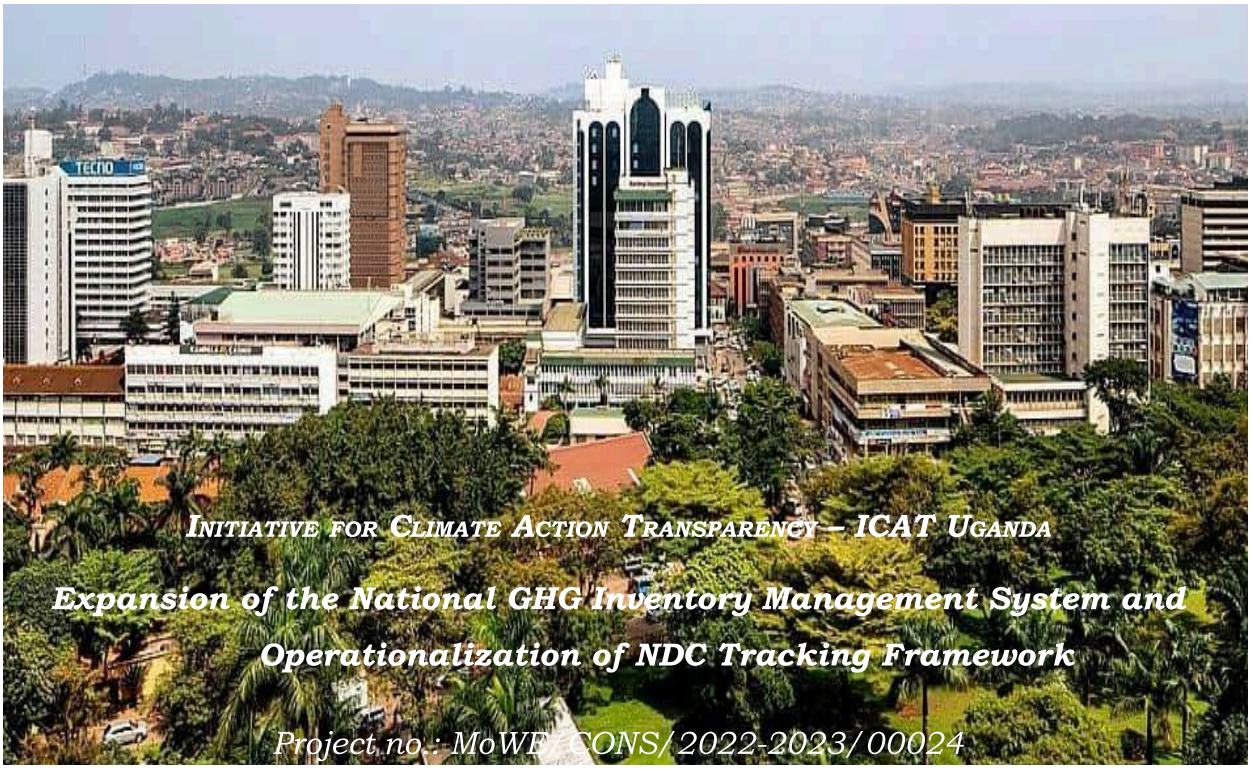

FINAL PROJECT REPORT

December 2024

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Abbreviations

CCD	Climate Change Department
GHG	Greenhouse Gas
GHGMI	Greenhouse Gas Management Institute
ICAT	Initiative for Climate Action Transparency
IPCC	Intergovernmental Panel on Climate Change
KCCA	Kampala Capital City Authority
MTIC	Ministry of Trade, Industries and Cooperatives
MoLG	Ministry of Local Government
MoWT	Ministry of Works and Transport
MEMD	Ministry of Energy and Mineral Development
MWE	Ministry of Water and Environment
NEMA	National Environment Management Authority
NDC	Nationally Determined Contribution
NEMA	National Environment Management Authority

1 INTRODUCTION

1.1 Background

The Republic of Uganda is a party to the Kyoto Protocol and signed the Paris Agreement in October 2015 and ratified it on the 21st of September 2016. Under these agreements, Uganda has several international reporting obligations to fulfil. The First National Communication was submitted in October 2002 and the Second National Communication in October 2014. The Third National Communications has recently been completed (2022). A Forest Emission Level and/or Forest Reference Level (FREL) was developed and submitted to the UNFCCC in January 2018. The First Biennial Update Report (BUR) was completed and submitted in 2019. In October 2015, Uganda submitted its Intended Nationally Determined Contribution (INDC) under Decisions 1/CP.19 and 1/CP.20 of the United Nations Convention on Climate Change (UNFCCC). That submission became Uganda's first Nationally Determined Contribution (NDC) under the Paris Agreement when it came into force on the 4th of November 2016.

Five years have passed since the first submission of the NDC by Uganda, and as required by the Paris Agreement, the NDC has gone through an update process. An Updated NDC has been produced with the support of the UNDP and was submitted to the UNFCCC in 2022. The updated NDC incorporates a suite of mitigation measures to reduce Uganda's emissions. Included in these are several mitigation actions for the transport and waste sectors which were not previously included in the INDC submitted for COP 21. Reporting requirements under the enhanced transparency framework (ETF) for action and support (Article 13) of the Paris Agreement, are more stringent and require more frequent reporting and tracking of mitigation action impacts. Uganda has started to enhance the capacity of its national experts in the climate change area and is very keen to increase the number of trained local experts as well as to improve their skills covering a range of activities in the climate change field. There is still, however, a need to: (a) improve data collection processes for GHG inventories, (b) build national capacity to complete GHG emissions projection analyses; (c) improve the ability to track NDC targets through an MRV system that fulfils the country's international obligations under the UNFCCC; and (d) consider the assessment of SDGs. The Initiative for Climate Action Transparency (ICAT) funds will, therefore, assist Uganda to address these areas and to close these gaps.

The ICAT project focused on two sectors, namely, the transport and waste sectors. These sectors are those which have new mitigation actions in Uganda's updated NDC. A needs assessment conducted during the recently completed CBIT project indicated that these two sectors have the greatest need in terms of Uganda's GHG data collection, data management and emission computation in order to have a more comprehensive national GHG inventory and assessment of their mitigation potentials.

1.2 ICAT Project Objectives

The overarching objective was to sustainably enhance the GHG emission inventory, projections, and mitigation analysis modelling capability for the Transport and Waste sectors and, enhance Uganda's ability to track the NDC actions in these two sectors.

Specific objectives were to:

i. Contribute towards ongoing efforts to build a national transparency framework that meets international standards and is tailored to domestic needs;
ii. Strengthen the national capacity to apply methodologies and tools to assess GHG and sustainable development impacts, and the effectiveness of policies, measures, actions, and plans included in Uganda's revised NDC;
iii. Contribute towards ongoing efforts to improve the availability and quality of data required to measure GHG and sustainable development impacts;
iv. Support the formulation of NDC indicators to allow consistent monitoring and evaluation of progress; and 5. Contribute to ongoing efforts to develop frameworks that facilitate tracking progress on NDC implementation while strengthening Ugandan capacities to construct and apply indicators towards that end.

1.3 Expected Outcomes

ICAT's technical support provided to the country was expected to contribute to the following outcomes:

- Uganda has sustainable capacity to compile a GHG emission inventory and projections for the Transport and Waste sectors in line with the latest UNFCCC recommendations and guidelines to support

an effective national MRV/transparency system as required under the Enhanced Transparency Framework (ETF) of the Paris Agreement

- Uganda can apply good practices and tools that integrate transparency of climate policies and actions with evidence-based policymaking, assessing the impacts of policies and measures (in terms of GHG emissions and other sustainable development factors) included in or being considered for its current and future NDCs;
- Uganda has developed, and can implement a sectoral NDC tracking framework; and
- Policymakers in the country (including the Office of the Prime Minister) are capacitated to assess the sustainable development impacts of policies and actions which will assist Uganda more effectively in achieving the objectives of both the Paris Agreement and the 2030 Agenda for Sustainable Development, including the Sustainable Development Goals (SDGs).

2 ICAT Project activities and Achievements

The ICAT Uganda Project consisted of two work streams that focused on the transport and waste sectors:

1) **Strengthen the sector working group's capacity to manage sector GHG inventories, and conduct baseline and mitigation scenario projections**.

This work stream aimed to enhance the data collection and management process for the Transport and Waste sectors to improve Uganda's ability to produce emission inventories and track the mitigation actions in the NDC.

Data collection templates were developed to assist sectors in improving the data collection process. These templates were piloted and initial data was gathered to ensure the templates are suitable for the various data providers. This base data can assist in the development of improved baseline projections and the templates can assist with the tracking of indicators for the NDC actions.

Following the enhancement of the inventory management process, the capacity of the sector working groups to develop baseline projections and mitigation impacts was strengthened. This was done through a several-day webinar series that introduced the concept of projections and their relationship to inventories.

The various tools for developing baselines and assessing mitigation impacts (GACMO, TRACE, PROSPECTS+, LEAP, ClimateSI transport model) were introduced. During the introductory tools workshop, sectors chose the LEAP, and GACMO as the most suitable tools to be used, and hands-on training was held.

As an initial step, sectoral baseline projections were developed to allow hands-on experience with the tools. This allowed for assessing the data collection and management processes for incorporating projections in the Inventory Management System. During this process, data, institutional, and resource gaps were identified, and recommendations were made for improved data collection, processing, and archiving systems for projections in the Transport and Waste sectors. Policy actions from each sector were selected to pilot the mitigation impact projections. Mitigation scenarios were developed, data collected, and mitigation impacts assessed through the use of the selected model.

2) **Enhancement and operationalization of the NDC tracking framework**.

This work stream focused on the NDC mitigation policies and measures and tracking their implementation. Stakeholder engagements were held to identify indicators for tracking the NDC policies and measures in the Transport and Waste sectors. The project engaged relevant ministries and sectoral working groups to assess relevant data needs and institutional arrangements.

The project produced an NDC tracking framework to track the actions, policies, and measures that are included in Uganda's NDC for the Transport and Waste sectors. The framework includes data reporting protocols that outline the required data for tracking indicators as well as roles and responsibilities for reporting data and conducting quality controls.

Data collection templates for tracking NDC indicators were developed, including monitoring parameters, to assist in measuring progress against NDC indicators. A roadmap to implement the NDC tracking system for the Transport and Waste sectors was developed and training was held on how to collect NDC data to operationalise the framework.

2.1 Summary of Activities and Outputs

National activities	Outputs	Status	Deliverable submission dates to UNOPS
Activity 0: Inception phase • Inception workshop • Hire consultants. • Inception reports	**Output A:** Inception workshop report **Output B:** Detailed work plan for the ICAT project	**Completed**	(22nd/08/2023) (02/09/2023
Activity 1: Strengthen sector working groups'	**Output C:** Data collection templates	**Completed**	09th/02/2024

capacity to manage sector GHG inventories for the Transport and Waste sectors • Review current inventory activity data for Transport and Waste sectors • A 2-day capacity building workshop to review current inventory and identify data requirements for moving to Tier 2 for both sectors • Develop data collection templates for the Transport and Waste sector, including Tier 2 requirements • Pilot the data collection templates	for Transport and Waste sector inventories **Output D**: Database of inventory activity data for Transport and Waste sector inventories		29TH/07/2024
Activity 2: Strengthen sector working groups' capacity to conduct baseline emission and mitigation projections • Organize an introductory webinar, together with CCD, on the various projection models (GACMO, Prospects+, TRACE, LEAP, ClimateSI) and sustainable development assessment tools.	**Output E:** Introductory modelling tools webinar report **Output F:** Training workshop report	**Completed**	11TH/04/2024 2nd/07/2024

The aim of the workshop will be to introduce the various models and tools and give a perspective on their scope and functionality in the Uganda context. The SD session will include training using an example policy from Uganda to demonstrate how a qualitative assessment is undertaken. • Organise a 1-day peer-to-peer workshop (virtual) between various ICAT country projects who have utilized these tools to provide their experiences with the tools and what the pros and cons are. • Model selection • Hold a 2-day training workshop on the selected model. The training session will be aimed at the CCD, national experts and sectoral working groups.			
Activity 3: Support data collection and processing to prepare GHG baseline and	**Output G:** Baseline and policy impact projections for the	Completed	Combined G and H January 2025

mitigation projections • Develop baseline scenario assumptions in consultation with relevant stakeholders • Review current data and collect additional data to develop sectoral baseline projections using the selected tool • Identify gaps in data, data management, institutional arrangements and resources. • Draft report on data collection and management improvement recommendations • Identify a policy or measure in each of the Transport and Waste sectors to pilot the development of a mitigation impact trajectory • Collect available data and, in conjunction with stakeholders, develop the policy impact trajectory for each sector • Draft a report on the baseline projection and policy impact trajectory for the Transport and Waste sectors	Transport and Waste sectors. **Output H:** Recommendations for improved data collection and management for baseline projections		

Activity 4: Development of a NDC tracking framework for the Transport and Waste policies and measures in the NDC • Together with stakeholders, and in conjunction with Activity 2 and 3, develop a draft set of indicators for the Transport and Waste sectors. • Develop a NDC tracking framework for the Transport and Waste sectors which includes a data reporting protocol that outlines the required data for tracking the indicators as well as responsibilities for reporting the data, and quality control and assurance arrangements. • Develop data collection templates for activity data to track the identified NDC actions in the Transport and Waste sector. **1.**	**Output I:** NDC tracking framework for the Transport and Waste sectors **Output J:** Data collection templates for tracking the indicators in the Transport and Waste sectors	**Completed**	Both 09th/04/2024 NB. (These templates have been upgraded since then)

Activity 5: Implement NDC tracking and monitoring framework at national and local government level • Create a database of mitigation activities associated with the Transport and Waste sector mitigation actions and incorporate into the iMRV system • Identify data, institutional and resource gaps to track the NDC actions. • Evaluate how the existing MRV platform can be used to manage data collection and processing for the indicator sets. • Develop a draft roadmap, which makes recommendations on how to fill the data, institutional and resource gaps, for tracking NDC actions and indicators for the Transport and Waste sectors • Conduct a validation workshop and ffinalise the roadmap • Hold 2 training sessions with	**Output K:** Database of mitigation activities in the Transport and Waste sectors **Output L:** Roadmap for the implementation of the NDC tracking system in the Transport and Waste sectors **Output M:** NDC tracking framework training workshop reports	**Completed**	11th/04/2024 January 2025

various government organizations to present the tracking framework and build awareness and assist government in operationalizing the framework.			
Activity 6: Project finalisation • Project validation workshop • Organise an endorsement workshop for the NCCAC (in-person or virtual) • Prepare a workshop report • Prepare final project close-out report, highlighting lessons learnt	**Output N:** Project close-out workshop report **Output O:** Final project report	**Completed**	January,2025

3 Lessons Learnt during Project Implementation

1) Overall project management. The successful Project coordination and implementation were made possible due to:

- Effective and flexible technical support from the GHGMI to the CCD coordination and the consultant's team. The team provided technical advice and reviews of project deliverables to meet the expected reporting standards.
- Timely disbursements of funds through UNOPS have made timely implementation of project activities as planned.

- It is prudent to implement the activities with close coordination with the sector lead agencies (focal points). This helps to identify specific sectoral needs that the project can contribute to.

2) Improving the sectoral GHG inventories, National capacities to conduct baseline projections, and Mitigation Policy Impact Assessment.

- There are still several data gaps for the two sectors, therefore, moving towards a higher tier reporting (Tier 2) would be a gradual process. A number of surveys need to be conducted for a country to come –up with country-specific emissions factors for both the transport and waste sectors.
- Although the project has ensured that relevant tools to collect and estimate emissions data are developed for the waste and transport sectors, there is a need to scale up this activity to other sectors such as AFOLU, Energy (Stationary), and IPPU.
- The coordination entity (MWE-CCD) through implementing its National Climate Act 2021, efforts are underway to develop regulations on reporting by Lead Agencies. This would enhance data sharing among institutions.
- Lead Agencies (Waste and Transport sector) have set up GHG inventory units that manage sectoral GHG inventories. This shall necessitate regular reporting of the GHG emissions as required under the National Climate Change Act and international reporting obligations
- The teams need follow-up capacity-building sessions on the management of GHG inventories and projections, and mitigation policy assessment using selected tools such as the IPCC inventory software, LEAP and GACMO and data collection templates developed for GHG and NDC tracking. This shall enable them to enhance their management and analytical skills to contribute to their day-to-day work.

3) NDC tracking

- The NDC tracking framework and tools for the two sectors were the initial domestic tools to track NDC actions. The sectors members were excited of the tools given the fact that they are demand driven and contributes effectively to the reporting needs and modalities.

- Given the fact that, the developed tools are excel-based desktop tools with a number of worksheets that sectors have to populate the data. It is prudent to support the development of a cloud based system to simplify the usability of the tools.
- Enhanced capacity building and data collection to operationalise the tools will be prudent for the sectors to wholly appreciate the out under the ICAT support.
- There is a need to scale-up the tools to other NDC sectors such as AFOLU, Energy stationery, and IPPU.

4 Conclusions

In line with the project expected outcomes,

- Uganda has a sustainable capacity to compile a GHG emission inventory and projections for the Transport and Waste sectors in line with the latest UNFCCC recommendations and guidelines. The ICAT project has significantly contributed to building capacities of both the Climate Change Department, and the Sector working groups i.e. Waste and Transport sector through, improving the sector-specific greenhouse gas database, and conducting projection analysis. In addition, this will support an effective national MRV/transparency system as
- Uganda can apply good practices and tools that integrate transparency of climate policies and actions with evidence-based policymaking. The ICAT project introduced some such tools where sectors chose GACMO and LEAP. This was followed up with hands-on training that equipped members with all relevant skills and knowledge to conduct mitigation policy assessments specifically those included in the NDC.
- Uganda has developed and can implement a sectoral NDC tracking framework for the Waste and transport sector. The tracking shall be very important to inform sectoral and national reporting, including the National NDC stocktake process
- Given the project's contributions to the two sectors, it's prudent for the CCD and partners, to scale up the best practices to other industries and sectors for a holistic tracking of the NDC actions.