The Republic of Uganda

MINISTRY OF WATER AND ENVIRONMENT

Standard National Climate Change Indicators and Indicator Reference Sheets

September 2018

CONTENTS

ACRONYMS

ACCRA	Africa Climate Change Resilience Alliance
CC	Climate Change
CCA	Climate Change Adaptation
CCD	Climate Change Department (formerly Climate Change Unit, CCU)
CDO	Community Development Officer
DDP	District Development Plan
DSIP	Development Strategy and Investment Plan
DSP	District Sector Plan
DTPC	District Technical Planning Committee
EEA	Enabling Environment for Agriculture
FTF	Feed the Future
GoU	Government of Uganda
IIED	International Institute for Environment and Development
IS	Implementation Strategy
KCCA	Kampala Capital City Authority
LG	Local Government
LGDPF	Local Government Development Planning Guidelines
LGPAS	Local Government Performance Assessment System
M&E	Monitoring and Evaluation
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MDAs	Ministry Departments and Agencies
MDG	Millennium Development Goals
MoES	Ministry of Education and Sports
MFPED	Ministry of Finance, Planning and Economic Development Ministry of
MGLSD	Gender Labour and Social Development
MoH	Ministry of Health
MoLG	Ministry of Local Government
MoLHUD	Ministry of Lands, Housing and Urban Development
MoTIC	Ministry of Trade, Industry and Cooperatives
MoTWH	Ministry of Tourism, Wildlife and Heritage
MoWT	Ministry of Works and Transport
MWE	Ministry of Water and Environment
NCCP	National Climate Change Policy
NDP	National Development Plan
NEMA	National Environment Management Authority
NFA	National Forestry Authority
NGO	Non-Government Organization
NPA	National Planning Authority
NWSC	National Water and Sewerage Corporation
PBS	Program Based Budgeting System
OOB	Output Oriented Budgeting
OPM	Office of the Prime Minister
P&E	Provide and Equip Ltd
TPC	Technical Planning Committee
UNHS	Uganda National Household Survey
UNMA	Uganda National Meteorological Authority
USAID	United States Agency for International Development
UWA	Uganda Wildlife Authority
WMD	Wetlands Management Department

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SECTION 1: INTRODUCTION

This section presents the background and rationale for the indicator reference sheets.

1.1 Background

Following the development of the Government of Uganda (GoU) National Climate Change Policy (NCCP) and its Implementation Strategy (IS) which were approved by the cabinet on April 1, 2015, the Ministry of Water and Environment (MWE) with support from development partners developed the national Standard Climate Change (CC) indicators in September 2015.

The process for developing the CC standard indicators was a participatory and widely consultative process that entailed:

a. The brainstorming and consultative meetings among key stakeholders that included:

- The communities
- The local government (LG) Technical Planning Committees including the Chief Administrative Officers (CAOs)
- National level sector representatives from the MWE/Climate Change Department (CCD), Ministry of Local Government (MoLG), Ministry of Finance, planning and Economic Development (MoFPED), the Office of the Prime Minister (OPM), Trade, Industry and Cooperatives, Ministry of Gender, Labour and Social Development (MGLSD), National Planning Authority (NPA), Kampala City Council Authority (KCCA) and other urban authorities, LGs, Agriculture/Production, Energy, Tourism and Wildlife Sector, Roads and Infrastructure
- Implementing partners and development partners
- Civil Society Organisations

b. Desk review and analysis of the selected documents to track progress regarding the drafting of LG CC indicators, collate, map out common indicators and identify gaps. See Annex 1 for the list of key documents reviewed.

c. Presentation of the draft report on CC indicators in 4 national level meetings including;

- The meeting for key mandated institutions for climate change policy implementation, other policy makers and CSOs
- Retreat to review the draft indicators for key mandated institutions for CC policy implementation and other policy makers
- The national validation meeting which will include MDAs, CSOs, and LGs
- Presentation at the national meeting organised by UBOS, OPM, MFPED and NPA to review indicators reported by sectors to NDP, OPM and PBS

The Standard National CC indicators were prioritized for the Program Based Budgeting System (PBS); a tool developed by MFPED, to budget across ministries at the national level and across sectors at the LG level and is the repository of all indicators tracked nationally by the public sector. MoFPED will be shifting from Output Oriented Budgeting (OOB) to Programme Oriented Budgeting, hence changing from focusing at output to outcome level. Outcome level indicators were therefore developed for CC in anticipation of this change.

The Standard National CC indicators were prioritized for the MoLG Local Government Performance Assessment System, which the ministry uses to ensure that all the funds that come to the LGs are utilized as budgeted, the inclusion of CC indicators was essential for effective tracking of implementation of CC interventions.

1.2 Rationale for the Indicator Reference Sheets

Indicator Reference Sheets or Performance Indicator Reference Sheets (PIRS) provide implementers, supervisors and funders a comprehensive description of each indicator. The PIRS enable comparable tracking, measurement and interpretation of indicators and hence are part of the 'reliability' data quality assurance measures.

In addition, PIRS serve as reference points for reporting, measuring performance and for performing data quality assessments; particularly focusing on the following data quality dimensions; validity, precision, reliability and timeliness:

- Validity - does data clearly and adequately represents the intended result as per indicator definition?
- Precision - have the right computations been applied? Is there an acceptable margin of error?
- Reliability - is data for the same indicator collected and analysed through a similar and consistent methodology? Data should reflect stable and consistent data collection processes and analysis methods over time
- Timeliness - is data collected at a commonly agreed frequency? (monthly, Quarterly, Annually, Every 5 years?) Is it available on time to influence management decision-making?

SECTION 2:

THE STANDARD NATIONAL CLIMATE CHANGE INDICATORS

This section presents the standard national CC indicators as prioritized for the PBS and LGPAS.

2.1 Standard National Climate Change Indicators for the Program Based Budgeting System (PBS)

SN	Outcome Indicators per Sector	Currently in PBS?
A	**Natural Resources including Water**	
	Outcome indicators	
	Wetland cover (% of total area)	Stated differently in PBS, adopted from NDP II
	Forest Cover (% Land Area)	Stated differently in PBS, adopted from NDP II
	Percentage of domestic water sources that comply with national standards	No
	Output indicators	
	Area in ha of wetlands demarcated and restored	Yes
	Number of hectares of forests restored and conserved	No
	Number of households with functional water harvesting facilities	No
B	**Agriculture/Production**	
	Outcome indicators	
	Percentage of household income generated from the sale of agricultural produce	No
	Percentage of households that are food secure	No
	Output Indicators	
	Number of agricultural income generating enterprises undertaken by households	No
	Number of farmers using Climate Smart Agriculture (CSA) technologies	No
C	**Trade, Industry and Cooperatives**	
	Outcome Indicators	
	Percentage change in agriculture trade volumes	No
	Pollution Index	No, in NDP II
	Output Indicators	
	Number of cooperatives that have mainstreamed CC mitigation and adaptation in their activities	No
	Percentage change in use of renewable energy source equipment at all levels	No
	Number of industries with efficient, environmentally friendly production and waste management practices	No
D	**Meteorology**	
	Outcome Indicator	
	Percentage of women and men making informed decisions from weather/climate information	No
	Output Indicators	
	Number of new weather stations installed/revamped and functional	No
E	**Energy**	
	Outcome Indicators	
	Percentage of renewable energy contribution to Uganda's energy mix	No

SN	Outcome Indicators per Sector	Currently in PBS?
	Percentage adoption and use of Renewable Energy Technologies (RETs) (improved stoves, solar PVs, biogas, briquettes)	No
	Output Indicators	
	Number of Mega Watts (MGs) generated from renewable energy sources)	No
	Number of households using renewable energy technologies	No
F	**Tourism and Wildlife Sector**	
	Outcome Indicators	
	Percentage change in wildlife conservation coverage	No
	Output Indicators	
	Proportion of area covered by invasive species in wildlife protected areas	No
	Percentage change in wild fire incidences reported in protected areas	No
G	**Health**	
	Outcome Indicator	
	Incidences of hygiene related diseases occurrence reported at health facilities annually	No
	Output Indicator	
	Number of community members sensitized on hygiene and water-borne diseases	No
H	**Transport and Infrastructure**	
	Outcome Indicators	
	Percentage of district roads improved to all-weather condition	No
	Percentage of cities and municipalities with climate change resilient physical development plans	No
	Output Indicators	
	Length in km of district roads with demarcated road reserve	No
I	**Gender, Labour and Social Development**	
	Outcome Indicators	
	Percentage of women and men with better livelihoods despite climate shocks	No
	Proportion of men and women farming population practicing climate-smart agriculture	No
	Output Indicators	
	Proportion of Sector Development Plans integrating CC and gender	No
	Number of men and women farmers accessing timely weather information	No
J	**MoLG/NPA**	
	Outcome Indicators	
	Percentage of LGs implementing CC interventions stipulated in their District Development Plans (DDPs)	No
	Percentage of actual funds allocated towards the CCA against budgeted	No
	Output Indicators	
	Percentage of higher level LGs that have integrated climate change interventions in their DDPs	No
	Number of LGs spending at least 5% of their non-wage budget for CC activities	No
K	**MoFPED**	
	Outcome Indicators	
1.	Percentage funding allocation for climate change	No

SN	Outcome Indicators per Sector	Currently in PBS?
L	**Education**	
	Outcome Indicators	
	Percentage of education institutions with functional water facilities during dry periods	No
	Percentage of education institutions implementing CC mitigation and adaptation activities	No
	Output Indicators	
	Number of functional rain water harvesting facilities constructed in education institutions	No
4.	Number of trees planted and maintained in school compounds	No
M	**Institutions *(LGs, Health Facilities (HFs) and Schools)***	
	Outcome Indicators	
	Percentage of government institutions with functional water facilities during drought	No
	Percentage of institutions implementing CC mitigation and adaptation activities	No
	Output Indicators	
	Number of trees planted at the institutional premises	No
N	**Cities and Municipalities**	
	Outcome Indicators	
	Energy	
	Percentage use of renewable energy	No
	Transport	
	Percentage reduction of Green House Gas (GHG) emissions	No
	Waste Management	
	Percentage of waste recycled	No
	Physical Planning	
	Percentage of infrastructure with appropriate drainage system	No
	Output Indicators	
	Waste Management	
	Tonnage of waste collected and disposed at waste management facility	No
	Physical Planning	
	Existence of climate change resilient physical development plan among cities and municipalities	
7.	Area covered by designated green spaces	No

Standard National Climate Change Indicators for the LG Performance Assessment System (LGPAS).

Performance measure	Indicators of performance measure	MoV/Information source, Assessment and scoring Procedure/Criteria
Climate Change Mainstreaming • *Maximum possible score is 10* • *Must score at least 7 to be eligible for a reward* • *Must score at least 5 to remain static* • *Any score below 5 deserve a penalty.*	1. Evidence of assignment of a Focal Point Person (FPP) in charge of climate Change 2. Evidence that the LGs integrated Climate change interventions in their Development plans consistent with National Standard Indicators. 3. Evidence that the LG annual budgets reflect budgetary allocations for climate change concerns that were raised in the LG Development Plans 4. Evidence that the LG mentored and sensitized other staff and other community leaders on climate change adaptation and mitigation 5. Evidence that the LG implemented Climate Change interventions raised in the LG development plan. 6. Evidence that Climate Change specific issues were identified and analyzed during the capacity building needs assessment and identified gaps addressed in their Capacity Building Plans	1. From the office of the CAO/TC, obtain and review the assignment and acceptance letters of the FPP 2. From the planning Unit, obtain and review the Five-Year DP to ascertain if Climate Change concerns were mainstreamed in various sectors consistent with NCCP. 3. From the HoF, obtain and review the annual budget of the previous FY to establish whether it reflects budgetary allocations to address climate change issues that were raised in LG plans 4. From HRD/FPP, obtain and review different documents like Activity/training reports, circulars, proposals for sensitization and capacity building on climate change mitigation and adaptation 5. From quarterly performance reports submitted to MFPED to establish whether issues raised in the LG plans were implemented. 6. From HRD, Obtain and review the capacity building needs assessment report to establish evidence that climate change specific issues were identified and analyzed during the capacity building needs assessment and gaps identified were included in the Capacity Building plans ***If there is evidence of indicators 1 and 5 score 1 for each and the rest score 2 each.***

SECTION 3:
INDICATOR REFERENCE SHEETS FOR THE NATIONAL CLIMATE CHANGE INDICATORS

The indicator reference sheets are presented per sector, that is, natural resources, agriculture/production; trade, industry and cooperatives; meteorology; energy; tourism and wildlife sector; health; roads and infrastructure; gender; labour and social development; MoLG/NPA; MFPED; education; institutions (LGs, health facilities and schools); KCCA and municipalities.

Natural Resource

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Natural Resources	
INDICATOR TITLE: A1 Wetland cover (% of total area)	
Definition: This indicator refers to the total area in square kilometers covered by a wetland. Wetlands are shallow seasonally or permanently water logged or flooded areas, which normally support hydrophytic vegetation (water tolerant). Hydrophytic plants are those that are adapted to growing in water or are found in predominantly wet places.	
Rationale: Increase in wetland coverage and reduction in wetland degradation is a climate mitigation strategy. Wetlands can act as a reservoir to store carbon dioxide, hence mitigating climate change impacts. On the other hand, wetland systems are vulnerable to changes in quantity and quality of their water supply, and it is expected that climate change will have a pronounced effect on wetlands through alterations in hydrological regimes with great global variability.	
Numerator: Land under wetland cover	
Denominator: Total land area	
Unit of measure: Percentage	Disaggregated By: District
Level: Outcome (Impact, outcome, output)	Data Source: NEMA survey reports, Wetlands Management Department and District Local Governments
Data Collection Methodology: Survey	
Frequency of Collection: Every five years	
Responsibility for Data Collection: Wetlands Management Department	
Measurement Notes (optional):	
Baseline: 11% (2012/2013) NDP II	Target: 12% (2019/2020) NDP II

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Natural Resources	
INDICATOR TITLE: A2 Forest Cover (% Land Area)	
Definition: "Forest cover" refers to the percentage of total land area covered by forest Forest as defined in the National Forestry and Tree Planting Act, 8/2003. (Part I: Preliminary) - means an area of land containing a vegetation association that is predominantly composed of trees of any size, and includes - (a) a forest classified under this Act; (b) a natural forest, woodland or plantation; (c) the forest produce in a forest; and (d) the forest ecosystem; including "forest ecosystem" which means any natural or semi-natural formation of vegetation whose dominant element is trees, with closed or partially closed canopy, together with the biotic and abiotic environment; or as modified for the purposes of compliance with international agreements especially the United National Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity	
Rationale: Decline in Uganda's forest cover puts pressure on natural resource use. Deforestation and forests degradation has led to biodiversity loss, changing ecosystem dynamics, shift in habitats, and growing seasons. It has also contributed to emission of green house gases (GHGs) that cause global warming. However, there is potential for conservation, sustainable management and enhancement of forest cover (through restoration, afforestation/reforestation, agro-forestry).	
Numerator: Area covered by the forest	
Denominator: Total land area	
Unit of measure: Hectares	Disaggregated By: Type of forest cover, ownership (private and protected areas), district
Level: Outcome (Impact, outcome, output)	Data Source: NFA, FSSD, Districts, UBOS, NEMA survey reports, Universities and Research Institutions.
Data Collection Methodology: Forest Cover Mapping, Forest Inventories and associated surveys	
Frequency of Collection: Five years	
Responsibility for Data Collection: National Forestry Authority and Local Governments	
Measurement Notes (optional): N/A	
Baseline: 14% (2012/2013) NDP II	Target: 18% (2019/2020) NDP II

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Natural Resources	
INDICATOR TITLE: A3 Percentage of domestic water sources that comply with national standards	
Definition: The domestic water sources will be subjected to the Uganda national water standard to assess the degree of conformity to the standard. This indicator tracks percentage of domestic water sources that comply with national standards.	
Rationale: Although Uganda has several water sources, most of them do not comply with the national standards so be considered as safe water for domestic use.	
Numerator: Domestic water sources that comply with national standards	
Denominator: Domestic water sources	
Unit of measure: Percentage	Disaggregated By: Type of water source
Level: outcome (Impact, outcome, output)	Data Source: MWE water Survey report
Data Collection Methodology: Survey	
Frequency of Collection: Every 3 years	
Responsibility for Data Collection: MWE/NWSC	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Natural Resources	
INDICATOR TITLE: A4 Area in ha of wetlands demarcated and restored	
Definition: Wetland demarcation involves determining the horizontal limits of the wetland. Wetland survey is a perquisite prior to wetland demarcation. Wetland restoration is a process that helps to transform an area that has been impacted by human or natural activity to an area that can sustain native habitats. Restoring an area is a long process that requires an understanding of an area. Learning about the history of an area and its succession through time, will help determine how to restore an area. Success can be determined if the ecosystem can recapture its natural dynamics.	
Rationale: This indicator aims at tracking the number of wetlands whose horizontal limits have been marked and re-established so as to be able to sustain native habitats and hence play their appropriate role in the eco-system.	
Numerator: Hectares of wetlands demarcated and restored	
Denominator: Total Area of wetlands	
Unit of measure: Hectares	Disaggregated By: District
Level: Output (Impact, outcome, output)	Data Source: NEMA survey reports, We suggest that the other data sources be Wetlands management department and District Local Governments
Data Collection Methodology: Survey	
Frequency of Collection: Annually	
Responsibility for Data Collection: Wetlands Management Department and Local Governments	
Measurement Notes (optional): The determination of the baseline and setting of the target has to be informed by the survey conducted	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Natural Resource	
INDICATOR TITLE: A5 Area (in hectares) of central and local forest reserves restored and conserved	
Definition: Forest restoration is a process that helps to transform an area that has been impacted by human or natural activity to an area that can sustain native habitats. Restoring an area is a long process that requires an understanding of an area. Learning about the history of an area and its succession through time, will help determine how to restore an area. Success can be determined if the ecosystem can recapture its natural dynamics. Forest conservation is the practice of planning and maintaining forested areas for the benefit and sustainability of future generations.	
Rationale: This indicator aims at tracking the number of forests that have been re-established and protected so as to be able to sustain native habitats and hence play their appropriate role in the eco-system.	
Numerator: Area (Hectares) of central and local forest reserves restored and conserved	
Denominator: Total land area covered by forest	
Unit of measure: Hectares	Disaggregated By: Type of forest cover, ownership (private and protected areas), district
Level: output(Impact, outcome, output)	Data Source: NFA, FSSD, Districts, UBOS, NEMA, Universities and Research Institutions.
Data Collection Methodology: Survey	
Frequency of Collection: Five years	
Responsibility for Data Collection: National Forestry Authority and Local Governments	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Natural Resource	
INDICATOR TITLE: A6 Number of households with water harvesting facilities	
Definition: The water harvesting facilities may include catchments such as roof top gutters and rain water tanks. This indicator measures the number of households who have water-harvesting facilities.	
Rationale: Water harvesting is a water management technique thus increase in number of households with water harvesting facilities indicates a strategy of climate change adaptation. Once rainwater is harvested, it ensure no water wastage during the rainy season and hence water reservoir during the scarcity of rains for domestic and agricultural purposes.	
Numerator: Number of households with water harvesting facilities	
Denominator: Total number of households	
Unit of measure: Households	Disaggregated By: Urban and rural, type of roof
Level: output (Impact, outcome, output)	Data Source: Uganda National Household Survey (UNHS) Report
Data Collection Methodology: Household survey	
Frequency of Collection: Every 3 years	
Responsibility for Data Collection: UBOS	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

Agriculture/Production

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Agriculture/Production	
INDICATOR TITLE: B1 Percentage of household income generated from the sale of agricultural produce*	
Definition: This indicator measures the proportion of earnings from households that comes from the sale of agricultural produce.	
Rationale: Agriculture is the main source of livelihood for Ugandans, but it is mostly done at a subsistence level, implying limited income for householdsand hence the high likelihood of exerting less pressure on the nature resources in search of earnings. Increased income from agriculture means improved profitability of the sector and less pressure on natural resources.	
Numerator: Household income generated from the sale of agricultural produce	
Denominator: Total household income	
Unit of measure: Percentage	Disaggregated By: Sex of the household head
Level: outcome (Impact, outcome, output)	Data Source: UNHS Report
Data Collection Methodology: UNHS survey	
Frequency of Collection: Every 3 years	
Responsibility for Data Collection: UBOS	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Agriculture/Production	
INDICATOR TITLE: B2 Percentage of households that are food secure	
Definition: This indicator measures the percentage of households experiencing moderate or severe hunger, as indicated by a score of 2 or more on the household hunger scale (HHs). To collect data for this indicator, respondents are asked about the frequency with which three events were experienced by household members in the last four weeks: 1. No food at all in the house; 2. Went to bed hungry, 3. Went all day and night without eating. For each question, four responses are possible (never, rarely, sometimes or often), which are collapsed into the follow three responses: never (value=0), rarely or sometimes (value=1), often (value=2). Values for the three questions are summed for each household, producing HHs score ranging from 0 to 6. (Adopted from Feed the Future (ftf) indicator Handbook)	
Rationale: Households that are food secure are a reflection of improved household resilience to effects of climate change.	
Numerator: The numerator for this indicator is the total number of households in the sample with a score of 2 or more on the HHs.	
Denominator: The denominator is the total number of households in the sample with HHs data.	
Unit of measure: Percentage	Disaggregated By: Sex of the household head
Level: outcome (Impact, outcome, output)	Data Source: UNHS Report
Data Collection Methodology: UNHS survey	
Frequency of Collection: Every 3 years	
Responsibility for Data Collection: UBOS	
Measurement Notes (optional): This indicator should always be measured at the same time each year, ideally at the most vulnerable part of the year (e.g. right before harvest, during the dry season, etc.)	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Agriculture/Production	
INDICATOR TITLE: B3 Number of agricultural income generating enterprises undertaken by households.	
Definition: This indicator measures the agriculture related income generating enterprises/activities undertaken by households.	
Rationale: The agricultural income generating enterprises boost agricultural production and household savings. Once households have diversified income, there is less pressure on natural resources.	
Numerator: The total agricultural income generating activities done at house hold level	
Denominator: The total income generating activities done at house hold level	
Unit of measure: Number	Disaggregated By: Type of income generating enterprises
Level: outcome (Impact, outcome, output)	Data Source: UNHS report
Data Collection Methodology: Population based survey	
Frequency of Collection: Every three years	
Responsibility for Data Collection: UBOS/MAAIF	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
Sector: Agriculture/Production	
INDICATOR TITLE: B4 Number of farmers practicing Climate Smart Agriculture (CSA) technologies.	
Definition: Climate-smart agriculture (CSA) is an integrative approach to address these interlinked challenges of food security and climate change, that aims at: • Sustainably increasing agricultural productivity, to support equitable increases in farm incomes, food security and development; • Adapting and building resilience of agricultural and food security systems to climate change at multiple levels; and • Reducing greenhouse gas emissions from agriculture (including crops, livestock and fisheries). Some of the CSA technologies used by crop husbandry farmers include establishment and utilization of shade trees (including fruit types), mulching and water harvesting.	
Rationale: Climate smart technologies are CC adaptation techniques aimed at sustainably increasing agricultural productivity, adapting and building resilience and reducing greenhouse gas emissions.	
Numerator: Number of farmers practicing CSA technologies.	
Denominator: Total number of farmers	
Unit of measure: Number	Disaggregated By: Type of technology
Level: output(Impact, outcome, output)	Data Source: District reports
Data Collection Methodology: Routine reporting	
Frequency of Collection: Annually	
Responsibility for Data Collection: DPO/DAO	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

Trade, Industry and Cooperatives

PERFORMANCE INDICATOR REFERENCE SHEET	
Sector: Trade, Industry and Cooperatives	
INDICATOR TITLE: C1 Percentage change in agricultural export volumes	
Definition: This indicator tracks the direction and magnitude of annual change in the value of agricultural export commodity volumes. It includes both formal and informal trade. Formal trade is defined as trade in which the trader submitted documentation at the border.	
Rationale: Increased export volume is one of the end results of efficient markets, foreign exchange earner and contributor to GDP.	
Numerator: Percentage change in export volumes per year (	
Denominator: Total trade volumes	
Unit of measure: Percentage	Disaggregated By: Commodity, Type of trade: (local versus export)
Level: outcome (Impact, outcome, output)	Data Source: UBOS Trade report
Data Collection Methodology Document review	
Frequency of Collection: Annually	
Responsibility for Data Collection: UBOS	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Trade, Industry and Cooperatives	
INDICATOR TITLE: C2 Pollution Index	
Definition: The Pollution Index is a simple and generalized way to describe the air quality. It is calculated from several sets of air pollution data. The pollution index is at times referred to as Air Quality Health Index, Air Pollution Index and Pollutant Standards Index. The Pollution Index considers air pollutants such as - sulphur dioxide (SO_2), particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), nitrogen dioxide (NO_2), carbon monoxide (CO) and ozone (O_3).	
Rationale: Air pollution contributes to global warming through creating a thick layer that does not easily allow sunrays to be transmitted through. It also causes health problems such as aggravated heart or respiratory illnesses.	
Numerator: Total number of enterprises that pollute the air	
Denominator: Percentage emission from industries	
Unit of measure: UNFCCC recommended unit	Disaggregated By: N/A
Level: outcome(Impact, outcome, output)	Data Source: Survey report
Data Collection Methodology: Computation of the index	
Frequency of Collection: Every 1 year	
Responsibility for Data Collection: NEMA	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
Sector: Trade, Industry and Cooperatives	
INDICATOR TITLE: C3 Number of cooperatives that have mainstreamed CC mitigation and adaptation in their activities	
Definition: Mainstreaming is the informed integration of themes or concerns or relevant value (s) into the decisions of institutions (cooperatives) that drives the policies, plans, investments and actions. Mainstreaming is a long-term, iterative process aimed at transforming ideas, policies, resource allocation and practices to promote desired developmental outcomes with regard to gender, environment, climate change, governance, and human rights among others. Cooperatives are farms or businesses jointly owned or run by its members to achieve a common goal.	
Rationale: Cooperatives constitute a large membership of farmers and hence have potential to influence the large membership to mainstream CC to realise large-scale positive influence.	
Numerator: Number of cooperatives that have mainstreamed CC mitigation and adaptation	
Denominator: Total number of cooperatives	
Unit of measure: Number	Disaggregated By: type of cooperative
Level: output (Impact, outcome, output)	Data Source: Survey report
Data Collection Methodology: Survey	
Frequency of Collection: Annually	
Responsibility for Data Collection: MTIC	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Trade, Industry and Cooperatives	
INDICATOR TITLE: C4 Percentage change in use of renewable energy source equipment by industries	
Definition: This indicator measures the use of renewable energy source equipment, such as equipment for bio-fuels, wind and solar energy among industries.	
Rationale: The use of renewable energy is one of the CC mitigation measures.	
Numerator: Percentage of industries using renewable energy source equipment in the reporting year.	
Denominator: Total number of industries	
Unit of measure: Percentage	Disaggregated By: Type of industry
Level: outcome(Impact, outcome, output)	Data Source: Survey report
Data Collection Methodology: Survey	
Frequency of Collection: Every 3 years	
Responsibility for Data Collection: Ministry of Trade and Industry	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Trade, Industry and Cooperatives	
INDICATOR TITLE: C5 Number of industries with efficient, environmentally friendly waste management practices.	
Definition: Efficient and environmentally friendly waste management practices entail all those activities and actions required to manage waste from its inception to its final disposal. This includes amongst other things, collection, transport, treatment and disposal of waste together with monitoring and regulation.	
Rationale: Poor or lack of waste management impacts negatives on the environment and in the long term causes negative effects on CC.	
Numerator: Number of industries with efficient, environmentally friendly waste management practices	
Denominator: Total Number of industries	
Unit of measure: Number	Disaggregated By: Type of industry
Level: output (Impact, outcome, output)	Data Source: Survey report
Data Collection Methodology: Survey	
Frequency of Collection: Every 2 years	
Responsibility for Data Collection: Ministry of Trade and Industry	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

Meteorology

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Meteorological Information	
INDICATOR TITLE: D1 Percentage of women and men making informed decisions from climate information	
Definition: This indicator tracks decision-making among individual men and women. Climate data may include monitored weather, seasonal forecast or climate projections (e.g. anticipated temperature, precipitation and sea level rise, changing frost-free dates, changing soil moisture and/or temperature, risk projections for extreme weather events, speed of soil erosion and water availability under future scenarios).	
Rationale: The use of Climate information positions farmers to respond appropriately to anticipated climate variability and change and hence increases productivity of agriculture.	
Numerator: Number of men and women making informed decisions from climate information	
Denominator: Total farming population	
Unit of measure: Percentage	Disaggregated By: Gender: (Men and Women)
Level: outcome (Impact, outcome, output)	Data Source: Survey report
Data Collection Methodology survey	
Frequency of Collection: Annually reported	
Responsibility for Data Collection: UNMA	
Measurement Notes (optional): The baseline and targets to be provided by the design	
Baseline: survey design	Target: survey design

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Meteorological Information	
INDICATOR TITLE: D2 Number of new weather stations installed/opened	
Definition: A weather station is a facility with instruments and equipment for measuring atmospheric conditions to provide information for weather forecasts and to study the weather and climate. A weather station should be maintained and remitting data as required	
Rationale: The weather stations provide localized weather forecasts so as to guide the communities regarding what weather to expect as well as what agronomic activities to do.	
Numerator: Number of new weather stations installed/ revamped and functional	
Denominator: Number of weather stations	
Unit of measure: Number	Disaggregated By: District
Level: output (Impact, outcome, output)	Data Source: UNMA annual reports
Data Collection Methodology: Routine remittance of information	
Frequency of Collection: Monthly reported	
Responsibility for Data Collection: UNMA	
Measurement Notes (optional): Only count the number of functional Weather Stations	
Baseline: TBD	Target: TBD

Energy

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Energy	
INDICATOR TITLE: E1 Percentage of renewable energy contribution to Uganda's energy mix	
Definition: This indicator measures the proportion of Uganda's energy generated from renewable energy technologies like bio-fuels, wind, solar, improved cook stoves and LPG at household and institutional levels.	
Rationale: There is need to invest in the necessary infrastructure to facilitate the exploitation of the abundant renewable energy sources including hydropower, geothermal, and nuclear, so as to increase power generation capacity.	
Numerator: Number of Mega Watts (MWs) generated from renewable energy	
Denominator: Total energy produced from all sources	
Unit of measure: Percentage	Disaggregated By: Type of Renewable energy
Level: outcome (Impact, outcome, output)	Data Source: UNHS
Data Collection Methodology: survey	
Frequency of Collection: Every 3 year	
Responsibility for Data Collection: UBOS/Ministry of Energy and Mineral Development	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Energy	
INDICATOR TITLE: E2 Percentage adoption and use of renewable energy technologies	
Definition: This indicator measures the rate of adoption and use of renewable energy technologies like bio-fuels, wind, solar, improved cook stoves and Liquefied petroleum gas (LPG) at household and institutional levels.	
Rationale: This indicator is useful to track the level of adoption and use of alternative sources of energy as well as renewable energy technologies.	
Numerator: Number of households and institutions using renewable energy technologies	
Denominator: Total number of households and institutions	
Unit of measure: Percentage	Disaggregated By: households and institutions Type of (RET)
Level: outcome (Impact, outcome, output)	Data Source: UNHS and institutional survey reports
Data Collection Methodology: UNHS	
Frequency of Collection: Annually	
Responsibility for Data Collection: Ministry of Energy and Mineral Development /UBOS	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Energy	
INDICATOR TITLE: E3 Number of Mega Watts (MWs) generated from renewable energy sources	
Definition: This indicator measures the quantity of power generated from renewable energy technologies like bio-fuels, wind, solar, improved cook stoves and LPG at household and institutional levels.	
Rationale: There is need to invest in the necessary infrastructure to facilitate the exploitation of the abundant renewable energy sources including hydropower, geothermal, and nuclear, so as to increase environmental friendly power generation capacity.	
Numerator: Number of MGs generated from renewable energy	
Denominator: Total energy produced	
Unit of measure: Mega Watts	Disaggregated By: Energy source
Level: output (Impact, outcome, output)	Data Source: Ministry of Energy reports
Data Collection Methodology: Routine monitoring data	
Frequency of Collection: Annually	
Responsibility for Data Collection: Ministry of Energy	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Energy	
INDICATOR TITLE: E4 Number of households using renewable energy technologies improved stoves, solar PVs, biogas, briquettes)	
Definition: This indicator tracks the use of RETs at household level. RETs may include improved stoves, solar PVs, biogas and briquettes.	
Rationale: The adoption of RETS at household level leads to less environmental destruction and less emission of GHG, which have a negative impact on the climate.	
Numerator: Number of households using RETS	
Denominator: Total number of households in Uganda	
Unit of measure: Mega Watts	Disaggregated By: Type of RET
Level: output (Impact, outcome, output)	Data Source: UNHS report
Data Collection Methodology: Survey	
Frequency of Collection: Every 3 years	
Responsibility for Data Collection: Ministry of Energy/UBOS	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

Tourism and Wildlife Sector

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Tourism and Wildlife Sector	
INDICATOR TITLE: F1 Percentage change in restoration of wildlife conservation areas	
Definition: This indicator measures the percentage area f wildlife protected or conservation areas that have been restored from previous degradation or encroachment in order to perform ecological, economic and/or cultural functions.	
Rationale: Continued encroachment and degradation of wildlife conservation areas and habitats impacts negatively on ecosystem health thereby contributing to climate change which leads to wildlife poor habitats, variations in wildlife distribution, species composition, and/or extinction and potential conflicts.	
Numerator: Percentage area of wildlife protected areas restored	
Denominator: Total number wildlife of protected areas restored/rehabilitated	
Unit of measure: Percentage	Disaggregated By: Level of encroachment and area restored
Level: outcome (Impact, outcome, output)	Data Source: survey report
Data Collection Methodology: survey	
Frequency of Collection: Every 5 years	
Responsibility for Data Collection: UWA and NFA	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Tourism and Wildlife Sector	
INDICATOR TITLE: F2 Proportion of invasive species in wildlife protected areas	
Definition: Invasive alien species are plants, animals, or other organisms that are introduced to a given area outside their original range and cause harm in their new home.	
Rationale: Since invasive species have no natural enemies to limit their reproduction, they usually spread rampantly. Invasive alien species are recognized as one of the leading threats to biodiversity and impose enormous costs to agriculture, forestry and fisheries, as well as to human health ultimately contributing to climate change	
Numerator: Percentage area covered by invasive species in wildlife protected areas	
Denominator: Total protected/conserved area	
Unit of measure: Proportion	Disaggregated By: type and number of invasive species
Level: Outcome (Impact, outcome, output)	Data Source: survey report
Data Collection Methodology: survey	
Frequency of Collection: Every 5 years	
Responsibility for Data Collection: UWA and NFA	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Tourism and Wildlife Sector	
INDICATOR TITLE: F3 Percentage change in wild fire incidences reported in protected areas	
Definition: This indicator measures the occurrence of wild fire within protected areas	
Rationale: Wild fires destroy natural habitats in protected and conserved areas which leads to environmental degradation and climate change	
Numerator: Wild fire incidences reported in protected areas	
Denominator: Number of areas prone to wild fires	
Unit of measure: Number	Disaggregated By: none
Level: Output (Impact, outcome, output)	Data Source: Ministry of Tourism Annual reports
Data Collection Methodology: Routine monitoring	
Frequency of Collection: Annually	
Responsibility for Data Collection: Ministry of Tourism	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

Health

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Health	
INDICATOR TITLE: G1 Incidences of hygiene/water-borne related disease occurrence reported at health centers	
Definition: Waterborne diseases are caused by pathogenic microorganisms that most commonly are transmitted in contaminated fresh water. Infection commonly results during bathing, washing, drinking, in the preparation of food, or the consumption of food thus infected. Examples of hygiene/water-borne related diseases include: diarrhea, cholera, hepatitis A, typhoid fever, bilharzias, dysentery and the like. Ok	
Rationale: Water-borne diseases cause about 1.8 million human deaths annually. The World Health Organization estimates that 88% of that burden is attributable to unsafe water supply, sanitation and hygiene. Water-born diseases are highly associated with environmental degradation and lack of proper and clean water management practices. Include source and date of report	
Numerator: hygiene/water-borne related disease occurrence reported at health centers (number of new water born related disease cases reported	
Denominator: Total population at risk per district	
Unit of measure: Percentage	Disaggregated By: type of disease, age
Level: outcome (Impact, outcome, output)	Data Source: Health Management Information System (HMIS) reports
Data Collection Methodology: Routine reporting	
Frequency of Collection: quarter, weekly, annually	
Responsibility for Data Collection: Ministry of Health	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Health	
INDICATOR TITLE: G2 Number of community members sensitized on hygiene and water-borne diseases	
Definition: This indicator measures the reach of information on hygiene and water-borne diseases.	
Rationale: People with correct information about the importance of maintaining good hygiene and drinking clean water, as well as the dangers of not doing that are more likely to adhere to the recommended practices. Environmental degradation contributes to poor hygiene and increased water-borne diseases.	
Numerator: Number of community members sensitized on hygiene and water-borne diseases	
Denominator: Total number of community members diseases	
Unit of measure: Number	Disaggregated By: sex
Level: output (Impact, outcome, output)	Data Source: HMIS reports, UNHS by UBOS
Data Collection Methodology: Routing monitoring and report	
Frequency of Collection: Annually	
Responsibility for Data Collection: Ministry of Health/MoLG	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

Roads and Infrastructure

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Roads and Infrastructure	
INDICATOR TITLE: H1 Percentage of community access roads (CAR) improved to all-weather condition	
Definition: An all-weather road is a thoroughfare, route, or way on land between two places that has been paved or otherwise improved to allow travel by foot or some form of conveyance, including a horse, cart, bicycle, or motor vehicle.	
Rationale: The linkage of rural communities to markets is considered a crucial means of increasing agricultural and other rural-based production as well as the access of rural communities to food at reasonable prices as well as greater off-farm employment opportunities and access to health and nutrition services. Community access roads open up transport from rural spaces where rural-based production activities such as agriculture are taking place, and connects, either directly or indirectly, with population centers and market activity, and social service centres, that it health facilities, education institution and the like. CAR "improvement" indicates that improves ease of commercial transport along that road and has made the road accessible even in bad weather conditions such as heavy rainfall.	
Numerator: Number of CARs improved to all-weather condition	
Denominator: Total number of community access roads	
Unit of measure: Percentage	Disaggregated By: type (tarmac versus marum)
Level: outcome(Impact, outcome, output)	Data Source: MoWT Annual Performance and LG reports
Data Collection Methodology:	
Frequency of Collection: Annually	
Responsibility for Data Collection: MoWT and Local Governments	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Roads and Infrastructure	
INDICATOR TITLE: H2 Length in Km. of roads with a demarcated road reserve	
Definition: This indicator tracks the length of a secured road reserve in kilometers for both the newly constructed and the old roads. A road reserve is the free space left along a road that is intended to be left free for future use.	
Rationale: Road reserves serve several purposes including providing space for possible future expansion of the road, by also provides space for water run off including greening	
Numerator: Length in Km of roads with secured standard road reserve	
Denominator: Length in Km of all roads	
Unit of measure: Kilometers	Disaggregated By: Type of road
Level: output (Impact, outcome, output)	Data Source: Local Governments/ Ministry of Works and Transport
Data Collection Methodology: Survey	
Frequency of Collection: Every 2 years	
Responsibility for Data Collection: MoWT and Local Governments	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

Ministry of Gender, Labour and Social Development

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Gender, Labour and Social Development	
INDICATOR TITLE: I1 Percentage of women and men with better livelihoods despite climate shocks	
Definition: This indicator measures the percentage of men and women with better livelihoods (better health, increased incomes and food secure) despite experiencing climate disasters such as drought, floods and land slides.	
Rationale: A high percentage of women and men with better livelihoods despite climate shocks indicates resilience to climate change.	
Numerator: Men and women with better livelihoods despite climate shocks	
Denominator:	
Unit of measure: Percentage	Disaggregated By: Gender (Male and Females)
Level: outcome (Impact, outcome, output)	Data Source: UNHS
Data Collection Methodology: Survey	
Frequency of Collection: 2 years	
Responsibility for Data Collection: UBOS	
Measurement Notes (optional):	
Baseline: 2015/2016	Target: 60%

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Gender, Labour and Social Development	
INDICATOR TITLE: I2 Proportion of men and women (farming population) practicing climate-smart agriculture	
Definition: Climate-smart agriculture (CSA) is an integrative approach to address these interlinked challenges of food security and climate change, that aims at: 1. Sustainably increasing agricultural productivity, to support equitable increases in farm incomes, food security and development; 2. Adapting and building resilience of agricultural and food security systems to climate change at multiple levels; and 3. Reducing greenhouse gas emissions from agriculture (including crops, livestock and fisheries). Some of the CSA technologies used by crop husbandry farmers include establishment and utilization of shade trees (including fruit types), mulching and water harvesting.	
Rationale: Climate smart technologies are CC adaptation techniques aimed at sustainably increasing agricultural productivity, adapting and building resilience and reducing greenhouse gas emissions.	
Numerator: Men and women (farming population) practicing climate-smart agriculture	
Denominator: Total farming population	
Unit of measure: Percentage	Disaggregated By: Gender (men and women)
Level: outcome(Impact, outcome, output)	Data Source: Local Governments
Data Collection Methodology: Survey	
Frequency of Collection: Five years	
Responsibility for Data Collection: UBOS	
Measurement Notes (optional):	
Baseline: Baseline line survey to be conducted	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Gender, Labour and Social Development	
INDICATOR TITLE: I3 Number of men and women farmers accessing timely weather information	
Definition: Climate information may include information on consequences of increased temperatures on crops, livestock, invasive species, pests and disease incidents, changes in stream flow due to precipitation shifts, or the number of people likely to be affected by future storm surges.	
Rationale: Timely accessibility of weather information results into accurate use of climate information for decision making. Decisions made may include timely planting and type and species of plants.	
Numerator: Number of men and women farmers accessing timely weather information	
Denominator: Number of men and women farmers	
Unit of measure: Number	Disaggregated By: Gender (Male and Female)
Level: output (Impact, outcome, output)	Data Source: MWE/UNMA reports
Frequency of Collection: Quarterly	
Data collection methodology	
Responsibility for Data Collection: District Production Officers	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Gender, Labour and Social Development	
INDICATOR TITLE: I4 Proportion of Sector Development Plans integrating Climate Change and Gender	
Definition: Each sector has a sector specific development plan. This indicator tracks whether CC and gender activities have been mapped and included in the Sector Development Plans.	
Rationale: Once CC and gender activities are included in the Sector Development Plans, it implies that they have been prioritised and budgeted for, and hence will most likely be implemented.	
Numerator: Sector Development Plans CC and gender activities	
Denominator: Sector Development Plans	
Unit of measure: Percentage	Disaggregated By: Sectors
Level: output (Impact, outcome, output)	Data Source: Sectors plans
Data Collection Methodology: Sector plan review	
Frequency of Collection: Five years	
Responsibility for Data Collection: NPA	
Measurement Notes (optional): Both CC and gender must be integrated in the sector plan for a sector to be marked as compliant to this indicator.	
Baseline: TBD	Target: TBD

Ministry of Local Government/ National Planning Authority

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: MOLG/NPA	
INDICATOR TITLE: J2 Percentage of Higher level LGs implementing CC interventions in their District Development Plans (DDPs)	
Definition: This indicator measures the extent of district implementing of planned CC activities.	
Rationale: It is one think to included CC activities in the workplans and another to implement them. Implementing CC interventions in their District Development Plans ensures implementation of CC mitigation and adaptation measures.	
Numerator: Number of LGs implementing CC interventions in their District Development Plans	
Denominator: Total Number of HLGs in Uganda	
Unit of measure: Percent	Disaggregated By: none
Level: outcome(Impact, outcome, output)	Data Source: HLG Assessment reports
Frequency of Collection: Annually	
Responsibility for Data Collection: Ministry of Local Government	
Measurement Notes (optional): The district should have implemented at least 50% of planned activities.	
Baseline: TBD	Target: 100%

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: MOLG/NPA	
INDICATOR TITLE: J 1 Percentage of LGs that have integrated climate change interventions in their DDPs	
Definition: This indicator measures the coverage CC mainstreaming interventions across the country. CC mainstreaming is implied by incorporation of various CC activities in various DDPs.	
Rationale: Mainstreaming CC interventions into DDP implies commitment to implement CC activities, and high likelihood of CC activities being implemented.	
Numerator: Number of HLGs that have mainstreamed CC interventions in their DDPs	
Denominator: Total Number of HLGs in Uganda	
Unit of measure: Percentage	Disaggregated By: District
Level: Outcome (Impact, outcome, output)	Data Source: DDP Review Reports
Data Collection Methodology:	
Frequency of Collection: Five years	
Responsibility for Data Collection: NPA	
Measurement Notes (optional):	
Baseline: 38	Target: 115

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: MOLG/NPA	
INDICATOR TITLE: J3 Number of LGs spending at least 5% of their non-wage budget for CC activities	
Definition: This indicator tracks the proportion of district budgets that are spent on CC interventions. CC interventions require adequate budgeting.	
Rationale: Implementation CC interventions requires adequate budgeting in order to implemented to the right scale and scope.	
Numerator: Number of LGs spending at least 10% of their budget for CC activities per financial year	
Denominator: Total Number of LGs in Uganda	
Unit of measure: Number	Disaggregated By: District
Level: output(Impact, outcome, output)	Data Source: Quarter progress report
Data Collection Methodology: Document review	
Frequency of Collection: quarterly	
Responsibility for Data Collection: MoLG	
Measurement Notes (optional):	
Baseline: TBD	Target: 100%

Ministry of Finance, Planning and Economic Development

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: MFPED	
INDICATOR TITLE: K1 Percentage funding allocation for climate change	
Definition: This indicator tracks the amount of funding from the national budget directed towards CC. This figure will most likely be reflected in line items under the Ministry of water and environment/CCD.	
Rationale: To measure sustainable investment in CC activities, we will monitor trends in the amount and percentage of national budget allocated to CC. Public investment CC demonstrates the government's commitment address and guard against the effects of CC.	
Numerator: Amount of national budget in Uganda Shillings allocated to CC	
Denominator: Total national budget amount in Uganda Shillings	
Unit of measure: Uganda Shillings	Disaggregated By: None
Level: outcome(Impact, outcome, output)	Data Source: National Budget
Data Collection Methodology:	
Frequency of Collection: Annually	
Responsibility for Data Collection: Ministry of Finance, Planning and Economic Development	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

Education

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Education	
INDICATOR TITLE: L1 Percentage of education institutions with functional water facilities	
Definition: The indicator tracks the availability of water in education institutions (schools) during drought periods.	
Rationale: The availability of water supply at education institutions during throughout the year implies the functionality of the water supply system.	
Numerator: Number of education institutions with functional water facilities	
Denominator: Total number of education institutions in the catchment area	
Unit of measure: Percent	Disaggregated By: Level (Primary, Secondary and tertiary)
Level: outcome(Impact, outcome, output)	Data Source: Local Governments, MoES
Data Collection Methodology: Survey, routine monitoring	
Frequency of Collection: Quarterly and annually	
Responsibility for Data Collection: Ministry of Education and Sports, LGs (water department), MoWE	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Education	
INDICATOR TITLE: L2 Percentage of education institutions implementing CC mitigation and adaptation activities	
Definition: This indicator measures the extent of implementing CC mitigation and adaptation activities in education institutions. The mitigation and adaptation activities may include conservation agriculture; carbon sequestration through low- or no-till practices; increased use of climate information for planning, risk reduction, and increasing resilience; increased energy efficiency; natural resource management practices that increase resilience to CC.	
Rationale: This indicator aims at tracking the implementation of CC mitigation and adaptation activities with in education institutions.	
Numerator: Number of education institutions implementing CC mitigation and adaptation activities	
Denominator: Total number of education institutions	
Unit of measure: Percent	Disaggregated By: Level (Primary, Secondary and tertiary)
Level: outcome (Impact, outcome, output)	Data Source: Survey report, monitoring report
Data Collection Methodology: Survey, routine monitoring	
Frequency of Collection: Annually	
Responsibility for Data Collection: Ministry of Education and Sports, MoWE (climate change department)	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Education	
INDICATOR TITLE: L3 Proportion of education institutions with functional rain water harvesting facilities.	
Definition: This indicator measures the presence of rainwater harvesting facilities that actually contain and provide water.	
Rationale: Water harvesting reflects CC adaptation and mitigation. The more the number of rain water harvesting facilities constructed in education institutions the more rain water harvested, both for institutional and agricultural use.	
Numerator: Number of functional rain water harvesting facilities constructed in education institutions	
Denominator: Total number of education institutions.	
Unit of measure: percentage	Disaggregated By: Level (Primary, Secondary and tertiary)
Level: Output (Impact, outcome, output)	Data Source: Survey report
Data Collection Methodology: Survey, routine monitoring	
Frequency of Collection: Annually	
Responsibility for Data Collection: Ministry of Education and Sports	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Education	
INDICATOR TITLE: L4 Number of trees planted and maintained in school compounds	
Definition: This indicator tracks the number of trees planted and maintained in school compounds as one of the CC mitigation and adaptation activities in education institutions.	
Rationale: Increase in number of trees planted and maintained reflects CC mitigation and adaptation implementation. Trees contribute to the rain production cycle, hence positively influencing climate.	
Numerator: Number of trees planted and maintained in school compounds.	
Denominator: N/A	
Unit of measure: Number	Disaggregated By: Level (Primary, Secondary and tertiary)
Level: Output (Impact, outcome, output)	Data Source: Local Governments
Data Collection Methodology: Survey	
Frequency of Collection: annually	
Responsibility for Data Collection: Ministry of Education and Sports	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

Institutions (LGs, Health Facilities (HFs) and Schools)

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Institutions (LGs, Health Facilities (HFs) and Schools)	
INDICATOR TITLE: M1 Percentage of government institutions with functional water facilities during drought.	
Definition: This indicator tracks the proportion of government institutions with water supply during prolonged dry spells. The institutions targeted for this indicator include LGs, Health Facilities and Schools, since they are some of the biggest LG 'landlords'.	
Rationale: The purpose of this indicator is to track water availability during drought periods among government institutions.	
Numerator: Number of government institutions with functional water facilities during drought periods	
Denominator: Total number of government institutions	
Unit of measure: Percentage	Disaggregated By: type (Health facilities, schools and LGs)
Level: Outcome (Impact, outcome, output)	Data Source: Ministry of Education and Sports, MOH and MoLG
Data Collection Methodology: Survey	
Frequency of Collection: Annually	
Responsibility for Data Collection: Ministry of Education and Sports, MOH and MoLG	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Education	
INDICATOR TITLE: M2 Percentage of institutions implementing CC mitigation and adaptation activities	
Definition: This indicator measures the extent of implementing CC mitigation and adaptation activities in institutions. The mitigation and adaptation activities may include conservation agriculture; carbon sequestration through low- or no-till practices; increased use of climate information for planning, risk reduction, and increasing resilience; increased energy efficiency; natural resource management practices that increase resilience to climate change.	
Rationale: This indicator aims at tracking the implementation of CC mitigation and adaptation activities within institutions.	
Numerator: Number of education institutions implementing CC mitigation and adaptation activities	
Denominator: Total number of education institutions	
Unit of measure: Percent	Disaggregated By: Institution
Level: outcome(Impact, outcome, output)	Data Source: Survey report
Data Collection Methodology: Survey	
Frequency of Collection: Annually	
Responsibility for Data Collection: MoLG, MoES and MOH	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

KCCA and Municipalities

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Energy	
INDICATOR TITLE: N1 Percentage use of renewable energy	
Definition: renewable energy is energy that is collected from resources that are naturally replenished and hence do not get depleted. This indicator measures the adoption and use of renewable energy in KCCA and municipalities at household and institutional levels.. Renewable energy may include bio-fuels, hydro power, wind, solar, the institutions that will be tracked are educational institutions, health facilities, places of worship, hotels, restaurants and bars.	
Rationale: This indicator is useful to track the level of adoption and use of alternative sources of energy as well as renewable energy technologies in the KCCA & municipalities.	
Numerator: Total Number of HHs and institutions in KCCA & municipalities using renewable energy	
Denominator: Total number of households and institutions in KCCA and municipalities	
Unit of measure: Percentage	Disaggregated By: households vs institutions, by type of energy
Level: outcome (Impact, outcome, output)	Data Source: UNHS and institutional survey reports
Data Collection Methodology: Survey (UNHS)	
Frequency of Collection: two years	
Responsibility for Data Collection: UBOS	
Measurement Notes (optional):	
Baseline: TBD	Target: 70

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Transport	
INDICATOR TITLE: N2 Amount of greenhouse gas in the atmosphere	
Definition: A greenhouse gas (GHG) is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. The primary greenhouse gases in Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone. The indicator measures amount of GHG in the atmosphere of KCCA and Municipalities.	
Rationale: It has been estimated that if GHG emissions continue at the present rate, earth's surface temperature will continue to rise, with potentially harmful effects on ecosystems, biodiversity and the livelihoods of people worldwide.	
Numerator: Amount of GHG in the atmosphere	
Denominator: N/A	
Unit of measure: CO_2e	Disaggregated By: by Type of gas
Level: outcome(Impact, outcome, output)	Data Source: KCCA and Municipalities survey report
Data Collection Methodology: Survey	
Frequency of Collection: annually	
Responsibility for Data Collection: KCCA and Municipalities	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Waste Management	
INDICATOR TITLE: N3 Percentage of waste recycled	
Definition: Recycling is the process of converting water materials into reusable objectives to prevent waste of potentially useful materials, reduce the consumption of fresh raw materials, energy usage, air water pollution by decreasing the need for conventional waste disposal. This indicator will measure the amount of waste materials recycled within KCCA and municipalities. the amount of waste recycled may exceed the total amount of waster collected.	
Rationale: Increase in percentage of waste recycled reflects good waste management practices and thus good environment management.	
Numerator: Tonnage of waste collected and recycled	
Denominator: Tonnage of waste collected	
Unit of measure: Percentage	Disaggregated By: type
Level: outcome(Impact, outcome, output)	Data Source: KCCA and Municipalities
Data Collection Methodology: Survey	
Frequency of Collection: annually	
Responsibility for Data Collection: KCCA and Municipalities	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Planning	
INDICATOR TITLE: N4 Proportion of land area in the municipality covered by the Physical Development Plan	
Definition: A Physical Development Plan is a detailed urban use plan encompassing various disciplines, which seek to order and regulate land use in an efficient and ethical way, thus preventing land-use conflicts.	
Rationale: Unplanned use of land, including urban settlement interferes with the environment.	
Numerator: Land area in the municipality covered by the Physical Development Plan	
Denominator: Total land area in the municipality	
Unit of measure: hectares	Disaggregated By: district
Level: outcome (Impact, outcome, output)	Data Source: MoLHUD reports
Data Collection Methodology: Routine data collection by MoLHUD	
Frequency of Collection: annually	
Responsibility for Data Collection: MoLHUD	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Waste Management	
INDICATOR TITLE: N5 volume of waste collected and disposed at waste management facility	
Definition: This indicator tracks the volume of waste that is moved and deposited in a designated waste management facility, it also tracks the waste that is discharged to the environment. These are solid waste, faecal waste and waste water	
Rationale: Increase in volume of waste collected and disposed at the management facility reflects good waste management and thus good environment and ecosystem management.	
Numerator: volume of waste collected and disposed at waste management facility	
Denominator: Total volume of waste produced in urban area	
Unit of measure: Tonnage/volume	Disaggregated By: type
Level: Output (Impact, outcome, output)	Data Source: KCCA and Municipality reports
Data Collection Methodology: Routine monitoring and reporting	
Frequency of Collection: annually	
Responsibility for Data Collection: KCCA and Municipalities	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Planning	
INDICATOR TITLE: N6 Area covered by designated green spaces	
Definition: The indicator measures the Area (in square meters) covered by designated green spaces in KCCA and municipalities.	
Rationale: Green spaces play an important role of balancing ecological factors in an area.	
Numerator: Area in KCCA and municipalities covered by designated green spaces	
Denominator: Total Area (in square meters) of KCCA and municipalities	
Unit of measure: Square meters	Disaggregated By: District
Level: output (Impact, outcome, output)	Data Source: KCCA and Municipalities
Data Collection Methodology: Survey	
Frequency of Collection: annually	
Responsibility for Data Collection: KCCA and Municipalities	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Planning	
INDICATOR TITLE: N7 percentage of infrastructure with appropriate drainage system	
Definition: Drainage is the natural or artificial removal of surface and sub-surface water from an area.	
Rationale: Poor drainage contributed to hazards such as floods as well as waterborne diseases.	
Numerator: Number of infrastructure with appropriate drainage system	
Denominator: Total number of infrastructure	
Unit of measure: percentage	Disaggregated By: type of insfrasture
Level: output (Impact, outcome, output)	Data Source: KCCA and district
Data Collection Methodology: Survey	
Frequency of Collection: Annually	
Responsibility for Data Collection: KCCA and Municipalities	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Energy	
INDICATOR TITLE: N1 Percentage use of renewable energy	
Definition: This indicator measures the adoption and use of renewable energy among KCCA and municipalities. Renewable energy may include bio-fuels, wind, solar, improved cook stoves and LPG at household and institutional levels.	
Rationale: This indicator is useful to track the level of adoption and use of alternative sources of energy as well as renewable energy technologies in the municipalities.	
Numerator: Percentage using of renewable energy	
Denominator: Total number of households and institutions in KCCA and municipalities	
Unit of measure: Percentage	Disaggregated By: households vs institutions
Level: outcome (Impact, outcome, output)	Data Source: UNHS and institutional survey reports
Data Collection Methodology: Survey	
Frequency of Collection: Annually	
Responsibility for Data Collection: Ministry of Energy/UBOS	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Transport	
INDICATOR TITLE: N2 Amount of green house gas emission reduction	
Definition: A greenhouse gas (GHG) is a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. The primary greenhouse gases in Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone. The indicator measures amount of GHG emission reduction in KCCA and Municipalities.	
Rationale: It has been estimated that if GHG emissions continue at the present rate, earth's surface temperature will continue to rise, with potentially harmful effects on ecosystems, biodiversity and the livelihoods of people worldwide.	
Numerator: Amount of GHG emission	
Denominator: N/A	
Unit of measure: CO_2e	Disaggregated By: Type
Level: outcome (Impact, outcome, output)	Data Source: KCCA and Municipalities survey report
Data Collection Methodology: Survey	
Frequency of Collection: annually	
Responsibility for Data Collection: KCCA and Municipalities	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Waste Management	
INDICATOR TITLE: N3 Percentage of waste collected and recycled	
Definition: Waste collection is a part of the process of waste management. It is the transfer of solid waste from the point of use and disposal to the point of treatment or landfill. Waste collection also includes the collection of recyclable materials that technically are not waste, as part of a municipal landfill diversion program. This indicator measures the quantity of waste recycled out of the total garbage collected.	
Rationale: Increase in percentage of waste collected and recycled waste reflects good waste management and thus good environment and ecosystem management.	
Numerator: Tonnage of waste collected and recycled	
Denominator: Tonnage of waste collected	
Unit of measure: Percentage	Disaggregated By: type
Level: outcome (Impact, outcome, output)	Data Source: KCCA and Municipalities
Data Collection Methodology: Survey	
Frequency of Collection: annually	
Responsibility for Data Collection: KCCA and Municipalities	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Planning	
INDICATOR TITLE: N4 Area in the municipality covered by the Physical Development Plan	
Definition: A Physical Development Plan is a detailed urban use plan encompassing various disciplines, which seek to order and regulate land use in an efficient and ethical way, thus preventing land-use conflicts.	
Rationale: Unplanned use of land, including urban settlement interferes with the environment.	
Numerator: Area in the municipality covered by the Physical Development Plan	
Denominator: Total area in the municipality	
Unit of measure: hectares	Disaggregated By: district
Level: outcome (Impact, outcome, output)	Data Source: survey reports
Data Collection Methodology: Survey	
Frequency of Collection: annually	
Responsibility for Data Collection: KCCA and Municipalities	
Measurement Notes (optional):	
Baseline:	Target:

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Waste Management	
INDICATOR TITLE: N5 Tonnage of waste collected and disposed at waste management facility	
Definition: This indicator tracks the volume of was that is moved and deposited in a designated waste management facility.	
Rationale: Increase in volume of waste collected and disposed at the management facility reflects good waste management and thus good environment and ecosystem management.	
Numerator: Tonnage of waste collected and disposed at waste management facility	
Denominator: Total tonnage of waste produced	
Unit of measure: Tonnage	Disaggregated By: N/A
Level: Output (Impact, outcome, output)	Data Source: KCCA and Municipality reports
Data Collection Methodology: Routine monitoring and reporting	
Frequency of Collection: annually	
Responsibility for Data Collection: KCCA and Municipalities	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Planning	
INDICATOR TITLE: N6 Area (in square meters) covered by designated green spaces	
Definition: The indicator measures the Area (in square meters) covered by designated greenhouse spaces in KCCA and municipalities.	
Rationale: Green spaces play an important role of balancing ecological factors in an area.	
Numerator: Area in KCCA and municipalities (in square meters) covered by designated green spaces	
Denominator: Total Area (in square meters) of KCCA and municipalities	
Unit of measure: Square meters	Disaggregated By: District
Level: output (Impact, outcome, output)	Data Source: KCCA and Municipalities
Data Collection Methodology: Survey	
Frequency of Collection: annually	
Responsibility for Data Collection: KCCA and Municipalities	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

PERFORMANCE INDICATOR REFERENCE SHEET	
SECTOR: Planning	
INDICATOR TITLE: N7 Number of infrastructure with good standard drainage system	
Definition: Drainage is the natural or artificial removal of surface and sub-surface water from an area. Many agricultural soils need drainage to improve production or to manage water supplies.	
Rationale: Poor drainage contributed to hazards such as floods as well as waterborne diseases.	
Numerator: Number of infrastructure with good standard drainage system	
Denominator: Total number of infrastructure with good standard drainage system	
Unit of measure: Number	Disaggregated By: District
Level: output (Impact, outcome, output)	Data Source: KCCA and Municipalities
Data Collection Methodology: Survey	
Frequency of Collection: Annually	
Responsibility for Data Collection: KCCA and Municipalities	
Measurement Notes (optional):	
Baseline: TBD	Target: TBD

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