution (NDCs) referred to as NDCs are the actions and targets that countries have signalled they will undertake to help keep global temperatures from rising more than 2 degrees Celsius (Devex, 2015). NDCs are essentially the backbone of the climate agreement. While securing a deal in Paris was a huge success, the real challenge will be actual progress in tackling climate change, i.e. countries following through on the commitments they made at COP21. This is where NDCs are so important, as they provide an action plan going forward.

With an average total fertility rate of 6 children per woman, Uganda has an annual growth rate of 3.3%; and the population is expected to grow from 34.8 million in 2014 (currently 85% of this population live in rural areas) to 93.4 million in the 2040's. However, the country has a low per capita income of USD 584, coming from economic development that is largely based on natural resources. Approximately 80% of the population is directly reliant on the agricultural sector for their livelihood, much as it is one of the most vulnerable sectors to climate change impacts. 89.5% of Uganda's energy needs are currently met by charcoal and firewood.

As the economy of Uganda is highly depended on natural resources, it is vulnerable to the impacts of climate change. For example, since 1960 mean annual temperatures have risen by 1.3ºC and annual and seasonal rainfall has decreased significantly across Uganda. Rainfall has also become more unpredictable and evenly distributed over the year. Extreme events such as droughts, floods and landslides are increasing in frequency and intensity.

Uganda is experiencing significant impacts of climate change, which include which include changing weather patterns, drop in water levels, and increased frequency of extreme weather events. The emissions of greenhouse gases resulting from human activities drives climate change. Even though Uganda's emissions are low the country is fulfilling its obligations to contribute to the emission reductions, as reflected in the Paris Agreement (NDC commitment).
Uganda's mitigation and adaptation actions in the NDC are based on the country's National Climate Change Policy (NCCP) (2015), which is derived from the Constitution of the Republic of Uganda (1995, as amended in 2005 and 2015) and reflects Uganda Vision 2040 (2012).

This Baseline study provides an update on the current status in implementation of Uganda's NDC and points out areas in Uganda's NDCs where improvement in the country's climate action can be made to benefit millions of people who lack adequate resilience to climate change.

It is part of East African Civil Society for Sustainable Energy & Climate Action (EASE&CA) is a three-year project (July 2019-July 2022) implemented in Tanzania, Kenya and Uganda under the support of CISU. The main objective of the EASE&CA project is to increase access to sustainable energy and other climate solutions to local communities in Uganda, Kenya and Tanzania with both women's and men's full and effective participation and leadership for improved livelihoods and reduction of poverty.

1.2 Specific Objectives of the Baseline Study

The specific objectives of the baseline study are as follows:

- Assess the current situation of the sustainable energy and climate action interventions, by CSOs and other actors in Uganda in relation to existing national legal and policy instruments as well as the global climate change discussions.
- Provide an update (since the PIPA project) on relevant initiatives by the different national-level stakeholders on sustainable energy and climate action in terms of policies, practices and actions how they could relate with the EASE CA project. This includes identifying opportunities for advocacy and lobbying for increased access to sustainable energy and other climate action.
- Map out stakeholders (in particular CSOs) and their involvement in implementations of the sustainable energy and other climate solutions.

2.0 Methodology

The Baseline Study report is based on a combination of a desk review, focus group discussions with a range of key climate change actors during 2 national CSO meetings (in August 2019) in Kampala. The process built on the baseline report prepared in 2017 at the start of the Project: Implementation of the Paris Agreement (PIPA) in East Africa - with a pro-poor focus.

2.1 Desk Review

A desk-study using available written national information (reports, policy, strategies, plans, papers, decision from parliament and government, NGO positions and others) were reviewed. Sources are listed in the reference section of this report.

2.2 Focus Group Discussions (based on engagement in CSO planning meetings in August 2019)

UCSD participates in other network planning meetings related to Environment and Natural resources. During this period 2 key meetings were held, that provided useful input to the baseline. One was the ENR CSOs planning meeting for the Annual Joint Sector review organized by the ENR CSOs secretariat; and the National High-level Dialogue on climate resilience. Both were held in August 2019 in Kampala. Both meeting involved a representative number of key stakeholders including government officials, development partners, national and international agencies, civil society and other stakeholders.

2.3 Limitations and Research Gaps

There is limited time to have in-depth discussions with key actors, coupled with limited knowledge awareness and understanding of Uganda's progress in understanding of NDCs, LEDS and Climate finance among the selected participants.

2.4 Summary of Current NDC

2.4.1 Nationally Determined Contributions (NDCs)

In October 2015, Uganda submitted its Nationally Determined Contributions (NDCs) to the UNFCCC Secretariat. Anticipating the serious impacts of climate change in Uganda, the plan confirms climate change adaptation as a top government priority and commits to a 22% reduction in GHG emissions by 2030 compared with baseline emissions in 2030 (MWE, 2016). Uganda's NDC document has both Mitigation and Adaptation components and timescale of up to up until 2030. The proposed priority measures for 2030 will build upon ongoing policies and plans, whose implementation will be accelerated in the period between 2016 and 2030 (IrishAid, 2015).

According to Uganda's NDC document, the livelihoods of Ugandans are highly dependent on the exploitation of her natural resources, including climate. In submitting this NDC, Uganda's priority is adaptation.

The country will continue to work on reducing vulnerability and addressing adaptation in agriculture and livestock, forestry, infrastructure (with an emphasis on human settlements, social infrastructure and transport), water, energy, health and disaster risk management. Sustainable Land Management (SLM) and Climate Smart Agriculture (CSA) will be scaled up to increase resilience at the grassroots level.

From our view, a pro-poor focus where improvement in the assets and capabilities of the poor in agriculture and livestock, as part of the country's climate action should place emphasis on expanding small scale water infrastructure, extending electricity to the unserved rural areas or expanding the use of off-grid solar system to support agricultural value-addition and to expand option for irrigation. For forestry, a pro-poor intention should entail encouraging efficient biomass energy production and utilization technologies in small, medium and large-scale institutions. In addition, agroforestry technologies and systems should be scaled up given the challenge of declining soil productivity, population pressures and demand for wood products. For water, managing water resource systems, including wetlands, particularly in the fast growing towns and cities, in such a way that floods are prevented and existing resources conserved (through the establishment of an Integrated Water Resources Management system) is paramount. This is in addition to extending electricity or expanding use of off-grid solar system to support water supply so as to increase access to clean and safe water to a wider population. For Infrastructure (including human settlements, social infrastructure and transport) there are benefits to large populations in improving water catchment protection in both rural and urban areas, while for energy, increasing the efficiency in the use of biomass in the traditional energy sector, promoting renewable energy and other energy sources could contribute to a pro-poor agenda.

In health, improving early warning systems for disease outbreaks, and making provision for a safe water chain and sanitation facilities to limit outbreaks of water-borne diseases and implement strong public awareness programmes to promote better hygiene would make great strides in addressing recurring but preventable health challenges which drain poor households' incomes.

For mitigation, Uganda is to focus on implementation of a series of policies and measures in the energy supply, forestry and wetland sectors. In the business-as-usual (BAU) scenario the estimated emissions in 2030 will be 77.3 Million tons of carbon dioxide equivalents per year ($MtCO_2eq/yr$).

The estimated potential cumulative impact of the policies and measures could result in approximately 22% reduction of national greenhouse gas emissions in 2030 compared to business-as-usual. Uganda proposes to implement the identified policies and measures, and their impact may be higher or lower than these estimations illustrate.

For a pro-poor focus, it is essential that an enabling environment for international support (financial, technology transfer and capacity building) is set, given that national resources are assumed to cover approximately 30% of incremental costs of the activities in the next 15 years, with 70% assumed to originate from international sources.

Furthermore, coordination amongst institutions working on the key focus like energy from hydropower (water resources); forestry; wetlands should be created where they are lacking or strengthened where they are weak.

Uganda's NDC also includes intentions to address the crosscutting issues of respect for human rights and gender-responsive climate change actions as well as protection of vulnerable groups, including women. However, how this is going to be done is not elaborate enough, in the light of the experiences from implementation of Clean Development Mechanism (CDM) projects that have resulted in reported displacement of local communities, landlessness and loss of land and biodiversity resources (EJOLT Report No. 02, 2012). Hence, planning and addressing needs of the climate change vulnerable populations (the rural poor and those living in slums with lower capacity to cope with and adapt to the impacts of climate change. women who are especially vulnerable in terms of food insecurity, water shortage and fuel wood scarcity, children, the elderly, persons with disabilities or sick) should be given priority. In addition, more focus on observing Human rights issues / putting in place environmental safeguards in all climate change adaptation and mitigation actions is an essential pro-poor milestone. Also engendering the NDC so that climate actions (both adaptation and mitigation) benefit women and men equally is important.

2.4.2 Main Targets for GHGs and other mitigation-related targets

The Government of Uganda has committed to reducing carbon emissions by 22% in a bid to mitigate and adapt to climate change and transit to a low-carbon climate-resilient economy. As outlined in the country's climate action plan, also called Nationally Determined Contributions (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat.

Uganda's NDCs commit to a 22% emission cuts on a business as usual basis by 2030 due to a series of policies and measures in the energy, forestry and wetland sectors and complimented by additional measures in climate smart agriculture and transport. The NDCs also propose reducing vulnerability and addressing adaptation in different priority sectors, including agriculture, water, infrastructure (including human settlements, social infrastructure and transport), health and risk management (particularly in urban areas).
These actions are among others expected to result in achieving a total of at least 3,200 Mega Watts renewable electricity generation capacity by 2030, up from 729 Mega Watts in 2013. They will also result in reversing deforestation trend and increasing forest cover to 21 percent in 2030, from approximately 14 percent in 2013. This will be achieved through forest protection, afforestation and sustainable biomass production measures. The wetland coverage is projected to increase to 12 percent by 2030, from approximately 10.9 percent in 2014, through demarcation, gazettement and restoration of degraded wetlands (MWE, 2015).

The NDC opens the door to affordable and modern energy as inscribed in goal seven of the United Nations Sustainable Development Goals (SDGs). In terms of its adaptation contribution,

Uganda articulates a long-term goal of ensuring that all stakeholders address climate change impacts and their causes through appropriate measures, while promoting sustainable development and green growth (WRI, 2016). This in turn lead to progress towards meeting the rest of the SDGs. For example, action on deforestation (resulting in erosion) that is estimated at 2.3% a year mainly due to increasing demands for agricultural land and fuel wood by the rapidly growing population. Settlements and cultivation on steep slopes are further increasing the risk of landslides and rates of soil erosion (Netherlands Ministry of Foreign Affairs, 2018).

2.4.3 Development of Uganda's Green Growth Development Strategy

In order to achieve the emission targets proposed in the NDCs, Uganda launched its Green Growth Development Strategy (GOU 2016). The Uganda Vision 2040 aspires to pursue economic development and socioeconomic transformation premised on the principles of a green economy such as equity, environment sustainability, resource efficiency, climate change adaptation and mitigation and inclusiveness. Accordingly, the National Planning Authority in partnership with the Climate Change Department of the Ministry of Water and Environment with financial support from the United Nations Development Programme (UNDP) developed a Green Growth Development Strategy (GOU 2016). A multi-sectoral committee comprised of state and non-state actors chaired by the National Planning Authority developed this strategy. The Uganda Green Growth Development Strategy (UGGDS) seeks to operationalize the contents of a green economy as outlined in the Uganda Vision 2040 and the National Development Plan and covers a time horizon of fifteen years. The UGGDS Implementation Roadmap seeks to accelerate the country's transition to a green economy. One of the Strategy's outcomes is to enhance climate change mitigation and adaptation by the year 2030 (MWE, 2019).

The UGGDS is informed by the national vision statement for long-term development planning "*A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years*". The strategy is aligned to the Vision 2040 and NDPII, and is set to be implemented in sync with the National Medium Development Plan and integrated into multi-sectoral programmes, for 2020 to 2030 under a 10-year planning and implementation framework.

The main objective of the UGGDS document is to provide guidance and describe the governance framework on priorities and strategy for implementation of the green economy and green growth and development in Uganda. While the goal of UGGDS in Uganda is a*n inclusive low emissions economic growth process that emphasizes effective and efficient use of the country's natural, human, and physical capital while ensuring that natural assets continue to provide for present and future generations.*

The process of UGGDS is focused on five core areas of agriculture, natural capital management, cities (urban development), transport and energy. UGGDS sets eight outcome areas of; income and livelihoods enhancement, decent green jobs, climate change adaptation and mitigation, environment and natural resources management, food and nutrition security, resource use efficiency, social inclusiveness and economic transformation at the sub-national and national level.

Performance on the eight outcome areas serves as the basis for evaluating whether or not the green economy implementation is on track with the spirit of Vision 2040 and the NDPs.

In order to implement the aspirations of the Uganda's Green Growth Development Strategy (UGGDS), Uganda developed a roadmap through support from the Global Green Growth Institute (GGGI) that provides a sequence of interventions and project ideas that can be implemented in the short, medium and long term to achieve green growth in line with the Uganda Green Growth Development Strategy (GGGI, 2016). However, strategic outcome targets for GHG reductions, green jobs, sustainable services, air quality, ecosystem services, and enhanced adaptation to climate change are still being worked on. However, project interventions by the GGGI include capacity strengthening on MRV systems and Regulatory Best Practice (RBP) for green growth policies development; working with public universities to promote green growth development. However, there is an opportunity to prioritize green growth interventions as Uganda embarks on the National Development Plan three (NDPIII) development (GGGI, 2019).

Though its implementation is still in its initial stages, but it is being gradually taken up in the subsequent development frameworks including NDPIII and hopefully in the NDC review process.

2.4.4 Baseline for targets: what is expected development without any of the proposed policies and measures

In the business-as-usual (BAU) emissions projection for Uganda, including Land Use Land Use Change and Forestry, the estimated emissions for Uganda in 2030 will be 77.3 million tons of carbon dioxide equivalents per year ($MtCO_2eq/yr$). Total emissions in 2000 were 36.5 million tons of carbon dioxide equivalents per year ($MtCO_2eq/yr$). The estimated potential cumulative impact of the policies and measures could result in approximately 22% reduction of national greenhouse gas emissions in 2030 compared to BAU (Irish Aid 2015).

2.5 Main Policies and Measures Proposed to Realise Mitigation Targets

According to Uganda's NDC document, the main policies and measures proposed to realise mitigation targets include the following:

- Uganda aims to build on existing Clean Development Mechanism (CDM) projects and Programmes of Activities pipeline, such as Bujagali Hydropower Project and Improved Cook Stove for East Africa.
- Uganda commits to undertaking a number of policies and measures to support low-carbon development in key priority sectors (energy / power supply, forestry and wetlands).
- The implementation of these policies and measures assumes the continuation of ongoing and planned international financial, technology transfer and capacity building support to complement domestic efforts as set out in the National Climate Change Policy.

- The estimated impact on greenhouse gas emissions for these policies and measures are also provided

In addition to the prioritised mitigation efforts outlined above, Uganda is prepared to undertake *additional* mitigation activities under the energy and agriculture sectors. However, the implementation of these additional activities is contingent upon receipt of sufficient international support, provided in the form of finance, technology and capacity building. Possible support could be accessed through various climate finance instruments and international market mechanisms.

Full implementation of the NDC actions (including the ones below), is conditional on the support of international community coming from both climate finance instruments and international market mechanisms (Ministry of Water and Environment, 2015).

Energy Sector

- Sustainable energy solutions in public buildings,
- Promotion and wider uptake of energy efficient cooking stoves or induction cookers Promotion and wider solar uptake of solar energy systems
- Development and enforcement of building codes for energy efficient construction and renovation
- Development and implementation of a long-term transport policy accounting for climate change mitigation concerns.
- Fuel Efficiency Initiative National Appropriate Mitigation Action: Policies and regulations to promote cleaner fuels, and more fuel efficient vehicle technology.

Agriculture Sector

- Climate Smart Agriculture techniques for cropping
- Livestock breeding research and manure management practices

2.6 Nationally Appropriate Mitigation Actions (NAMAs)

The United Nations Development Programme (UNDP)'s Low Emission Capacity Building (LECB) project helped Uganda prioritise and develop concepts for 13 Nationally Appropriate Mitigation Actions (NAMAs) in four sectors, namely agriculture, energy, transport and waste management. The proposed Monitoring, Reporting and Verification (MRV) system is structured around these NAMAs (MWE, 2016). While some have been funded many more await funding as listed in section 2.6.1 below:

2.6.1 Uganda's Priority NAMAs

So far, Uganda has developed 13 NAMAs out of the 40 NAMAs have been identified as priority actions for Uganda's mitigation action on climate change in three different sectors (Agriculture, Energy, Waste and Transport) as listed below:

1. Promotion of high yielding upland rice in Uganda (Agriculture Sector)

The purpose of the NAMA is to promote the cultivation of high yielding upland rice combined with a reduction in total acreage under paddy rice. This NAMA seeks to increase rice production in Uganda for both domestic and export markets by promoting the cultivation of high yielding upland rice combined with a reduction in total acreage under paddy rice. The NAMA will address methane emissions from rice cultivation. Methane emissions from rice cultivation in 1994 were estimated at 23.54 kilotons. Recent estimates put methane emission from rice at about 204.24 kilotons in 2010. The increase in methane emissions is a result of an increased area under paddy rice cultivation, estimated to be 48,406ha in 2008. (UNFCCC 2015). According to UNFCCC, this NAMA is seeking Support for Preparation.

2. Integrated Wastewater Treatment for Agro-process Water in Uganda

There is a high national priority to address the problem of poorly or untreated treated wastewater discharge in urban areas given the extent of pollution, especially in Lake Victoria basin.

The NAMA seeks to increase efficiency and value addition prospects for wastewater treatment of agro-processing firms by establishing an integrated wastewater treatment process using both an anaerobic and aerobic digester with sequencing batch reactor. From the two processes, GHGs especially methane will be captured in the form of biogas and using a generator converted to electricity, and/or used directly for cooking and lighting where the volumes of biogas generated are small.

Also, the process will lead to generation of large volumes of bio-slurry that can be used for producing bio-fertilizers, while the treated wastewater can be re-used in some of the targeted facilities. According to UNFCCC, this NAMA is seeking Support for Preparation.

3. Developing appropriate strategies and techniques to reduce methane emissions from livestock production in Uganda

The purpose of this research NAMA is to determine the technical options to reduce greenhouse gas emissions from livestock production in Uganda, and the potential for reducing emissions in the sector. This NAMA seeks to develop methods to reduce GHG gas emissions from livestock production in Uganda. Livestock numbers have increased across all types: cattle, sheep, goats, poultry and others. Present estimates from the last Agricultural census show that the national cattle herd stood at 11.4m in 2008. According to UNFCCC, this NAMA is seeking Support for Preparation.

4. National Fuel Efficiency Initiative

The Fuel Efficiency Initiative focuses on adoption of strategies, policies and regulations to promote ownership and use of cleaner and more fuel-efficient vehicle. The use of modern fuel-effective vehicle technologies is intended to reduce CO_2 emissions per vehicle.

This will be achieved through the development of fuel efficiency policies, along with information dissemination, capacity development and awareness creation that promote behavioral change and supports markets for fuel-efficient technologies. It will involve also developing a national fuel and vehicle database and toolset. According to UNFCCC, this NAMA is seeking Support for Preparation.

5. Fuel Efficiency in Motor Vehicles

This NAMA is to reduce greenhouse gas emissions and promote sustainable development in the transport sector through the implementation of a Fuel Efficiency Initiative that includes the development of policies and regulations that will promote the use of more efficient vehicles. The NAMA will help to address the government's goal of meeting the energy needs of Uganda's population for social and economic development in an environmentally sustainable manner. According to UNFCCC, this NAMA is seeking Support for Preparation.

6. Periodic Vehicle Inspection for Emissions and Roadworthiness

The purpose of this NAMA is to reduce greenhouse gas emissions and promote sustainable development in the transport sector through the implementation of a Fuel Efficiency Initiative that includes the development of policies and regulations that will promote the use of more efficient vehicles. The NAMA will help to address the government's goal of meeting the energy needs of Uganda's population for social and economic development in an environmentally sustainable manner. No support received yet although as a country mandatory assessment of Motor vehicle worthiness started in January 2017.

7. Bus Rapid Transit for Kampala (Transport Sector)

The purpose of this NAMA is to improve efficiency of public transport while saving and reducing emissions associated with public transportation in the Kampala metropolitan region. This NAMA is important in Uganda as urbanization increases and more towns and urban centres are growing. Implementing this NAMA will be a platform for subsequent rollout to other city regions developing in the country extending it beyond Kampala city and making it nationally relevant and important for efficient public transportation. According to UNFCCC, this NAMA is seeking Support for Preparation

8. The Promotion of the Use of Efficient Institutional Stoves in Institutions

The purpose of this NAMA is to promote the use of energy efficient institutional stoves in primary, secondary and tertiary educational institutions in Uganda. The use of efficient stoves will reduce the rate of consumption of wood fuel, which will reduce greenhouse gases emissions and ultimately lead to a decrease in the rate of deforestation. According to UNFCCC, this NAMA is seeking Support for Preparation.

The most common form of cooking fuel in the schools of Uganda is wood with 96 per cent of the schools using it as their main cooking fuel, followed by charcoal with 4 percent of the schools (MES, 2013a)

The fuel in urban and semi urban areas is obtained from retailers, who are sourcing it from ever-more-distant areas. The demand for wood is putting immense pressure on the forests around cities and towns, as these cities and towns are expanding. Forest management is not sustainable, reforestation activities are very sparse, and thus deforestation of the country is a growing problem. Prices of fuel wood in urban and semi urban areas are rising, and fuel wood is a major cost item for the school budgets. In rural areas, it is a common practice that pupils are obliged to bring wood from home, or they are being sent to collect the wood in the nearby forest instead of attending classes. This poses risks to the children and shortens the time they spend studying (GoU /UNDP, *undated*).

Planting trees for fuel in own woodlot is not a common practice. Only a few schools have sufficient land that could be used for planting trees for fuel harvesting, or the land is not in their ownership. In general, it is hard to establish the costs of fuel paid by the schools since conditions vary immensely. According to a study conducted in Wakiso District, rural schools spend about UGX 400,000 (about US$112) per month on firewood, with their urban counterparts spending twice as much (UNIDO, 2012).

One of the interventions will be implementation of institutional improved biomass cook stoves, replacing 3-stone fireplaces and any type of unimproved cookstove. Reckoning the average size of the schools in Uganda, and capacity of the average and most common IICS (ca 100 litres, catering for about 200 pupils, there will be 2.5 IICSs installed in each school. The expected 5,000 improved institutional cook stoves (IICSs) in 22,000 schools to be constructed are anticipated to result into 1,913,000 tCO_2 GHG emissions reduction per year and 16,383,000tCO_2 GHG emissions reduction per 10-years lifetime (GoU /UNDP, *undated*).

9. FAOSTAT Emissions Database

For NAMA preparation, FAOSTAT provides national data for emissions from agriculture (1961-2000) and land use (1990-2011), as well as projections to 2030 and 2050, enabling analysis at the national level and identification of emissions hotspots and target sectors for mitigation action.

Since National GHG inventories are necessary for the development of national baselines and sector analysis, FAOSTAT data can support countries in their NAMA preparation.
FAO is developing a global platform of standardized GHG data analysis tools for AFOLU in collaboration with its Member Countries, and in coordination with other international agencies, to be maintained and distributed within FAOSTAT. It also provides Member Countries with the methodological guidelines and capacity development tools necessary to identify national GHG emissions and mitigation options.

The FAOSTAT Emissions database was launched in 2012. Emissions data are fully consistent with the underlying FAOSTAT information on inputs, production, costs, socioeconomic indicators, trade, and food commodities trends. As a part of FAOSTAT, the Emissions Database is a corporate product, with long-term sustainability and regular updates. It is also open to member country feedback and suggestions for increased relevance. FAOSTAT is a robust international reference for reporting and analysis.

There are 55 countries using the FAOSTAT database for quality assurance/quality checking, activity data needs, support for National GHG inventories, and centralized review processes. This project is supported through Food and Agriculture Organization of the United Nations.

10. FAO Learning tool on Nationally Appropriate Mitigation Actions (NAMAs) in the agriculture, forestry and other land use (AFOLU) sector

FAO's new online "Learning tool on Nationally Appropriate Mitigation Actions (NAMAs) in agriculture, forestry and other land use (AFOLU) sector" supports the efforts of developing countries in the identification, development and implementation of country specific mitigation actions in the context of national sustainable development. The objective of this FAO learning tool is to guide national policy makers, advisers, researchers, private sector and other stakeholders in developing countries to identify, design and implement NAMAs in AFOLU sector. This tool has five modules. The modules do not need to be followed in chronological order. Each module can be studied individually. This project is supported through Food and Agriculture Organization of the United Nations.

11. Reduction, Recycling and Reuse of Solid Waste in Kampala City

This NAMA for reduction, recycling and reuse of solid waste in Kampala seeks to introduce a policy NAMA that exploits the joint responsibility of local authorities and residents or persons working in these urban areas to contribute to waste management using the 3Rs. The focus is to reduce waste generation and improve waste collection, recycling and reuse.

In Kampala city waste generation is extremely high and the proposed Landfill Project in Kiteezi will at first on the waste already collected and the 40% solid waste that is collected by KCCA and supporting agencies. Indeed, in Kampala several community-based organisations, private companies and non-governmental organisations have been licensed to support the waste management responsibilities of KCCA.

The NAMA will encourage proper solid waste management through sharing of knowledge on composting processes and provision of extension support to households and other institutions. The support will include: training on waste reduction (reducing the amount of municipal solid waste produced by not creating it, through people buying only what they need) and reuse (reusing materials and packaging where possible) and recycling;(materials and packaging that cannot be reused should be recycled) by training on waste handling and how to convert waste into a marketable commodity, support for selling the commodity, maintenance of an information data base on activities for different stakeholders, and a sharing board to create transactions as well as creating a platform for recycling investors as well as solid waste management companies. The NAMA will target the 60% of solid waste in Kampala that is not collected by the Kampala Capital City Authority (KCCA). This is not yet implemented.

12. UNDP Low Emission Capacity Building Programme

The UNDP Low Emission Capacity Building (LECB) Programme promotes essential cooperation between relevant institutions, engaging the public sector and industry in a concerted effort to address climate change consistent with national development priorities around the world. Programme-supported projects aim to strengthen technical and institutional capacity at the national level.

This work includes the identification and formulation of NAMAs, Low emission development strategies (LEDS), mitigation actions in selected industries with the participation of the private sector, the strengthening of GHG inventory management systems and the design of Measurement, Reporting and Verification (MRV) systems. Support was secured and prioritization of the NAMAs in Uganda was done.

From the above NAMA priority projects it is only the one on periodic vehicle inspection for emissions and roadworthiness that was supposed to be implemented without external support, as vehicle owners have to pay for the inspection. However, due to disagreement on the inspection fees and the institution to oversee this process, the project came to a standstill in 2018. It awaits Uganda Parliament's Committee on Physical Infrastructure report to be debated in plenary.

2.7 Main Adaptation Targets, Policies and Measures

Uganda has the overarching objective of ensuring that all stakeholders address climate change impacts and their causes through appropriate measures, while promoting sustainable development and green growth.

According to the NDC, the country will continue to work on reducing vulnerability in the following priority sectors: agriculture and livestock, forestry, infrastructure (with an emphasis on human settlements, social infrastructure and transport), water, energy and health. Uganda is experiencing significant impacts of climate change, including changing weather patterns, drop in water levels, and increased frequency of extreme weather events (droughts, floods, and landslides).

Risk management (particularly in urban areas) is also identified as a key priority sector for Uganda. This is in terms of mainstreaming climate resilience in all sectors, vulnerability risk mapping, effective early warning systems and improving efficiency of emergency related institutions.

According to the NDC, in recent years, Uganda has also made notable progress in adaptation as follows:

- Uganda's National Adaptation Programme of Action (NAPA) was submitted to the Secretariat of the United Nations Framework Convention on Climate Change in 2007;
- Approved a National Policy for Disaster Preparedness and Management in 2010;
- Developed her National Climate Change Policy and its costed Implementation Strategy in 2012/13;

- Has taken steps to integrate climate change into the National Development Plans, as well as in sectoral policies, plans and programmes;
- Has produced climate change mainstreaming guidelines.
- Some efforts have also been made in research, systematic observation, education, training, public awareness and institutional strengthening.
- Specific activities have been developed on the ground to increase resilience, regarding, among others, agriculture, water and urban planning.
- Developed a 10-year Climate Smart Agriculture Program (2015-2025).
- A national agricultural sector National Adaptation Plans process was launched in June 2015. In addition, the country laid the ground for a coherent National Adaptation Plan in 2015, but progress has been slow in developing it.

The process will also include the analysis of the current and future climate variables, the assessment of vulnerabilities and the appraisal of adaptation options, the refining of the priority sectors and the actions mentioned above. The process has enabled Uganda to identify, finance and implement appropriate adaptation measures, and to balance sectoral and cross-sectoral priorities, at national, sub-national and local levels. Importantly, the medium - to long-term adaptation planning underpinning the NAPs should be multi-stakeholder oriented, and based on and guided by the best available science, rigorous collection and analysis of appropriate data, and consideration of experiences and good practices within and outside, Uganda.

2.8 Cross Cutting Issues

The Paris Agreement calls for gender equality and women's empowerment, and the sections of the agreement detailing adaptation and capacity-building efforts specifically call on countries to adopt gender-responsive approaches. The Government of Uganda has already started to address issues of gender related to climate change:

- Uganda's Nationally Determined Contributions (NDC) recognized gender involvement in all climate change related interventions.
- With the framework in place, the Climate Change Department (CCD) of the Ministry of Water and Environment (MWE) has endeavoured to ensure women's participation in mitigation, adaptation and other related climate change actions for example in capacity building, training and awareness programmes.
- Consequently, women are participating in the committees set up to implement the Paris Agreement namely: Adhoc National Steering Committee and Projects implementing committee.
- MWE's Climate Change Department, in collaboration with Makerere University commissioned a joint research on climate change and gender and subsequently, a gender training manual was developed.
- The Ministry of Agriculture, Animal Husbandry and Fisheries (MAAIF) as well as the Ministry of Energy and Mineral Development have mainstreamed climate change into their sector plans, budgets and activities. Working with Africa Climate Change Resilience (ACCRA), USAID and Feed the Future, CCD developed the Uganda National Climate Change Communications Strategy and Standard National Climate

Change Indicators. Launched in September 2018, this will be used in the Output Budgeting Tool (OBT) of the Ministry of Finance, Planning and Economic Development and the Ministry of Local Government's Assessment Tool and launched in September 2018. This will spread information on climate change adaptation across the country, but also help integrate climate change adaptation into government planning and budgeting frameworks. The Communications Strategy will ensure that climate information is consistently and widely shared throughout Uganda. The Climate Change Indicators will likewise be critical in tracking the integration of climate change adaptation and mitigation measures in development programs (USAID, 2018).

3.0 Resilience building in Uganda's climate change architecture

As of 2016, Uganda is ranked as the 14th most vulnerable country and the 48thleast ready country to address climate change by the ND-GAIN Country Index. According to a study by CDKN (2015), the cost of inaction on climate change will range between 3.2 billion and 5.9 billion per annum by 2025 with the biggest economic impact in the sectors water, energy, agriculture and infrastructure. If no adaptive action is taken, climate change damage estimates in these sectors collectively amount to 2 - 4 percent of Uganda's GDP (MWE, 2019). Moreover, the costs of inaction on climate change by 2025 are estimated to be 20 times the costs of adaptation. It is projected that climate change will increase the frequency and severity of extreme rainfall events and result in hazards such as droughts, floods, storms and landslides, causing considerable damage, disrupt economic activity and even claim lives.

According to the Ministry of Water and Environment, in response to these challenges, the Government of Uganda is committed to build resilience against adverse effects of climate change by developing a policy and regulatory framework for climate change and through international commitments such as the NDCs.
The Vision 2040, a strategic vision to transform Uganda to a middle-income country and the second National Development Plan (NDPII: 2015/16 – 2020/21) highlight the need for climate change adaptation and mitigation. The development goal is to ensure a harmonized and coordinated approach towards a climate resilient and low-carbon development path for sustainable development in Uganda.

Moreover, the Uganda National Climate Finance Strategy (2017), prepared on behalf of the Ministry of Finance, Planning and Economic Development (MoFPED), is the most recent relevant strategic document developed with the goal to "establish and operationalize a comprehensive framework for the mobilisation, governance and delivery of financing for an effective climate change response".

Uganda NDC Partnership Plan builds on and aligns with existing institutional arrangements and policy frameworks such as: Second National Development Plan (NDP II); National Climate Change Policy (2015) and its Costed Implementation Strategy; Green Growth Development Strategy and National sectoral policies. The Uganda NDC Partnership Plan identifies 5 results;

- Efficient, operational and gender-responsive policy and institutional framework for the effective governance of climate change in Uganda strengthened.
- Financing for climate change increased and reflected in relevant planning and budgeting frameworks at national and local levels.
- Effective and institutionalised MRV system that monitors GHG emissions and gender responsive adaptation measures.
- Strengthened capacity of government, civil society, private sector and academia to effectively integrate NDC-SDGS commitment with a gender lens into existing and future programs.
- Project financing for NDC implementation accelerated.

According to the Uganda NDC Partnership progress report (June –July 2018), the plan stands at USD 44,560,585 in form of new and on-going pledges as per 22 June, 2018 new pledges were equivalent to USD 11,360,996 of which USD 10,825,713 were to go through Government system and USD 535,283 to go outside the government system (GoU / NDC Partnership, 2018)

4.0 Review of Uganda's NDC by 2020

Uganda is planning to review its NDCs ambition by 2020 in line with the Paris Agreement, though there is no clear roadmap for this process as yet, which according to the Ministry will take into account the progress made in its implementation (launch of the NDC Partnership, development partner commitments, projects launched from the GCF and AF, among others)

Climate Change Department (Ministry of Water and Environment) is coordinating line ministries like Energy, Agriculture and transport and agencies like National Planning Authority, National Environment Authority, National Forestry Authority, Uganda Wildlife Authority and Departments such as Wetland Management Department to implement the national sectoral climate action.

5.0 The UGGDS as Uganda's LEDS and long-term targets

Uganda's long-term targets in energy sector are seen through the SE4ALL**.** The ultimate goal of Uganda's National Development Plan and Uganda's Vision 2040 is "to meet the energy needs of the Ugandan population for social and economic development in an environmentally sustainable manner." Consequently, in 2012 the Government of Uganda decided to become one of the "early movers" and opted-in the SE4ALL Initiative.

Since then, and with the SE4ALL Initiative as its framework, the GoU continues its commitment for the transformation of its energy sector, and deepen the reforms needed to scale up public and private investments in the energy sector to meet its SE4ALL 2030 targets (MEMD 2015). Uganda's SE4ALL goals are set as following:

Universal access to modern energy services		Doubling global rate of improvement of energy efficiency	Doubling share of renewable energy in global energy mix	
Percentage of population with electricity access	Percentage of population with access to modern cooking solutions	Reduce national wood consumption by 40% and improve energy efficiency of power users by min 20%	Renewable energy share in Total Final Energy Consumption	
			Power	**Thermal**
>98%	**>99%**		**>90%**	**>36%**

Source: MEMD 2015

5.1.1 LEDs / Low Carbon Development Strategies (LCDs)

The Government of Uganda, through the Ministry of Water and Environment (MWE)'s Climate Change Unit (CCU), in collaboration with the United Nations Development Programme (UNDP) delivered the Low Emission Capacity Building (LECB) Project for Uganda (2014 -2017). This EU-UNDP Project focused on strengthening Uganda's technical and institutional capacity in the development of Green House Gas (GHG) inventory systems and Nationally Appropriate Mitigation Actions (NAMAs) with in-built Measuring, Reporting and verification (MRV) systems.

The LECB project has helped to have Institutional arrangements for GHG data collection; analysis and transfer have been established.

In addition, Climate Change Department staff visited the International Livestock Research Institute (ILRI) in Nairobi, Kenya to help find a strategy to reduce GHG emissions from various land uses including livestock production, crop production, wetland conversion and others in Africa. Furthermore, the Climate Change Department through LECB has updated the NAMA Registry of the UNFCCC.

5.1.2 Long-term targets on climate and energy and deforestation, such as targets of 100% renewable energy by 2050

In Uganda, there are no clear long term targets on climate change and energy, deforestation such as targets of 100% renewable energy. The UGGDS broadly talks about low emissions development. What is proposed in UGGDS currently is for 10 years. Clarity is still needed on timelines and target for low emissions development in the long term.

5.1.3 LEDS/LCDS available from academia, CSO or international institutions

In Uganda, the WWF Energy Report (2015) for Uganda scenario study presented options and opportunities for developing the energy system for Uganda in a renewable and sustainable manner. The Report recognizes that to be sustainable, the renewable energy solutions presented must have limited negative impact on biodiversity, ecosystems and climate.

According to WWF, this requires combined action which tackles poverty, climate change and ecosystems. Energy access cuts through all three issues – and renewable energy can provide an answer. Almost all global and national studies of Low Carbon Strategies or drastic reduction of GHG emissions conclude that both improvement in energy efficiency and change in energy mix toward renewable energy and other low-carbon energy sources, among other measures, are integral to achieving low carbon targets. For WWF, a sustainable energy system means a safe and sustainable future for people, places and species, in an equitable low-carbon society resilient to climate change.

This system must protect the world's biodiversity and ecosystems and ensure that humanity's ecological footprint stays within the Earth's capacity to sustain life.

According to WWF Uganda Country office, the key targets for Uganda in energy are to: Achieve 100% renewables by 2050 (WWF 2015); Access to modern energy services for all by 2030 compared with baseline emissions in 2030 (MWE, 2016); Resource use for energy generation not exceeding sustainability levels.

In the long run, it is important to develop infrastructure and promote efficient energy solutions in order to avoid scenarios of fossil fuel dependency. Access to modern and clean energy services is a necessary precondition for achieving development goals that extend far beyond the energy sector, such as poverty eradication, access to clean water, improved public health and education, women's empowerment and increased food production. The United Nations (UN) Secretary General launched the SE4ALL Initiative in September 2010 to achieve three inter-related goals by 2030 (MEMD 2015).

In conclusion, does not have a LEDP. Its approximate is the UGDDS that runs up to 2030.

6.0 Climate financing

Many Ugandan institutions are associated with climate finance policies/strategies. A Netherlands MoFA (2018) study identified 11 Ministries involved, and a further 9 subsidiary agencies. However, national government expenditures on climate change in Uganda are relatively low.

According to the Netherlands MoFA (2018) study, between 2008/09 and 2011/12 these were in average 0.2% of GDP – which is significantly lower than the 1.6%, which has been indicated as necessary investment in the Implementation Strategy of the new Climate Change Policy.

These climate change expenditures were around 1% of total government expenditures in these years, equal to about USD 20 million annually (including all 'climate relevant' expenditures). Of this amount, about two thirds were spent on adaptation measures, and the remaining one third on mitigation (Netherlands MoFA, 2018). On district level, climate-relevant investments were higher: 2% of total government expenditures, of which 98% was for adaptation activities, mostly in water, agriculture and natural resources sectors. Effectiveness of public spending on climate change actions is yet unclear. While there has been progress in policy development, on-the-ground impact are not reported

Since 2013, Uganda has received additional international climate finance for both adaptation and mitigation. For adaptation, Uganda is a pilot country of the CIF/Pilot Program for Climate Resilience (PPCR) and is preparing its program. For mitigation, the UNREDD national program for Uganda was launched in November 2015. It will include the set-up of a National Forest Monitoring System (NFSM) with appropriate monitoring reporting and verification functions (MRV) with support from the Forest Carbon Partnership Facility of the World Bank and Austrian Cooperation. An investment plan is under preparation for the World Bank Climate Invest Fund (CIF) Forest Investment Program (FIP). Uganda has also been selected as a pilot country for funding under the Scaling Up Renewable Energy in Low Income.

Countries Program (SREP) of Climate Investment Funds (CIF). Its investment plan of $50 million (indicative) focusing on solar, geothermal and wind energy endorsed and being finalized. Uganda was also awarded a grant by the Green Climate Fund (GCF) focusing on wetlands and climate adaptation. Other sources include the Adaptation Fund, the Least Developed Countries Fund (LDCF), the Global Environment Facility, the UNREDD Program, the Forest Carbon Partnership Facility (FCPF), and the WB / Climate Investment Funds.

Various international and multilateral climate change related activities are being implemented in Uganda, through international climate funds. Bilateral funding as reported by the Climate Funds Update in 2016 was around $50 million (with the likelihood of under-reporting due to the integration of climate change into food security, disaster risk reduction, and water programs). Bilateral projects currently being implemented, related to food security and/or water, include:

- 'Feed the Future', a regional programme with a climate change component, funded by USAID; various other climate change supported activities by USAID, including capacity building of Makerere University faculty, and a national vulnerability assessment (completed in 2013);
- 'Reducing Community Risk and Strengthening Disaster Response', funded by DFID; DFID's food security programme, which is being reframed to be more climate-smart; a resilience context analysis in the Karamoja area (funded by DFID);
  CDKN's Uganda programme (funded by DFID and the Netherlands) which undertook an economic assessment of the costs of climate change in Uganda (2014/5) and assisted in the preparation of the Ugandan INDC;
- Various water initiatives supported by GIZ/KfW;

- Global Energy Transfer Feed-in Tariff (GET FiT) has the objectives to assist East African nations in pursuing a climate resilient low-carbon development path resulting in growth, poverty reduction and climate change mitigation. Roll-out of the program will start in Uganda in Phase 1.

  The GET FiT Uganda Programme made substantial progress in 2018. Four new hydropower projects with a total capacity of 29 MW were commissioned during the year, thus increasing the total installed capacity of the GET FiT portfolio to 87.1 MW. A total of ten projects, including seven hydropower projects, two solar projects and one

bagasse project, are now operational and delivering renewable energy to the Ugandan grid. Overall, GET FiT projects generated a total of 271 GWh during 2018, corresponding to approximately seven percent of the total grid electricity supplied in the country.

6.1 The Green Climate Fund (GCF) in Uganda

The GCF is a financial mechanism of the United Nations Framework Convention (UNFCCC) on Climate Change and was established in 2010. The GCF respond to climate change by investing in low-emission and climate resilient development and by Raising 100 billion USD a year by 2020 in order to fund mitigation and adaptation projects in the public and private sectors. The fund was established as the main financing mechanism under the UNFCCC under Article 11 of the Convention Direct access vs. Indirect Access to climate finance for developing countries. The balance between Adaptation and Mitigation Financing is not yet clear since the developed countries are willing to fund mitigation while the developing countries want adaptation projects to be funded.

Status of GCF in Uganda

- National Designated Authority (NDA) in Uganda is the ministry of Finance Planning and Economic Development Inter-ministerial Standing Committee is already established.
- The Uganda Ministry of Water and Environment has joined other accredited entities: KfW, UNDP, FAO, Sahara and Sahel Observatory **(**OSS) , WWF, IUCN are among the already accredited entities for GCF.
- In addition, Uganda's National Environment Management Authority (NEMA), Uganda Development Bank and Kampala City Council Authority (KCCA) are pursuing accreditation with the GCF. NEMA, UDB and KCCA were formally nominated by the NDA to become Direct Access Entities. KCCA has received readiness support to identify accreditation gaps and develop an action plan towards accreditation (MWE, 2019)
- Uganda has benefited from 5 GCF projects (in Uganda and together with other countries) to date with total amount of project value of USD 2.4billion. These include Climate Investor One; Transforming Financial systems for climate; Acumen Resilient Agriculture Fund; Gereef Next; and Building resilient communities, wetlands ecosystem and associated catchments in Uganda

5 investment priorities of the GCF – Uganda qualifies in four areas (1-4 listed below)

1. Transforming energy generation and access
2. Creating climate-compatible cities
3. Encouraging low-emission and climate-resilient agriculture
4. Scaling up finance for forests and climate change
5. *Enhancing resilience in Small Island Developing States (SIDS) - not relevant for Uganda*

How does it work?

- National Designated Authorities (NDA): Core interface between a developing country and the fund. MFPED in Uganda
- Implementing Entities (IEs): Management and oversight of project implementation (project proposal preparation, project management and reporting). Implementing entities must work with an accredited entity in order to submit their proposal to the GCF.
- Accredited Entities (AE): GCF Funds can only be assessed through accredited entities. All entities can apply for accreditation, which will be granted based on their legal personality, their environmental and social safeguard capacity, institutional system and track record. Projects submitted by accredited entities must receive a non-objection from the country's NDA. Accredited entities may propose their own projects and act as Implementing Entities (IEs).

What kind of projects?

- Mitigation: Reduce emissions from (Energy Generation, Transport, Buildings & cities, Forests and Land Use)
- Adaptation: Increase Resilience of Health, food and water Security, Ecosystems and Ecosystem services, infrastructure and built environment, Livelihoods, people and communities
- The GCF contribution to a given project or program can range from a few million to more than 250 million dollars.
- Each accredited entity is accredited up to a certain level of funding, as illustrated: XS (Micro at 0-10m USD, S(Small at 10-50m USD), Medium(50-250m USD) and Large (Above 250m USD).

How ready is Uganda?

- Under coordination of National Designated Authority (NDA), which is MFPED, the GCF Preparatory Support Programme seeks to maximize the effectiveness of the Fund.
- A GCF Country Programme and strategic framework have been developed.
- Projects Development initiated on 8 priority areas.
- Over 10 projects already considered with majority given letters of no objection and nomination to (Wetlands project 24.1 m USD secured through UNDP and Ministry of Water and Environment).
- Some have funding already (Wetlands 24.1M USD, Universal Green Energy Access Program (UGEAP) Regional >200m USD, Evergreen Agriculture pipeline)

Ongoing processes

- National Implementing Entity accreditation by different Ministries, Departments and Agencies which are supposed to be implementing entities.
- Financing Strategy which says that each country is supposed to set aside 30% fund of the climate change intervention and get 70% from the developed partners has to be finalized.

- National Financing Vehicle for instance the ministry of water and environment has proposed a basket fund for climate change where the government and development partners interested in climate change can contribute the resources through the climate fund. The challenge is that some of the project funds are direct to particular interventions hence it may be difficult to operationalize the fund.

Challenges inGCF implementation in Uganda

- Project Development Abilities: most applicants lack the abilities to develop fundable proposals while others lack willingness to learn the process of developing the proposals that can attract funding given that they have to proof the national impact of the project.
- While some entities are willing to work together in project development there is a tendency by those who are brought into other entities ideas to rush copy and paste the project ahead of the actual proponents of the project.
- Levels of consultation is so demanding and complicated that some people end up writing the proposal without actual consultation with the project beneficiaries or write a proposal with a clear case or need for project intervention

6.2 Building Drought Resilience through Land and Water Management in Arid and Semi-Arid Areas, Kenya and Uganda

Austrian Development Agency (ADA) through IUCN supported a project for strengthening the resilience of local village communities in Uganda and Kenya against the effects on draughts and floods which occur with increasing frequency due to climate change from 2015 – 2018).

The project had the overall objective to improve the resilience of dry land communities to the impacts of increasingly severe and frequent drought and floods within well-managed river catchment ecosystems in Kenya and Uganda.

The project purpose was to improve the integrity of sub-catchment ecosystems of the Lower Tana River, Kenya and the Upper Aswa-Agago River, Uganda and the adaptive capacities of the local communities living there (ADA, 2015).
Direct project beneficiaries of phase 2 were about 201.000 people in sub-catchments Tula, Al-Amin Moju, Saka, Khorweyne, Bangale and Kasha (Kenya); Alebtong, Lira, Otuke, Amuria and Agago (Uganda).

Conflicts about the use and overuse of resources are already contributing to degradation of natural resources like water and land resulting in a decrease of ecosystem resilience and adaptive capacity of households (UNFCCC 2016). ADA supported the second phase of the project with EUR 1 million.

6.3 The Global Climate Change Alliance plus (GCCA+, 2018 – 2023) – Phase 2

With funding of €8 million (Ugx 33.8 billion) from the European Union, the GCCA+ Project seeks to help to scale up agricultural adaptation to climate change in Uganda, enabling rural households to become more resilient to climate change effects and food insecurity by promoting sustainable and gender transformation actions (FAO, 2019).

The GCCA+ Project will be implemented in nine districts of the central part of Uganda's Cattle Corridor, including six previous beneficiary GCCA districts of Nakasongola, Luwero, Nakaseke, Mubende, Kiboga and Sembabule and three new adjacent, vulnerable districts of Kalungu, Gomba, Lyantonde.

The new phase of the Project builds upon the successful implementation of the first phase of the GCCA project, implemented from 2012 to 2017, which helped to make Uganda one of the leading countries in Africa undertaking climate change adaptation.

Some of the interventions in Phase 1 included construction of 15 valley tanks and rehabilitation of five old ones, formation of 168 Farmer Field Schools, with about 4,000 farmer households, establishment of about 700 hectares of bioenergy plantations to enhance sustainable energy production and formation of 400 farmer groups with over 10,000 farmer households. Phase 1 also witnessed the establishment of 380 plots to demonstrate and promote field adaptation practices for coffee.

GCCA+ will augment these milestones targeting more households and more people. This Phase will witness the establishment of six valley tanks that will cater for about 12,000 livestock, distribution of 5,000 energy saving cook stoves, and installation of 300 small scale irrigation schemes benefiting 25,000 people in the nine beneficiary districts, among many other climate change adaptation interventions.

6.4 Feed the Future for Enabling Environment for Agricultural Activities Project (EEA)

This USAID programme supported MWE's CCD to mainstream climate change activities into district plans and budgets. The scope of the work was focusing on a minimum of thirty seven (37) districts of Uganda, to improve the capacity of Ugandan government institutions to respond to the impacts of climate change on agriculture.

6.5 The Danish Government to Government partnerships

The Danish government to government partnership contributes to enhancing enabling environments in emerging middle-income economies by sharing Danish experience and best practices, in particular by sharing knowledge of enabling energy sector planning, policy and regulation as well as providing capacity building in the partner countries to support low-carbon transition.

Denmark moreover supports the development of an enabling environment for climate action, incl. adaptation through bilateral support e.g. in Mozambique, Kenya, Uganda, and through multilateral channels such as GGGI, the Least Developed Countries Fund support for National Adaptation Plans, and the Green Climate Fund's readiness facility (UNFCCC 2016).

7.0 Internal climate financing

Uganda has one of the lowest greenhouse gas (GHG) emissions per capita in the world, estimated at 1.39 tons carbon dioxide per capita. This is far below the global average of approximately 7.99 tons of carbon dioxide. In spite of this, the country is very much committed to fulfill its NDC obligation as part of a global effort to reduce emission, to realize Goal 13 of the United Nations Sustainable Development Goals.

The Government has committed to allocating modest resources to implement climate change-relevant strategies in mitigation and adaptation towards the target of 30 percent incremental costs in the next 15 years (MWE, 2015).

This represents approximately 1.2 percent of the country's Gross Domestic Product (GDP) per annum over the next 15 years (GDP at market prices as of 2011). The rest is conditional on receiving sufficient international support by at least 70%.

The total cost in the adaptation priority sectors is estimated at around USD 2.4 billion over the next 15 years. Although the total costs of the activities in the priority mitigation sectors are uncertain, the upfront capital investment for the renewable energy installations has been estimated at USD 5.4 billion over the next 10 years. Additionally, the initial Costed Plan for the National Climate Change Policy indicates costs of around USD 36 million over the next ten years for the implementation of measures in the forestry sector (MWE, 2015).

Uganda's largest share of financial resources for climate related expenditure comes from donors, both bilateral and multilateral including international financing institutions. The Climate Change and Environment Donor working group in Uganda, led by DFID is compiled on-going and projected funding since 2013 till 2023, the available data to date shows support amounting to approx. US$ 282,117,285. Adaptation accounts for US$206,739,939, mitigation US$69,154,199 and crosscutting US$ 6,223,147 (IrishAid, 2018)

The National Climate Change Policy and Costed Implementation Strategy estimated that Uganda will require US$2.9 billion over the next 15 years (US$2.4 billion for adaptation). Uganda receives support through its association with the USAID East Africa Regional mission.

8.0 Global Climate Partnership Fund (GCPF)

Global Climate Partnership Fund works through local banks in developing countries to make finance available to small and medium enterprises (SMEs) and households and reduces risks through a first loss position. Moreover, with support from Germany and the UK, the Global Energy Transfer Feed-in Tariff (GET FiT) is unlocking market barriers and promote private sector investment in small-medium scale renewables in Uganda by providing feed-in tariff support and technical assistance (UNFCCC 2016).

During 2018, four new hydropower projects with a total capacity of 29 MW were commissioned, thus increasing the total installed capacity of the GET FiT portfolio to 87.1 MW. A total of ten projects, including seven hydropower projects, two solar projects and one bagasse project, are now operational and delivering renewable energy to the Ugandan grid. Overall, GET FiT projects generated a total of 271 GWh during 2018, corresponding to approximately seven percent of the total grid electricity supplied in the country. As of 2018, the Programme has leveraged over USD 450 million in private investments, including USD 160 million of private
commercial financing (GETFiT, 2018).

9.0 Main stakeholders involved

Ministry of Water and Environment (MWE)

The Ministry of Water and Environment (MWE) is responsible for monitoring CDM projects and evaluating their contributions to social, economic and environmental variables. Staff monitor registered CDM projects and visited potential projects to assess their feasibility (MWE, 2016), for instance Bujagali Hydro Power Plant, Kachung Forest Project, Kakira Sugar Works, etc.

MWE's Climate Change Department (CCD)
This coordinates Uganda's implementation of the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol, and Paris Agreement.

Four thematic areas have been highlighted under the CCD's 5 year strategic plan: Develop institutional capacities for climate change management in Uganda, establish the knowledge base for climate change mitigation and adaptation, operationalize the climate change policy, and coordinate, initiate and monitor climate change implementation activities in Uganda (MWE, 2016).

Uganda Climate Change Resource Centre

The Resource Centre was established in January 2015 to act as a one stop centre for all climate change related information and actions being coordinated by MWE. Currently, MWE in collaboration with Makerere University Centre for Climate Change Research and Innovations (MUCCRI) is developing an online knowledge management system that will help to:

- ✓ Link with communities of best practice, by facilitating learning through dialogue and information exchange/dissemination.
- ✓ Strengthen linkages and foster collaboration among communities in Uganda, regionally and globally.
- ✓ Stimulate discussion, group analysis, and data sharing on research, capacity building and policy issues.

Tools developed and anchored in the National Climate Change Resource Centre include the Uganda Climate, an interactive web-based National Climate Atlas to centralize spatial information and knowledge on Climate Change (MWE, 2017). In addition, working with the EU-UNDP's Low Emission Capacity Building Project, MWE is in the process of developing a National Greenhouse Gas Inventory system that will archive data on greenhouse gas emissions from different sectors.

Uganda National Meteorology Authority (UNMA)

Uganda National Meteorological Authority (formerly Department of Meteorology) under Ministry of Water and Environment is a semi-autonomous government institution for weather and climate services (UNMA Act. 2012) and a focal institution to Inter-Governmental Panel on Climate Change (IPCC), an international body of experts mandated to analyze scientific research findings on climate change. The Government of Uganda (GoU) has always recognized natural resources (including weather and climate) as a basic factor in the country's national development process.

It is well documented and common knowledge that the day to day management and harnessing of all natural resources are largely dependent on the state of the environment, weather and climate. Weather and climate is therefore, an important factor in the social and economic development of the country as it has major influences on the developments of all other sectors of the economy.

Ministry of Agriculture, Animal Industry and Fisheries

- o Promotion of Upland Rice (Agriculture Sector)
- o Livestock Mitigation (Agriculture Sector)

Ministry of Energy and Mineral Development

- o NAMA concept on fuel efficiency was adopted by the Ministry of Energy and Mineral Development and testing of 27 stations was set to commence in September 2016 under the LECB project.

The German Ministry of Environment (BMUB) and the German Ministry for Development Cooperation (BMZ)

The German Ministry of Environment (BMUB) and the German Ministry for Development Cooperation (BMZ) provided funding to support Uganda in preparing to access the GCF (Climate Finance Readiness Programme). A National Designated Entity was established in Ministry of Finance, Planning and Economic Development with a clear focal person.

UNDP / GEF Implementing Low Emissions

A Project: "Building Resilient Communities and Ecosystems through Restoration of Wetlands and Associated Catchments in Uganda" submitted by UNDP 8 year project From 2017 - 2025 with total Budget of $24.1m GCF, and $18.1m GOU and $2M UNDP total $44.3M, approved Dec. 2016 that will:

- Restore critical wetlands to improve ecosystem services such as ground water recharge, flood control, fishing and agriculture for enhanced livelihoods to the most vulnerable subsistence farming communities.
- Diversify livelihoods and agriculture to make it more resilient to climate shocks, by enhancing the skillset of beneficiaries for employability and adaptation.
- Empower communities in sensitive wetland areas in risk reduction and preparedness to climate-related disasters. This will be done through participatory and decentralized early warning systems and capacity development for implementing disaster risk reduction measures.

Kampala Climate Change Action Strategy

The Kampala Climate Change Action Strategy aligned to the City's Strategic Plan, was designed to ensure Kampala City's development path takes a low emission approach, builds resilience and maximizes the co-benefits of efficiency, economic diversity and human wellbeing. It is aimed at mainstreaming climate change response in all city services in order to put the city on a low carbon development path (KCCA, 2016).

The strategy that has attracted a number of development partners and private sector (including AfD, World Bank, EU, UNISDR, WaterAid, Bill and Melinda Gates, MTN, Century Bottling Company) with project support, addresses three issues:

• The short and long-term adaptation of the city to climate change impacts
• Charting a low emissions development path for the city
• Transforming the threat of climate change into an opportunity for residents.

10.0 CSO involvement

10.1 CSO-Networks involved in climate policy in the Uganda

CSO / CSO Network	**Level of involvement in climate change policy in Uganda**
CAN Uganda	• Network of over 100 Non- Governmental Organizations (NGOs) is working to promote government and individual actions to limit human-induced climate change to ecologically sustainable levels. • Participated in UNFCCC COPs from 2010 to COP 22 • conducts capacity building initiatives to which media staff and member CSOs benefit • Organises dialogues, interfaces with national delegations and post-COP feedback events in collaboration with the Climate Change Department (CCD) under the ministry of water and Environment and the Parliamentary Forum on Climate Change (PFCC)

	• Represents CSOs on the GCF National Committee
UCSD	• National network of more than 40 CSOs coordinating advocacy around issues and commitments made by world governments to-wards sustainable development – inspired by the Rio+10 project Johannesburg summit 2002. UCSD hosts the regional secretariat for EA SusWatch. • Involved in activity-based advocacy to influence decision-making and planning, through for example lobbyism for green issues during the Presidential Elections 2016, recommendations for key livelihood areas to implement the East African Community Climate Change Policy (EACCCP) in the Lake Victoria basin, and the Sustainable Energy for All (SE4All) project. Moreover, UCSD has initiated several online petitions. UCSD was involved in tracking the implementation of MDG 1,7 and 8 through the Global Sustainability Watch Project in 2005. • Since 2006, has been working through SusWatch EA in close cooperation with SusWatch Kenya to implement the Lake Victoria Environment Management Project II (2012-2015). One key achievement was preparation of IEC materials for awareness raising and advocacy over a wide range of issues including climate change adaptation and water and sanitation, pollution control etc. • UCSD coordinated the PIPA project (2017 – 2018) that led to start of the Uganda PIPA Campaign group[1] that is still active; is a member of other networks and chair to INFORSE-East Africa. More: www.ugandacoalition.or.ug
WWF	• WWF-Uganda is developing and promoting access to cost effective and environmentally friendly energy solutions for domestic, institutional and productive energy needs of the country. This is done through: • Continuous support to compliance to energy legislation to mitigate negative energy developments, promoting access to clean and renewable energy, advocacy for equitable sharing and utilization of petroleum revenue in Uganda and support to the main streaming and implementation of climate change adaptation and resilience practices in a t least two priority landscapes. • Ccommissioned a research to assess the targets in terms of access to energy where by only a number of proportion of population is experiencing • WWF is an accredited entity to GCF. A number of offices are putting together concept note which will include Kenya, Uganda and DRC on energy access, clean lighting and cooking. More: http://wwf.panda.org/who_we_are/wwf_offices/uganda/about_uganda/
	• Accredited GCF member • The Uganda programme promotes nature-based solutions in the climate change prone areas e.g. Mt. Elgon and Karamoja region. Local people's

[1] Includes ACTADE, Youth Plus Network, APCCC, NAPE, ARCOS, Water Aid Uganda, EMLI Bwaise Facility, Uganda Today, TEENS Uganda, JEEP, NAWAD, ACTADE, CAN Uganda, RUDMEC, UEEF, Nature Palace Foundation, KEA, PFCC Uganda, Environmental Alert, New Horizon , ACSA and UCSD

IUCN	knowledge is enhanced based on their indigenous and social-cultural institutions and lifestyles. The Programme demonstrates improved natural resource governance through an integrated water resources management (IWRM) planning process, which, not only conserves water resources but also the accompanying biodiversity. The importance of biodiversity as a foundation of sustainable development and an important component important for disaster risk reduction (DRR) is demonstrated to ensure sustainable livelihoods. • In partnership with the Ministry of Water and Environment, technical support is provided in designing and implementing the REDD+ programme. More: https://www.iucn.org/regions/eastern-and-southern-africa/countries/uganda
DanChurchAid Uganda	• Works closely with partner organisations and government structures at different levels, while also doing direct/self-implementation in our humanitarian response to the South Sudanese refugee influx. DCA works in the humanitarian-development nexus, and introduce cash-based interventions, appropriate technologies and digital solutions to address vulnerability; builds local capacity; supports appropriate livelihoods including access to land and climate change adaptation; and fights for gender equality, transparency and social accountability.
OXFAM	• Oxfam has been concerned about climate change for more than 25 years. In 1983, Oxfam produced Weather Alert, a briefing paper that recorded the human impacts of various climate anomalies affecting our programmes around the world. • In 1992, Oxfam discussed the special threat that climate change posed to people living in poverty, along with other environmental crises highlighted at the UN World Summit on Sustainable Development in Brazil. • Oxfam is helping people cope with severe weather events, as well as plan for the consequences of future climate change. Like everything we do, our climate change work focuses on three core areas: • *Humanitarian:* constantly responding to disasters such as the floods in Bangladesh. Climatic hazards like these are expected to increase in frequency over the coming years and decades. What's more, we're making sure these communities are better prepared for extreme weather events in the future too. That means things like raising homes up on stilts, or improving early warning systems for when disasters strike. • *Development:* helping communities adapt to climate change is a key part of our development work. In Thailand, rice farmers are innovating with on-farm water harvesting systems for irrigation and are diversifying their crops to protect their livelihoods against drought. And in Pakistan, we are supporting farmers to reclaim fields damaged by salt water and helping them get fresh water for their fields and for household use. • *Campaigning*: Demanding urgent and decisive action on climate change from world leaders - action that results in a global deal that is fair for all people, not just those with power and money. OXFAM demands global action to reduce emissions, enable vulnerable countries and communities to adapt to climate change - including an international climate fund, push for a global move towards low-carbon economies.

	• For example, in 2013, Oxfam's research project interviewed coffee farmers in the Rwenzori Mountains (Uganda) and found that they are aware that the climate is changing and becoming less predictable, and have used various adaptation strategies. But for Arabica coffee, which can only be grown at high altitudes in Uganda, climate change and rising temperatures are likely to further restrict the areas in which it can be grown. This report makes recommendations for adapting coffee production in Uganda to reduce the impact of climate change on the economy and to reduce the risks that smallholder farmers will fall further into poverty. • Oxfam was lead partner to the The Africa Climate Change Resilience Alliance (ACCRA) that has been working in Ethiopia, Uganda and Mozambique since 2009, supporting governments, civil society and the wider development community to integrate climate change adaptation and resilience into their policy and practice. • The ACCRA alliance is made up of Oxfam GB, ODI, Save the Children International, Care International and World Vision International. More: https://www.oxfam.org/en/countries/uganda
National Association of Professional Environmentalists (NAPE)	• Serves as an important actor that gives voice to marginalized communities and the environment of Uganda. • Monitoring of oil exploration, moving to political advocacy against oil extraction activities, and continuing to the advocacy for community rights and voices now that extraction activities have begun. Below we give a more detailed explanation of the programme. • The Sustainability School approach advocates and seeks to give the communities capacity to effectively participate in social economic and political change processes. The aim of this school is the transfer of power from dominant groups to the poor, marginalized disadvantaged and disenfranchised who are always the majority • Works on water governance including advocacy for community rights to water and sanitation through engaging government of Uganda to formulate policies and legislations that promote the rights to water and sanitation. • Protecting the rights of communities affected by big infrastructure development. Principal examples include: Palm oil plantations in Kalangala, Oil extraction near Lake Albert, Exotic tree plantations for carbon trading near Bukaleba (Eastern Uganda) and Kikonda Forest Reserve (western) • Ecosystems Alliance Programme aim to empower communities for sustainable Natural Resource Management in the Albertine Rift. • Awareness and advocacy on responsible use of chemicals in Uganda • CAN East Africa secretariat although its activities are not clear. More: http://www.nape.or.ug/
Environmental Management for Livelihoods Improvement	• Works to improve people's livelihoods, influence policy and to help tackle global issues • Actively engaged in a number of Multilateral Environment Agreements (MEAs) such as: Stockholm Convention, UNCCD, UNFCCC, and key global bodies i.e. The United Nations, UNEP, GEF, World Bank and Green Climate Fund.

(EMLI- Bwaise Facility)	• EMLI maintains its continuous flow of information, sharing of experience and knowledge through its dialogues, national, regional and international platforms. • EMLI undertake research and produce broad set of papers, write articles, hold lectures and question multi-level natural resource policies. • Represents CSOs on the GCF National Committee. More: www.bwaisefacility.org
Development Network of Indigenous Voluntary Associations (DENIVA)	• Sustainable Livelihoods Program aims at supporting Member Organizations with skills and knowledge in order to advocate pro-poor and gender sensitive policies through programmes in agriculture, trade, climate change and improved service delivery. • In December 2016, organized a public dialogue on the Uganda National Climate Change Policy that brought together over 200 stakeholders drawn from DENIVA membership, U.S. Agency for International Development, local farmers, civil society actors, local government officials , national policy makers from Ministry of Agriculture, Animal Industries and Fisheries, Ministry of Water and Environment, Parliamentary Forum for Climate Change, Parliamentary Forum for Natural Resources, Parliamentary Forum for Disaster Risk Reduction, the private sector, academia, women and youth from Kasese, Kamwenge, Ibanda, Kamuli, Mayuge and Jinja districts. More: www.deniva.or.ug
Renewable Energy CSO Network (c/o Environmental Alert)	• Loose coalition of civil society organizations engaged in policy lobbying and advocacy towards good governance and better service delivery in the environment and natural resources sector in Uganda. It is a membership network composed of mainly local NGOs and CBOs with a few International NGOs. With support from WWF Uganda aims to promote the use of efficient, clean cooking and lighting alternatives at national level. • Strategic interventions: ○ Engaging and influencing decisions making processes and policy implementation in the ENR Sector. ○ Generation and dissemination of lessons from ENR-CSO members' activities and information about the sector performance ○ Strengthening capacity of ENR-CSO Network members and other stakeholders in lobbying and advocacy ○ Building a credible ENR-CSO Network More: http://enr-cso.org/
Advocates Coalition for Development and Environment (ACODE)	• Promoting the use of research and analysis to improve public expenditure governance; • Building citizen capacity to use data to demand for accountability in service delivery; • Enhancing central and local governments' capacity to respond to citizen demands for accountability; • Facilitating dialogue, and spread learning amongst the various actors in the forestry sector on workable approaches to good forest governance;

	• Enhancing justice and equitable distribution of forestry resource benefits; • Developing initiatives to combat illegalities in the forestry sector and enhance the integrity of the forestry resource base; • Advocating for just and equitable forestry related policies, legislation and mechanisms of implementation of those policies and legislation; and • Linking Uganda with other participating countries in the Forest Governance Learning Group initiative to share lessons and experiences. More: http://www.acode-u.org/
CARE International in Uganda	CARE Uganda is implementing "Strengthening Resilience and promoting inclusive governance program (STRENPO) for women and youth in vulnerable communities 2018-2021" project. The project is being implemented in partnership with the following partners: Environmental Alert (EA), Advocates Coalition for Development and Environment (ACODE), Rural Initiative for Community Empowerment (RICE West Nile), and Joint Effort to save the environment (JESE).
African Center for Trade and Development (ACTADE)	• Works to influence the promotion and enjoyment of social, political and economic rights by all. Advises government on a) priority setting for the national budget and monitor its implementation in selected sectors and districts; b) climate change adaptation measures that support communities to anticipate and build resilience to impacts of climate change; c) ensure that no one is left behind, especially not the women, youths, nor persons with disability. • Involved in policy advocacy work in climate change. The policy space moved beyond, SDGs, Uganda Green Growth Development Strategy. • Action Oriented strategies for instance participation in the implementation of strategic Pilot programmes for climate resilience. • More: www.actade.org
Parliamentary Forum on Climate Change Uganda	• Formed in 2008 by members of the 8th parliament to respond to the pressing environmental, social and economic issues presented by Climate Change. • Has a membership of 215 legislators of which 80 are females. Being among the first parliamentary forum on climate change in Africa, the forum has influenced parliamentary climate change dialogue and reforms in many regions of the continent. • PFCC takes cognizance of the need to enhance the legislative, oversight, budgeting and representation roles of parliamentarians as a mechanism for mainstreaming climate change concerns into the national and global development frameworks such as the National Development Plan (NDP), Sustainable Development Goals (SDGs), Sustainable Development strategy, National Development Goals (NDCs) and the Green Growth Strategy (GGS). More: http://www.parliament.go.ug/index.php/members-of-parliament/parliamentary-fora/parliamentary-forum-on-climate-change-pfcc

Parliamentary Committee on Climate Change	Formed in 2019, the Parliamentary standing committee will scrutinize all bills related to climate change mitigation and adaptation, make recommendations to Parliament on legal and institutional mechanisms to address climate change among other mandates.
Uganda Water Partnership	The Uganda Water Partnership (UWP) is a multi-stakeholder country level platform established to promote Integrated Water Resources Management (IWRM) and facilitate development of water related policies, strategies, programmes and tools in response to regional and country needs and integrating these different development priorities in the water and sanitation sub-sector in Uganda.
Africa Climate Change Resilience Alliance (ACCRA) Alliance	ACCRA is a consortium made up of Oxfam GB, the Overseas Development Institute (ODI), Save the Children Alliance, Care International and World Vision International and funded by DFID. ACCRA aims to increase governments' and development actors' use of evidence in designing and implementing both humanitarian and development interventions that increase poor and vulnerable communities' adaptive capacity. Among others, the objective is to work together with local and national governments to build capacity to implement interventions which can build communities' adaptive capacity. More: https://www.preventionweb.net/organizations/7280
Joint Energy and Environment Projects	JEEP is a non-governmental organization working for a green Uganda with an environmentally safe and clean habitat for the present and future generations. Located in Uganda, where biomass accounts for 93% of the entire energy used, our mission is to combat environmental destruction and conserve natural resources. JEEP carries out training, advocacy and awareness seminars, focusing on environmental conservation and energy-saving technologies. We use a grassroots, practical approach and reach out primarily to rural communities.
Nature Palace Foundation	Nature Palace Foundation (NPF) is a not-for-profit community development and human-well being focused organization that operates on the principle of blending Conservation with Development. The NPF responds to universal concerns of Food Insecurity, Biodiversity Loss, Climate Change, Poverty and Disease through innovative approaches that include Environmental Advocacy, a Community Botanic Garden, Sustainable Agriculture models and Pro-poor Eco-tourism. More: https://www.facebook.com/Nature-Palace-Foundation-100735466653498/
Kikandwa Environment Association	Kikandwa Environmental Association (KEA) is a developmental community based organisation in Uganda founded in 1999 with purpose of addressing rural development issues and natural resource management. KEA was born out of the need to address the alarming low levels of food security, low income in the rural communities in addition to protecting against rapid degradation of natural resource on which more than 95% of Mubende and Mityana District depend for their livelihood. More: http://kikandwaenvironmentalassociation.org/
	East African Energy Technology Development Network-Uganda (EAEDTN-U) advocates for appropriate energy technology development through technology promotion and utilization. EAEDTN-U seeks to

East African Technology Development Network	improve the quality of life of the poor households in East Africa by increasing their access to appropriate energy technology options and promoting income generating activities geared towards economic empowerment of women and men. We work to enhance the capacity for productive use of energy and energy technologies for commercial purpose. The EAETDN-U upholds concerns within the areas of capacity building, Technology transfer, Information sharing and Networking. More: https://www.facebook.com/pg/East-African-Energy-Technology-Development-Network-Uganda-Eaetdnug-1411168259137636/about/?ref=page_internal

10.2 Main barriers for CSO involvement in climate policy

- Uganda has a vibrant civil society engaged both in advocacy and service delivery. Although they operate relatively freely, space for Ugandan CSOs, as in much of the region, is narrowing particularly for those engaged in advocacy. In part, this is because of widely held negative state perceptions, which see CSOs as pursuing a 'foreign' agenda especially when it relates to governance and transparency.
- At all levels, there is limited awareness amongst actors, on the causes of climate change and/or climate variability and their devastating impacts on socioeconomic development plans and activities. In addition, there are limited structured engagement mechanisms among the stakeholders. This is worsened by the high expectations from the communities CSOs work with to address the unpredictable effects of climate change.
- Generally, there is an inadequate conceptualization of the importance of weather and climate information by strategic planners that limits the desired action to be taken in good time to reduce the climate change impacts on communities.
- The institutional and financial resources are currently inadequate which poses serious setback to the sector operations. The inadequate CSO internal capacity, legitimacy and credibility that is key to effective fundraising, impact on these efforts. In addition to complex nature of available funding options for CSOs makes it equally difficult for them to access such resources.
- Liaison between the various ministries and other relevant institutions is crucial when expecting uniformity and well-coordinated efforts. Currently, coordination mechanisms need to be strengthened through CSOs building trust with others on climate action.
- Inadequate participation – where a selected few benefit - have their capacities built (information, knowledge etc.) and those especially at the subnational level have fewer chances.
- CSO actors lack confidence to speak out on some climate related issues due to lack of information, skills and knowledge.
- Staff turnover where skilled and knowledgeable individuals move on to other sectors leaving behind gaps.
- Technical knowledge limits CSOs to engage in the sector in a meaningful and strategic way.
- GCF funding process in relation to how to engage and track projects, remains understood to many CSOs

10.3 Possible role of capacity building and other support to increase CSO-involvement in climate policies

Based on the desk review, experience from the PIPA project evaluation process and the focus group discussions, the following recommendations are made in relation to capacity building for CSOs:

- CSOs should continue to advocate for the pro-poor engagement in Climate actions by giving priority to reaching out to the unserved vulnerable communities.
- Scaling up and providing spaces for CSOs to share information and knowledge and to collectively seek accountability from duty bearers regarding climate action at national and local levels.
- There is need for CSOs to support one another to learn and share knowledge and skills, as one way to sustain capacity for advocacy and engagement with the key actors including the duty bearers.
- It is critical to institutionalise capacity development among the staff in the NGOs so as to expand the base of CSO actors with different skills and knowledge.
- There is need to simplify and provide a user friendly, popular version of Uganda's NDC, LEDs (once in place) and the GCF process for easy understanding among the CSOs, decision and policy makers and media so that the terminology involved can be broken down for easy relation to the ground situation among the communities.
- There is need to regularly track the real impact of climate change on livelihood sources like agriculture and trade and share it with planners and decision makers at all levels.
- Uganda's NDC and the Green Growth Development Strategy as the Low Emissions Development Strategies (LEDS) need to be popularised further

11.0 Recommendations

The recommendations below are also generated from the interviews conducted with key stakeholders and literature reviews, and partly from the inception meeting of the project.

- Need to move beyond numbers for quality involvement of CSOs in climate change by training them to be change agents and advocates of climate change action (especially adaptation and resilience building) through the globally agreed frameworks like the NDC.
- Need to summarise Uganda's NDC, the UGGDS and GCF Country Programme and operations through a popular version, user friendly language and peg them through key thematic days
- There is need have more GCF accredited institutions through building their capacities and knowledge, as currently this is limited.

- There is need to regularly bring the key issues from the implementation of Uganda's NDC, UGDDS, and GCF to the attention of duty bearers as well as the general public.
- Need to empower the national and local level legislators / councillors to deliver messages that can influence development to be sensitive to climate change, as well as putting in place a conducive climate change law (that is underway)
- Need to amplify the voices of the affected communities at all levels as a strategy to influence duty bearers to take appropriate climate actions.
- Need to provide regular training, exposure and visits to CSOs to enable them appreciate available options in mitigation and adaptation to climate change, so as to lobby and advocate for action in turn.
- Building the capacity of different actors to ensure climate resilience namely: strengthening coordination of climate resilience work; strengthening the knowledge of natural resources departments on climate resilience and strengthening the capacities of the district and sub-county executive committee to initiate and enact (through their councils) ordinances and by-laws that include climate change and climate resilience in the local governments legal documents.

12.0 Current Opportunities

12.1 Opportunities for participation in NDC and implementation and improvements

- Uganda's NDC Partnership Plan – coordination tool to mobilise resources to attract more development partners as unmet gaps are gradually funded and to promote transparency (resources, gender, results etc). ENR CSOs (Climate change and weather) feel that they need to be more involved in implementation of the NDC Partnership Plan.
- Review of Uganda's NDC by 2020 planned – to review implementation challenges and gaps as well as sectoral issue in order to reflect the country's "highest possible ambition".
- Uganda submitted its Biennial Update Report (BUR) to the UNFCCC in October 2019.

12.2 Opportunities for participation in SE4All plans

- *Legislation:* As far back as 2010, Government of Uganda has been involved in development of an energy efficiency and conservation bill to regulate the efficient and rational use of energy in Uganda; to enhance and promote energy conservation in Uganda; and to avoid wasteful use of energy and to ease the burden of energy costs on the economy and the environment. The process has been slow though CSOs. In addition to this legislative process, an energy efficiency roadmap for Uganda was prepared with support from Power Africa, as a response to the important role that electrical energy efficiency can play in meeting Uganda's energy goals. The document estimates that if the most efficient technologies on the market were adopted, 2,224 GigaWatt hours could be saved by 2030 across all sectors, representing 31% of the projected load. This translates into 341 MegaWatts of peak demand reductions, energy access to an additional 6 million rural customers and reduction of carbon dioxide emissions by 10.6 million tonnes in 2030 (MEMD / Power Africa, 2017).

- *CSOs* focusing on renewable energy are working together to lobby the Government (MEMD). For example, they have developed a Civil Society Organization and Networks Position Paper with Suggested Issues and Recommendations for consideration in the National Renewable Energy Policy (2007) Review Process (that has been slow). UCSD is actively involved in the National Renewable Energy CSO Network activities.
- UCSD is part of Sustainable Energy CSO platforms for example the INFORSE Network, the Renewable Energy CSO Network and the Environment and Natural Resources CSO Network which cooperate regularly to prepare and submit joint policy proposals to influence national, regional and global policy processes.

12.3 Opportunities for participation in other national climate and energy plan developments

- National process to develop Uganda's 3rd National Communication to the UNFCCC launched. UCSD is expected to be part of the NSA to engage in this under four groups (Group 1: Vulnerability and Adaptation, Group 2: GHG Inventory and Mitigation and Group 3: General and cross-cutting issues).
- Climate Change Bill yet to be passed with potential to take Rights-Based Approach (now the draft has incorporated stricter sanctions and strengthening coordination at Local Government level as requested by Cabinet)
- *Policy framework:* The Government of Uganda launched its new strategy to spread information on climate change adaptation across the country. The four-year Uganda National Climate Change Communications Strategy and Standard National Climate Change Indicators (2018), developed with support from the United States Agency for International Development (USAID), will also help integrate climate change adaptation into government planning and budgeting frameworks. Communications Strategy will ensure that climate information is consistently and widely shared throughout Uganda. The Climate Change Indicators will likewise be critical in tracking the integration of climate change adaptation and mitigation measures in development programs.
- Uganda developed and launched a sectoral NAP on agriculture (NAP-Ag funded by FAO). Stakeholder mapping of climate change actors is on-going, though process constrained by resources since launch in 2016. UNEP and the Ministry of Water and Environment are working on a project to support this.
- Review shows that NDPIII is expected to take climate actions more concretely than it was in NDPII. The National Planning Authority is set to have the NDP III framework approved by Cabinet by September 2019 (Note, the budget framework for 2020/2021 shall be within the NDP III).
- The Uganda PIPA Project Campaign Group remains in communication through the Google mailing list established in 2017.
- CSOs working relationship with Ministry of Water and Environment was formalised through an MoU with the ENR CSOs Network to which many CSOs are members. UCSD is an active member of the ENR CSOs Network (climate change and weather thematic group).

- Implementation of the National Roadmap to implement SDGs in Uganda. CSOs, working under the Uganda CSO Agenda 2030 Reference Group, are contributing to popularization and resource mobilisation to implement the different SDGs by the relevant agencies. For example, under SDGs 1, 5, 7, 13, and 17. UCSD is actively participating in the work of the Uganda CSO Agenda 2030 Reference Group.

12.4 Opportunities for participation in Adaptation Fund and Green Climate Fund (GCF) projects

- Projects rolled out / on-going: EURECCA project under the Adaptation Fund; the 5 GCF supported projects, GCF Readiness support to Uganda and CSO projects that underscore local solutions in agriculture, forestry, renewable energy etc.
- Uganda represents LDCs on the Adaptation Fund Board and has the Ministry of Water and Environment designated as a National Implementing Entity.
- Uganda's Ministry of Water and Environment recently became accredited as a National Implementing Entity under the GCF. This is an expanded opportunity for Uganda to directly access GCF finance.
- UCSD, together with partners under Uganda Water Partnership, has developed and submitted a GCF Readiness proposal that has received comments which are under consideration by the Ministry of Water and Environment, Uganda Water Partnership (UWP) and the Global Water Partnership (GWP - East Africa).
- Catchment management planning (4 zones – Albert, Kyoga, Upper Nile and Victoria) as tools to ensure that land, water and related resources are developed and managed in a coordinated manner without compromising sustainability of vital ecosystems. These Catchment Management Zones have activity and investment plans that could benefit immensely from taking up local sustainable energy and climate solutions.
- UCSD is part of the newly launched CSO Advisory Group of the Adaptation Finance trading project coordinated by CARE Uganda with support from CARE Netherlands and CARE Denmark, in support to the Uganda Nationally Determined Contributions (NDC) Partnership Plan output 2.2: functional budget tracking system and tools in place to monitor inter/national climate finance (including inflows and off-budget tracking).

13.0 Conclusion

Uganda's agricultural sector is highly vulnerable to climate change because it is largely rain-fed and dominated by smallholder farmers with inadequate adaptive capacity. Equally vulnerable are marginalized groups more especially the women, youth, refugees and host communities that depend on subsistence farming for the livelihoods.

With most Ugandans reliant on the environment for their livelihoods, the country is set to tackle the impacts of climate change assuming international support comes by as assumed in the NDC. Current efforts to develop fundable concepts under NAMA are commendable, need to be supported but regularly reviewed to secure that they reach benefit the intended audience.

On the other hand, Uganda needs enact policies and laws as well as invest in climate actions that build the assets and capabilities of the poor people rather than eroding them. In this regard Uganda's NDC that is expected to gradually be ambitious, need to take this into account if resilience and adaptation will make sense to the poor and their vulnerable settings.

Uganda's policy and legislative framework provides a conducive environment to implement the NDC (given the priorities set for adaptation and mitigation), but efforts need to be made to strengthen the internal capacities of the mandated institutions especially at the subnational level, enable them to regularly consult with other actors so as to be in tandem with the expectations of raising Uganda's ambition in the Paris Agreement.

With regard to the GCF, while more entities are likely to be accredited to GCF in Uganda, following the recent accreditation for the Ministry of Water and Environment, more engagement of CSO actors in the country's GCF project portfolio needs to be deliberately taken up. It is also important to provide more attention to adaptation and resilience building actions to enable poor people who are already paying for the impacts of climate change to effectively cope.

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