



Wetlands and Climate Mitigation

Daniel Murdiyarso, CIFOR

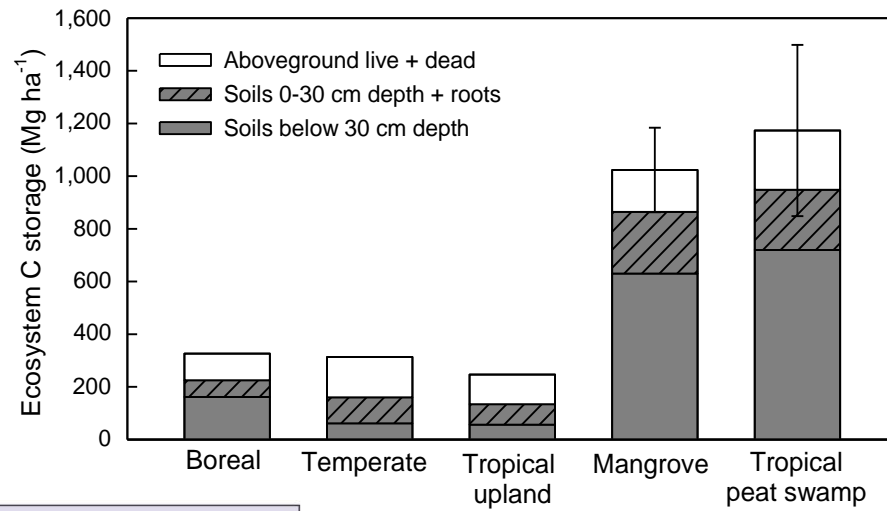
SWAMP

Sustainable Wetlands Adaptation and Mitigation Program

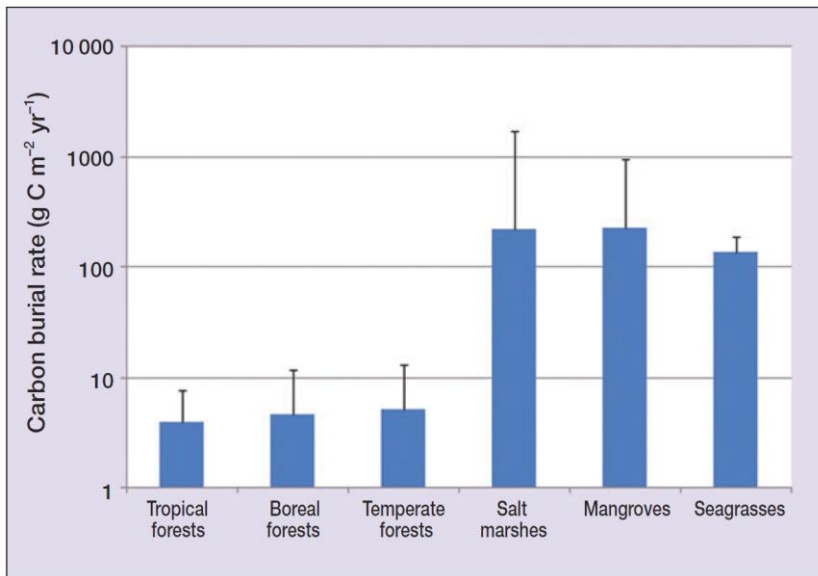


RESEARCH
PROGRAM ON
Forests, Trees and
Agroforestry

Wetlands: high-carbon reservoirs

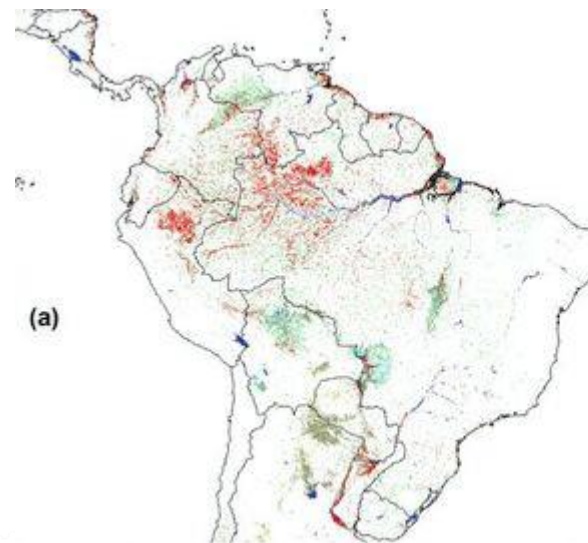
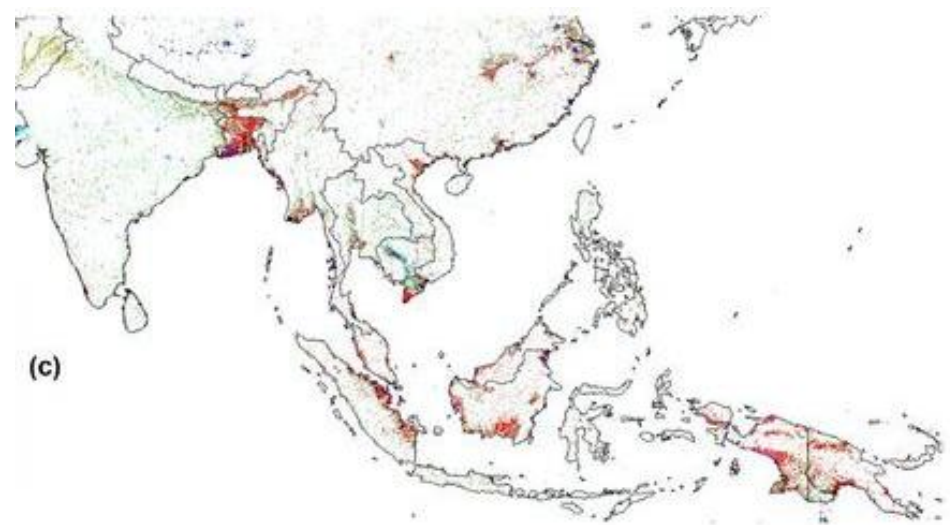
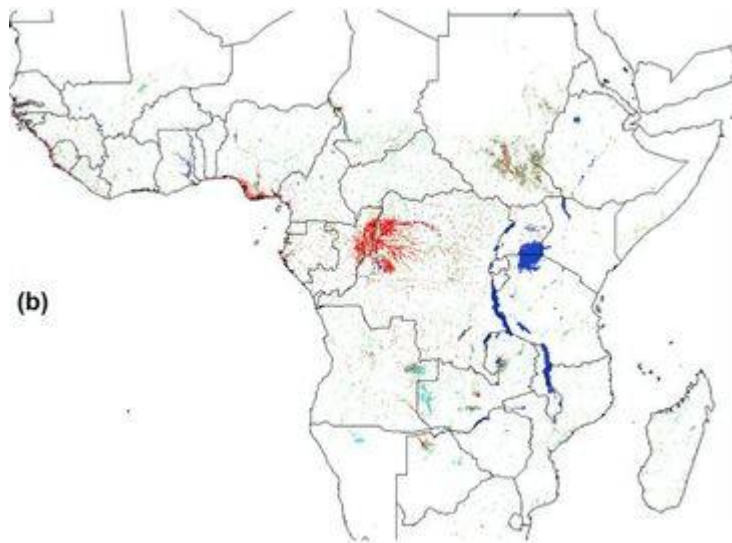


Donato et al. (2011) Nature Geoscience



McLeod et al. (2011) Front Ecol Environ

Global wetlands map



Wetland classes

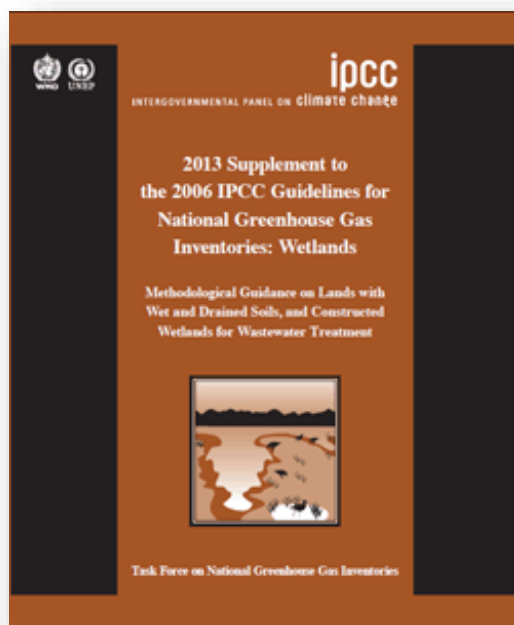
- Open water
- Mangroves
- Swamps-bogs
- Fens
- Riverine
- Floodouts
- Floodplains
- Marshes
- Dryland wetlands
- Wet meadows

| Region | Country | Area | Volume | Depth |
|---------------|------------------|-----------------|-----------------|-------|
| | | km ² | km ³ | m |
| Asia | Indonesia | 225,420 | 1,388 | 3.4 |
| | Malaysia | 29,649 | 180 | 3.4 |
| | Papua New Guinea | 45,018 | 220 | 3.2 |
| South America | Brazil | 312,250 | 1,489 | 3.1 |
| | Colombia | 74,950 | 327 | 2.9 |
| | Peru | 74,644 | 449 | 2.8 |
| Africa | Congo DRC | 115,690 | 747 | 3.1 |
| | Congo | 43,769 | 345 | 3.3 |
| | Nigeria | 21,685 | 114 | 3.1 |

Gumbricht et al. 2017. GCB

2013 SUPPLEMENT TO THE 2006 IPCC GUIDELINES FOR NATIONAL GREENHOUSE GAS INVENTORIES: WETLANDS

<http://www.ipcc-nggip.iges.or.jp/home/wetlands.html>



1. Introduction
2. Drained Inland Organic Soils
3. Rewetted Organic Soils
4. Coastal Wetlands
5. Inland Wetland Organic Soils
6. Constructed Wetlands for Wastewater Treatment
7. Cross-cutting Issues and Reporting



THANK YOU

www.cifor.org/swamp



CENTER FOR INTERNATIONAL FORESTRY RESEARCH

