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ONLINE WORKSHOP

Capacity Building on the IPCC 2013 Wetlands Supplement, FREL Diagnostic and Uncertainty Analysis

13 -17 April 2020

Background

Under its Nationally Determined Contribution (NDC), Indonesia has committed to reducing its greenhouse gas (GHG) emissions unconditionally by 26% by 2020, and by 29% by 2030 compared to a business-as-usual scenario. The Forest Reference Emission Level (FREL), which covers emissions from deforestation, forest degradation and peat decomposition, was set at 0.57 Gt CO_2e yr^{-1} using 1990–2012 as reference period. It was submitted to the UNFCCC in 2016 and used as the benchmark for evaluating REDD+ performance against actual emissions during the 2013–2020 implementation period.

As Indonesia ranks among the world's top holders of high-carbon reservoir in wetlands, peatlands and mangroves have been identified as major areas for FREL improvement and national MRV systems refinement for GHG accounting. Since wetlands were not accounted separately, there are some sources of GHG that are missing in the current FREL, including: (i) emissions from fires that do not lead to deforestation or degradation (ii) annual non-CO_2 GHG emissions from drained peatlands, including CH_4 and N_2O emissions, and (iii) emissions from dissolved organic carbon (DOC). At the same time substantial missing sinks, including: (i) regeneration and natural expansion of mangroves, (ii) standing secondary forests sinks (mangroves, peatlands and non-wetland forests), and (iii) restored and rewetted peatlands will have to be accounted for.

To this end, assessment of the transparency, accuracy, completeness, consistency and comparability (TACCC) is deem necessary to comply with UNFCCC principles. Identifying underrepresented forest dynamics (sources/sinks) in Indonesian wetlands and consequently incorporating them would eventually improve FREL estimates.

Along this line this workshop is organized to facilitate the use and familiarization of the IPCC 2013 Wetlands Supplement. The dialogue will also allow participants to explore data mining and sharing from nationally and globally available sources for use in the proposed FREL improvement.

Goal and objectives

The overall goal of the workshop is to build the capacity of officials of the Government of Indonesia (GoI) in improving and developing FREL. Therefore, the workshop is designed to have a direct interaction and two-way communication with GoI officials with the following specific objectives:

1. To familiarize with the IPCC 2013 Wetlands Supplement through hands-on sessions on the use and understanding of the Wetland Supplement for peatlands and mangroves by navigating through Chapter 2 (Drained organic soils), Chapter 3 (Rewetted organic soil), and Chapter 4 (Coastal wetlands) of the Supplement; and providing scientific background for some key EF (e.g. peat fire, peat decomposition) for a better understanding on how to develop Tier 2 EF.
2. To present Transparency, Accuracy, Comparability, Completeness, Consistency (TACCC) principles of the UNFCCC to improve the existing FREL 2016
3. To introduce Monte Carlo simulations to estimate uncertainty values for the FREL

Program

The program is designed to allow exchange of knowledge and experience among participants and facilitators/ resource persons in the following areas:

- Methods: The use of IPCC Wetland Supplement, especially Chapter 2, 3 and 4
- Methods: Introduction to uncertainty analysis (Monte Carlo)
- Data: identification of data availability and gaps through TACCC diagnostic

Date and Platform

The workshop will be held through 90 minutes Webinar on 13-17 April 2020.

Expected outputs

- Participants familiarize themselves with the IPCC 2013 Supplement on Wetlands
- Participants are aware of the gaps of data and information (missing sources and sinks) to improve the FREL following quality control and quality assurance (QA/QC) exercise
- Participants are well-equipped with methods and analytical capacity to further develop an improved FREL

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Agenda

Monday, 13 April 2020 | Capacity building on the IPCC 2013 Wetlands Supplement		
08.30-08.45	**Internet Connection and preparation**	*Host:* **Vito Kapilarang,** CIFOR
08.45-09.30	**Opening** **1. Introduction** — **Daniel Murdiyarso,** CIFOR **2. Welcoming and opening remarks** — **Ruandha Sugardiman,** MoEF **3. Roadmap to FREL 2020** — **Syaiful Anwar,** MoEF	
09.30-10.00	**Session 1** **Peatland emission factors** Navigating Chapters 2 (Drained organic soils) and 3 (Rewetted organic soils) *Points of discussion:* • Peat emission factors used in the FREL 2016 and planned to be used in the FREL 2020	*Resource persons:* **Kristell Hergoualc'h,** CIFOR **Erin Swails,** CIFOR
10.00-10.30	**Session 2** **Peatland emission factors** Scientific background on some key emission factors (e.g. peat fire, peat decomposition) for a better understanding on how to develop Tier 2 emission factors *Points of discussion:* • Data availability and gaps	*Resource persons:* **Kristell Hergoualc'h,** CIFOR **Erin Swails,** CIFOR
Tuesday, 14 April 2020		
09.00-09.30	**Session 3** **Mangrove emission factors** Navigating Chapter 4 (Coastal Wetlands) *Points of discussion:* • Mangrove emission factors to be used in the FREL 2020	*Resource persons:* **Daniel Murdiyarso,** CIFOR **Sigit Sasmito,** CIFOR
09.30-10.00	**Session 4** **Mangrove emission factors** Scientific background on some key emission factors (based on changes in above ground C stocks, belowground C stocks, soil C stocks, total ecosystem C stocks) for a better understanding on how to develop Tier 2 emission factors *Points of discussion:* • Data availability and gaps	*Resource persons:* **Daniel Murdiyarso,** CIFOR **Sigit Sasmito,** CIFOR
10.00-10.30	**Summary and way forward**	*Facilitator:* **Rupesh Bhomia,** CIFOR
Wednesday, 15 April 2020 | Capacity building on FREL uncertainties		
09.00-09.30	**Session 5** **FREL uncertainty estimates** Description of options for estimating uncertainties under the IPCC 2006 guidelines *Points of discussion:* • What is needed to reduce uncertainty?	*Resource person:* **Oswaldo Carrillo,** CIFOR
09.30-10.00	**Session 6** **FREL uncertainty estimates** Description of the process of compiling the data needed to run the Monte Carlo simulations Running Monte Carlo simulations with Indonesian FREL data *Points of discussion:* • What is the acceptable uncertainty for an improved FREL 2020 • What at does it take?	*Resource person:* **Oswaldo Carrillo,** CIFOR
10.00-10.30	**Summary and way forward**	*Facilitator:* **Rupesh Bhomia,** CIFOR

Agenda

Thursday, 16 April 2020 | Capacity building on UNFCCC principles		
09.00-09.30	**Session 7** **TACCC principles** Description of TACCC principles *Points of discussion:* • How TACCC diagnose can be used to improve FREL 2020	*Resource person:* **Zuel Araujo,** CIFOR
09.30-10.00	**Session 8** **TACCC principles** Diagnostic of how the existing FREL 2016 could be improved to better align with the TACCC principles *Points of discussion:* • What was in FREL 2016? • What have to be there in FREL 2020?	*Resource person:* **Zuel Araujo,** CIFOR
10.00-10.30	**Summary and way forward**	*Facilitator:* **Rupesh Bhomia,** CIFOR

Friday, 17 April 2020 | FREL 2016 and FREL 2020: How best to support a better accounting of wtelands?		
09.00-09.30	**Session 9** **How best to support FREL improvement?** To understand how best to support the GoI in its FREL 2020 submission; particularly regarding the data needs and preferences and the accuracy requirements. This would imply understanding on: • The selected FREL emissions/sinks • Preferences on how best to support GoI on the non-selected emissions/sources • Description of the MRV system to support FREL 2020 submission • Description of the FREL uncertainty estimates	*Resource person:* **Belinda Margono,** MoEF
09.30-10.00	**Session 10** **Open discussion** 1. To understand the best way to request and access data from FREL 2016 and FREL 2020, so that diagnostics and improvements can be suggested and done for the next FREL submissions. 2. To integrate the uncertainty analysis based on Monte Carlo Simulations and identifying focal points within the Government that can support hands-on collaboration to run these simulations.	*Resource persons:* **Daniel Murdiyarso**, CIFOR **Rupesh Bhomia**, CIFOR **Kristell Hergoualc'h**, CIFOR
10.30	**Closing**	

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