Land Use Classification, QA/QC Procedures and Tools for the LULUCF Sector Towards National GHG Inventory Improvement

-- Training of Trainers (ToT) for Turkmenistan --

3-5 April 2024, Ashgabat, Turkmenistan

Background

Under the new reporting requirements of the Article 13 under the Paris Agreement, the Parties have to report on their regular GHG Inventories to the United Nations Framework Convention on Climate Change (UNFCCC) as part of their Biennial Transparency Reports (BTRs). With this in mind, the UNFCCC Decision 17/CP.8, 18CMA.1 and 5/CMA.3 under the Paris Agreement, Article 15, recommends the use of the Intergovernmental Panel on Climate Change (IPCC) guidelines, particularly the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 IPCC Guidelines) and IPCC Inventory Software, in the estimation and reporting of national GHG inventories.

The *Capacity-building Initiative for Transparency – Global Support Programme* (CBIT-GSP) is a five-year global project, funded by the Global Environment Facility (GEF), implemented by the United Nations Environment Programme (UNEP) and executed by the UNEP – Copenhagen Climate Center (UNEP-CCC). The objective of the CBIT-GSP is to provide streamlined support and capacity-building at the national, regional, and global level 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.

Turkmenistan intends to start the development of its first BTR this year and being the member of the Regional Network for Transparency in Central Asia and the Caucasus under the CBIT-GSP project, requested support to improve its national GHG Inventory for Land use, land use changes and forestry sector (LULUCF) Sector. FAO supported the CBIT-GSP and the team of Turkmenistan in collaborating with the trainer/resource person on LULUCF with English and Russian skills.

To address the request, CBIT-GSP in close collaboration with FAO, and UNDP of Turkmenistan intends to organize and deliver a two-day training on Land use classification, QA/QC procedures, and tools for the LULUCF Sector.

Objective

The main objective of this training is to **support the national GHG Inventory team of Turkmenistan, particularly experts involved in conducting GHG inventory for LULUCF sector** in determining the land use categories according to the land use classification provided by the 2006 IPCC Guidelines: forests, croplands, grasslands, wetlands, settlement, other lands, and their sub-categorization, applying QA/QC procedures and using different tools, for instance the IPCC Inventory Software, as the most mirroring tool of the 2006 IPCC Guideline, that gives the opportunity to create and maintain data archive needed for

conducting GHG inventory on a regular basis. This will allow to perform accounting for emissions and removals in specific carbon pools, considering national circumstances, stratification of national data and different activities (i.e., management practices) throughout land-use categories.

The obtained knowledge and experience during the training will enhance national capacity on GHG Inventory for the LULUCF sector of the next submission under the UNFCCC.

Approach

The training is designed as a **Training for Trainers (ToT)** and intend to increase the level of knowledge of the current pool of experts from the key ministries and departments, who are involved in collecting data, developing national indicative parameters, and compiling the national GHG Inventory (LULUCF sector) by using the 2006 IPCC Guidelines. It is expected that the approach intended to be used for this training will enhance experts' capacity in conducting national GHG Inventory of LULUCF sector in Turkmenistan as essential part of future official submission under the UNFCCC.

Before the training, the team of experts/participants are requested to familiarize with the Third National Communication of Turkmenistan under the UNFCCC, which includes the latest GHG Inventory for LULUCF sector. This will help them to utilize the training materials in the most efficient way including through active participation in a discussion during questions and answers (Q&A) sessions and practical exercises. The participants are also encouraged to install the latest IPCC Inventory Software prior to the training. The most recent version of the software is available at the IPCC TFI website (https://www.ipcc-ggip.iges.or.jp/software/index.html).

Target Audience

This event is intended for technical experts who deal with the national GHG inventory development, including those providing activity data, developing national indicative parameters, and those compiling the data for the GHG inventory of LULUCF sector purpose. Based on the practical example with applying the IPCC Inventory Software for the LULUCF Sector, experts will enhance their knowledge on land use classification with regard of matching national land use categories to the ones defined by the 2006 IPCC Guidelines.

Venue

The training will be conducted at the premises of the United Nations Development Programme, in the training room, with access to the internet and computers.

Duration and Language

The training will last for 3 days and will be delivered **in Russian**.

Proposed Agenda

Day 1: 3 April 2024 (Wednesday)

Time	Session
08.30 – 09:00	**Registration of the participants**
09.00 – 09:30	**Opening of the training and welcoming remarks:** - On behalf of the Government of Turkmenistan - On behalf of CBIT-GSP FAO and UNDP **Moderator: TBD**
09:30 – 10:30	**Introductory Session: Setting the scene** - Latest National GHG Inventory of the LULUCF sector of Turkmenistan under the UNFCCC: overall trend, outputs per categories - Behind the scenes: institutional arrangements, methodologies, data collection, data gaps, uncertainties, existing tools for calculation - Q&A - Discussion **Moderator:** TBD
10:30 – 11:00	**Coffee-break**
11:00 – 11:30	Pre-assessment of the participants' knowledge level (2006 IPCC Guidelines and IPCC Inventory Software) and expectations from the training
11:30 – 12:30	**Session 1: Overview of the Land Use Classification provided by the 2006 IPCC Guidelines** - Different approaches for Land representation. Main land use categories: forest land, cropland, grassland, wetlands, settlements and other lands, and their sub-categorization and stratification. - Concept of building a Land-use matrix - Q&A
12:30 – 13:30	**Lunch**
13:30 – 14:30	**Session 2: National land use categories classification. Matching with the land use categorization provided by the 2006 IPCC Guidelines** - Practical activity using available national data
14:30 – 15:30	**Session 3: Selection of approach for national land representation according to the 2006 IPCC Guidelines, building Land Use Matrix** - Practical activity using available national data
15:30 – 16:00	**Coffee-break**
16:00 – 16:45	**Session 4: Overview of a tool that can assist conducting GHGI for LULUCF sector, particularly the IPCC Inventory Software** - Key technical instructions and requirements pertaining to the installation and use of the IPCC Inventory Software - General structure, features and functionalities of the IPCC inventory
16:45 – 17:00	**Recap of the Day 1**

Day 2: 4 April 2024 (Thursday)

Time	Session
09.00 – 10:30	**Session 5: Use of the IPCC Inventory Software for National GHG inventories in the LULUCF Sector. Initial Step to start GHGI for LULUCF sector using the IPCC Inventory Software.** **Part 1. Land Representation Manager** - Familiarizing with the Land Representation Manager functionality - Practical exercise with available national data as a data entry
10:30 – 11:00	**Coffee-break**
11:00 – 12:30	**Session 5: Part 2. Land Use Manager** - Familiarizing with the Land Use Manager functionality, Land Use Matrix - Practical exercise with available national data as a data entry
12:30 – 13:30	**Lunch**
13:30 – 15:30	**Session 6: Conducting GHG Inventory. Part 1. Forest Land** - Use the LULUCF-specific worksheets of the software - Navigation through categories, inserting activity data, etc. - Practical exercises
15:30 – 16:00	**Coffee-break**
16:00 – 16:45	**Session 6: Part 2. Cropland** - Use the LULUCF-specific worksheets of the software - Navigation through categories, inserting activity data, etc. - Practical exercises
16:45 – 17:00	**Recap of the Day 2**

Day 3: 5 April 2024 (Friday)

Time	Session
09.00 – 10:30	**Session 6: Part 3. Grassland** - Use the LULUCF-specific worksheets of the software - Navigation through categories, inserting activity data, etc. - Practical exercises
10:30 – 11:00	**Coffee-break**
11:00 – 12:30	**Session 6: Part 4. Wetlands, Settlements and Other Land** - Use the LULUCF-specific worksheets of the software - Navigation through categories, inserting activity data, etc. - Practical exercises
12:30 – 13:30	**Lunch**
13:30 – 15:30	**Session 7: Reporting in the LULUCF Sector** - Summarizing the LULUCF inventory, including import/export functions - Reporting
15:30 – 16:00	**Coffee-break**

16:00 – 16:30	Post-assessment of the training
16:30 – 16:50	**Lessons Learned and Next Steps** - Lessons learned from the training - Planning of the next steps
16:50 – 17:00	**Closure of the training and closing remarks**