

Training on the preparation of national GHG inventories for the AFOLU/LULUCF Sector

In-country support training for Sierra- Leone
Date: 27-31 May

Background

The MPGs, formulated to implement transparency in reporting under the Paris Agreement, defined specific new requirements for reporting the results of national GHG inventories. As such, information on national GHG inventory results should be included in a specific chapter of the BTR (Chapter I) and supporting information should be included in the annexes. In addition, all Parties must provide a national inventory report (NIR), which consists of a national inventory document (NID) and the common reporting tables (CRT), to the UNFCCC as part of each country's BTR submission process.

Although many countries now count on the skills to prepare national GHG inventories, which were cultivated as part of the preparation of their previous National Communications and BUR, Sierra Leone is in the final stage of submitting its first BUR report.

Sierra Leone is in the initial stage of updating the current inventory that was used to prepare the updated NDC as part of their BTR. However, the task of reporting on the associated processes that lead to the development of inventories and on the data and results is also a key aspect of ensuring that countries comply with the transparency conditions established in Article 13 and can become a challenge for the countries.

The objective of the **CBIT-GSP** is to provide streamlined support and capacity-building at the national, regional, and global levels to assist developing countries in responding to the reporting provisions under the UNFCCC and the Paris Agreement's Enhanced Transparency Framework and ultimately increase ambition for climate action. The CBIT-GSP plans to achieve this through multiple support modalities, including establishing and working 10 Regional Networks across the globe to foster south-south collaboration, knowledge-sharing, and learning among countries. The Regional Networks for Anglophone Africa are invited to participate in a joint training exercise on reporting the national GHG inventory under the MPGs, which was assessed as one of the priorities of capacity building for transparency in the regional networks.

About Sierra Leone

Sierra Leone in 2020 received support from GEF under the CBIT window to strengthen the country build and strengthen Sierra Leone's national capacity to implement the Paris Climate Agreement through the development of an effective transparency framework. The transparency framework will enable the government of Sierra Leone and other stakeholders to track impacts in prioritized sectors. The NDC for Sierra Leone covers the following areas: climate adaptation and financing, data collection and management inventory, information systems and technologies, Institutional arrangements, knowledge management and NDC tracking.

Based on the above status, the following has been done to support the transparency aspect in the country: the institutional arrangements have been established, key sector focal points have been identified and provided with capacity through training and provision of some tools to be able to collect and transfer data relating to greenhouse gases. The country is establishing an online NDC platform to track our NDC implementation, which will be housed in the EPA, which coordinates the country's CBIT implementation.

To this end, Sierra Leone requested the **CBIT-GSP** to provide support and capacity-building of Sierra Leone's technical staff in responding to the reporting provisions under the UNFCCC and the Paris Agreement's Enhanced Transparency Framework and ultimately increase ambition for climate action. Specifically, Sierra Leone's technical staff will be trained on the key elements of developing the national GHG inventories under the ETF of the Paris Agreement for the AFOLU sector.

Objective

The purpose of the GHG Inventory Training, following the IPCC 2006 Guidelines for the Agriculture, Forestry, and Other Land Use (AFOLU) sector, is to enhance the capacity of technical experts in Sierra Leone in the compilation, analysis, and reporting of greenhouse gas (GHG) inventories. This hands-on training, incorporating the IPCC software, is designed to equip the participants with the necessary skills to improve their contributions to the national reporting under the Enhanced Transparency Framework (ETF) of the Paris Agreement. The training aims to ensure that Sierra Leone's GHG inventories are accurate, comprehensive, and conform to UNFCCC modalities procedures and guidelines for reporting under the ETF, thus supporting informed policymaking and contributing to global efforts in combating climate change. The specific objectives are;

- To strengthen the capacity of Sierra Leone's technical experts in preparing and reporting GHG inventories under the ETF.
- To deepen the technical experts' understanding of the 2006 IPCC Guidelines for GHG inventories, focusing on methodologies, data collection, and reporting requirements for the AFOLU sector.

- To provide participants with practical skills in using the IPCC software for GHG inventory compilation and analysis. This includes training on data input, manipulation, and interpretation of outputs, enabling participants to accurately estimate GHG emissions and removals.
- Train national stakeholders on sectoral reporting on the inventory of emissions sources, sinks, and emissions reduction activities in the LULUCF sector consistent with the latest UNFCCC.

Audience

This activity is intended for technical officers who work as coordinators of the national GHG inventory and sectorial(s) inventory data providers in Sierra Leone. This includes data providers from the government at the national and sectoral levels and staff from other institutions that are part of Sierra Leone's institutional arrangements for reporting inventories under the UNFCCC and the Paris Agreement.

The Approach

The training will be conducted through an in-country hands-on training in Sierra Leone on the 2006 IPCC guidelines for national greenhouse gas inventories for AFOLU, including the IPCC inventory software. It is envisaged that through this training, participants will acquire the necessary knowledge and insights for reporting the national inventory under the ETF. The consultant will give an overview of the new requirements for reporting of national GHG inventories under the Paris Agreement (MPGs) and associated flexibility provisions, through the governance and procedural processes necessary for sustainable GHG inventory process under the ETF.

Dates

- The in-country **27-31 May 2024**.

In-person workshop

Proposed technical contents for an agenda for the in-person workshop:

GHG Inventory Process: IPCC 2006 Guidelines and IPCC Software
Cross Cutting Issues
<ul style="list-style-type: none"> • Methodological approaches. • Data needs and data collection issues • Data gap filling techniques • Uncertainty analysis • Key Category analysis
<ul style="list-style-type: none"> • Overview of the AFOLU (Agriculture and Forestry) sector in the IPCC 2006 Inventory Guidelines • Collection of AFOLU sector Activity data • Methodological Approaches in the Agriculture and FOLU sub-sectors • Assigning Uncertainties for AD in the AFOLU sector
IPCC Software (New version)

Detailed agenda for the five days hands on training 27 -31 May 2024.

Day 1:27 May - Cross Cutting Issues: Good Practice Elements		
08:30 - 09:00	Registration	
09:00 – 09:30	Opening Session <ul style="list-style-type: none"> - Welcome remarks Kenya. - Welcome remarks CBIT-GSP - Introductions of participants - Workshop objectives 	Sierra Leone Representative CBIT-GSP Representative
0930-10:00	Country Experience <ul style="list-style-type: none"> • GHG Inventory process in Sierra Leone • Challenges and lessons learned 	Sierra Leone Representative
10:30-10:55	Overview of reporting requirements for the GHG inventory and MPGs including application of flexibility requirements	UNEP-CCC Consultant
10:55-11:50	Guidance on good practice elements	UNEP-CCC - Consultant

	<ul style="list-style-type: none"> - Guidance on good practice elements - Approaches to data collection - Uncertainty analysis- plus excel practice exercise 	
11:50-12:00	Health Break	
12:00-12:25	<p>Guidance on good practice elements</p> <ul style="list-style-type: none"> - Methodological choice & key category analysis 	UNEP-CCC - Consultant
12:25-13:00	<p>Guidance on good practice elements</p> <ul style="list-style-type: none"> - Time series consistency - Practice of gap filling exercise 	UNEP-CCC - Consultant
13:00-	Lunch	
14:00-14:30	<p>Guidance on good practice elements (continued)</p> <ul style="list-style-type: none"> - Time series consistency <p>Practice of gap filling exercise</p>	UNEP-CCC - Consultant
14:30-16:30	<p>2006 IPCC Inventory Software</p> <ul style="list-style-type: none"> - Overview of the IPCC Software - Installing and navigating the IPCC software. - Basic functionalities and data management within the software. - IPCC Presentation on Interoperability - Understanding Common Reporting Tables (CRT) <p>Software administration and control levels</p>	UNEP-CCC - Consultant
16:30-17:00	Closing session: Recap of the workshop, open discussion for questions	UNEP-CCC - Consultant
Day 2: 28 May. - The national GHG inventory for Agriculture, Forestry and Other Land Use sector in accordance with the 2006 IPCC guidelines		
09:00 – 09:30	Overview of the AFOLU sector's role in GHG emissions.	UNEP-CCC - Consultant

09:30-10:00	Agriculture inventory and challenges in Sierra Leone	Sierra Leone Representative
10:00-10:30	AFOLU Sector overview and challenges in Sierra Leone	Sierra Leone Representative
10:30-11:30	<p>Overview of categories within the agriculture sector: Methodologies and Data requirements</p> <ul style="list-style-type: none"> - 3A Livestock categories' - 3C Aggregate sources and non-CO2 emissions on Land 	UNEP-CCC - Consultant
11:30-11:45	Health break	
11:45-12:15	<p>Data Requirements and Sources for the Agriculture Sector</p> <ul style="list-style-type: none"> - Types of data needed, sources, and methodologies for data collection (3A and 3C). - Challenges in data collection and strategies to overcome them. 	UNEP-CCC - Consultant
12:15-13:00	<p>Data Requirements and Sources for the Agriculture Sector</p> <ul style="list-style-type: none"> - Data collection templates (3A and 3C) - Practical Exercises in Excel 	UNEP-CCC - Consultant
13:00-14:00	Lunch	
14:00-16:30	<p>IPCC Inventory software- Agriculture sector demonstration</p> <ul style="list-style-type: none"> • Understanding Livestock Manager • Simulation exercise on inventory compilation • Entering basic data and understanding software functionalities related to the agriculture sector. • Reporting tables (CRT 3A and 3C) 	UNEP-CCC - Consultant

16:30-17:00	Closing session: Recap of the workshop, open discussion for questions	UNEP-CCC - Consultant
DAY 3: 29 May - Land Use, Land Use Change and Forestry -LULUCF sector		
09:00-09:30	LULUCF Inventory in Sierra Leone: Country experience and challenges	Kenyan Representative
09:30-10:00	The national GHG inventory for the LULUCF sector in accordance with the 2006 IPCC guidelines (3B Land)	UNEP-CCC - Consultant
10:00-10:45	Addressing the issues of activity data collection in the LULUCF sector, aiming to ensure consistent and complete GHG emission/removals time series, with a focus on practical examples related to: <ul style="list-style-type: none"> I. Identifying the most relevant Activity Data (AD) for land representation. II. Adapting national land classification systems to IPCC land use categories - 	UNEP-CCC - Consultant
10:45-10:55	Health Break	
10:55-12:00	Addressing the issues of activity data collection in the LULUCF sector, aiming to ensure consistent and complete GHG emission/removals time series, with a focus on practical examples related to: <ul style="list-style-type: none"> - Land representation. <ul style="list-style-type: none"> - Understanding the creation of land use transition matrices based on land cover maps and, - Understanding how to generate a consistent time series using agreed IPCC gap filling techniques. 	UNEP-CCC - Consultant

12:00-13:00	-Assessing activity data uncertainties in LULUCF. - Exploring relevant tools to support country's transition to ETF and enhance data collection and reporting in the LULUCF sector	UNEP-CCC - Consultant
13:00-14:00	Lunch	
14:00-16:30	IPCC Methodological guidance to estimating GHG emissions/removals from sources/sinks for the LULUCF sector. Introduction and definition of basic concepts <ul style="list-style-type: none"> - Carbon Pools - Living biomass and dead organic matter - Soil organic matter in mineral soils - Soil organic matter in organic soils - Harvested wood products. 	UNEP-CCC - Consultant
16:30-17:00	Closing session: Recap of the workshop, open discussion for questions	UNEP-CCC - Consultant
DAY 4: 30 May- Land Use, Land Use Change and Forestry -LULUCF sector		
09:00 – 09:30	IPCC Methodological guidance to estimating GHG emissions/removals from sources/sinks for the LULUCF sector	UNEP-CCC - Consultant
09:30-10:30	Carbon stock changes in living Biomass- Biomass Carbon pool. <ul style="list-style-type: none"> - Biomass: Land Remaining in a Land-use Category and land converted to another category - Exercise 	UNEP-CCC - Consultant
10:30-11:15	Carbon stock changes in living Biomass- Biomass Carbon pool. -Biomass: Land Remaining in a Land-use Category and land converted to another category	UNEP-CCC - Consultant

	-Exercise	
11:15-11:25	Health Break	
11:25- 12:25	Carbon stock changes in living Dead Organic Matter- DOM -DOM: Land Remaining in a Land-use Category and land converted to another category - Exercise	UNEP-CCC - Consultant
12:25-13:00	Carbon stock changes in living Dead Organic Matter- DOM -DOM: Land Remaining in a Land-use Category and land converted to another category - Exercise	UNEP-CCC - Consultant
13:00-14:00	Lunch	
14:00- 16:30	Carbon stock changes in Soil Organic Matter (SOM) carbon pool -SOM in Mineral Soils - SOM in Organic Soils - Exercises	UNEP-CCC - Consultant
16:30-17:00	Closing session: Recap of the workshop, open discussion for questions	UNEP-CCC - Consultant
Day 5: 31 May – Land Use, Land Use Change and Forestry -LULUCF sector		
09:00 – 09:30	Simulation of the IPCC Inventory Software - IPCC inventory software -Land type manager. - IPCC inventory software- Land representation. Hands-on exercise on entering data for Forest Land.	UNEP-CCC - Consultant
09:30-10:00	Simulation of the IPCC Inventory Software	UNEP-CCC - Consultant

	<ul style="list-style-type: none"> - IPCC inventory software -Land type manager. - IPCC inventory software- Land representation. <p>Hands-on exercise on entering data for Forest Land.</p>	
10:00-10:45	<p>Simulation of the IPCC Inventory Software</p> <ul style="list-style-type: none"> - IPCC inventory software -Land type manager. - IPCC inventory software- Land representation. <p>Hands-on exercise on entering data for Forest Land.</p>	UNEP-CCC - Consultant
10:45-11:15	<p>Simulation of the IPCC Inventory Software</p> <ul style="list-style-type: none"> - IPCC inventory software -Land type manager. - IPCC inventory software- Land representation. <p>Hands-on exercise on entering data for Forest Land.</p>	UNEP-CCC - Consultant
11:00-11:10	Health Break	
11:10-13:00	<p>Simulation of the IPCC Inventory Software</p> <ul style="list-style-type: none"> - IPCC inventory software -Land type manager. - IPCC inventory software- Land representation. <p>Hands-on exercise on entering data for Forest Land.</p>	UNEP-CCC - Consultant
13:00-14:00	Lunch	
14:00-14:45	<p>Simulation of the IPCC Inventory Software</p> <ul style="list-style-type: none"> - IPCC inventory software -Land type manager. 	UNEP-CCC - Consultant

	<ul style="list-style-type: none"> - IPCC inventory software- Land representation. <p>Hands-on exercise on entering data for Forest Land.</p>	
14:45- 16:30	<p>Simulation of the IPCC Inventory Software</p> <ul style="list-style-type: none"> - IPCC inventory software -Land type manager. - IPCC inventory software- Land representation. <p>Hands-on exercise on entering data for Cropland.</p>	UNEP-CCC - Consultant
16:30-17:00	Closing session: Recap of the workshop, open discussion for questions	UNEP-CCC - Consultant