

First Circular

Workshop on TROPICAL WETLAND ECOSYSTEMS OF INDONESIA: SCIENCE NEEDS TO ADDRESS CLIMATE CHANGE ADAPTATION AND MITIGATION

Sanur Beach Hotel, Bali
11 – 14 April 2011

Background

Tropical wetlands provide a broad array of ecosystem services. Among the least studied value of global significance is their function as significant global carbon (C) pools.

Recent studies demonstrated that C stocks in peatlands and mangroves of Southeast Asia are over twice that of most upland tropical and temperate forests. However, information on C stocks and fluxes and on emissions and removals of non-CO₂ greenhouse gases (GHG) (methane (CH₄) and nitrous oxide (N₂O)) are limited. Therefore, it remains difficult to assess how land use/land cover change affects GHG fluxes and to set up reference emission levels for a REDD+ mechanism in wetland ecosystems.

With the implementation of REDD+, it is important to improve our knowledge on C stocks and fluxes and on non-CO₂ GHG fluxes of tropical wetlands. Hence, this workshop is designed to provide information and an initial blueprint for the development of the international REDD+ mechanism in wetlands.

Objectives

- Communicate the state-of-the-science in understanding the extent, structure, function, and status of tropical wetlands of the Indonesian Archipelago.
- Discuss and delineate the greatest uncertainties in accurately quantifying the extent, structure, function, and status of tropical wetlands of the Indonesian Archipelago.
- Discuss and delineate the uncertainties and information needs to accurately quantify GHG flux changes resulting from land use/land cover change in tropical wetlands.
- Discuss the possibility, value and need to establish a multiyear interdisciplinary research program centered upon Indonesian tropical wetlands – similar to the Large-scale Biosphere-Atmosphere experiment (LBA) of the Brazilian Amazon, a Brazilian-led interdisciplinary effort to study human impacts on tropical forest ecology in the Amazon region of Brazil.
- Provide additional inputs to inform and improve IPCC guidelines on tropical wetlands.
- Build capacity and synergy among the Indonesian science community related to the multiple scientific disciplines of tropical wetlands.





Workshop Structure

The workshop will be a combination of invited presentations, individual submitted talks, discussions, and small group discussions. To address the purpose and objectives of the workshop, the program will focus on the following topics:

- C stocks and C stock changes from land use/land cover change in peatlands and mangroves: quantification and uncertainties
- Wetlands fires: extent, emissions, and biomass losses
- CO₂ and non-CO₂ GHG fluxes and flux changes from land use/land cover change in peatlands and mangroves using different techniques
- Remote sensing of peatlands and mangroves – extent and land use/land cover change ecosystem
- Ecosystem modeling of tropical wetlands dynamics
- Human dimensions of land use/land cover change and climate change
- Links with the IPCC processes (guidelines, activity data, and emission factors)

Participants

The workshop is intended to provide a platform for interaction among researchers, scientists and other stakeholders from a broad diversity of backgrounds and experiences that are working or have interest on issues related to wetlands in Indonesia. It is expected that around 60 participants will be joining the workshop.

Contacts

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