



GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

**CROPLANDS RESEARCH GROUP:
Peatland Management Network**

Co-chairs: Hanna Silvennoinen (Simon Weldon?), Fahmuddin Agus

Membership:...?

For GRA meeting on Jan. 17 and 18, 2023 in Seville Spain and online

Assumed Membership

| Member Countries with Boreal and Temperate Peatland | Member countries with Tropical Peatland |
|---|---|
| Norway | Indonesia |
| UK | Malaysia |
| Ireland | Brazil |
| Finland | Peru |
| USA | Costa Rica |
| Canada | Argentina |
| Sweden | Chile |
|? | Congo |
| |? |

- Please confirm that your country is a member or would like to be a member
- We need to choose who will be the co-chairs; perhaps one from the boreal/temperate area and the other from the tropical area?
- The co-chairs may need to plan a meeting to discuss activity priorities and possible joint proposal

Activities/Accomplishment since last meeting

- Exchange of emails between Indonesia and the new representative of Norway (Dr. Simon Weldon)
- “Slowing-down” our research activities (on GHG Inventory Improvement) due to a major reorganization in Indonesia

■ Research (funding) Opportunities:

| Research Topics | Potential funding source |
|--|---|
| Improving nutrient (especially K, Ca, Mg, B) management by using stonemeal: Economic feasibility and GHG intensity reduction | BPDPKS (agency for managing palm oil export levy) |
| Enhancing carbon stock using biochar | ?? |
| Water table management for reconciling oil yield and GHG emissions | ?? |
| ??? | ?? |

Barriers / Opportunities to achieving **C neutrality** in cropping systems

■ Facts about peat emissions

- Drained peat continue to emit CO₂ through heterotrophic decomposition
- Drained peat is prone to fire
- The emission rate may decrease with time since the drainage commences, but unlikely stop as long as the peat is drained
- CO₂ removal by plants is much lower than that of emission by decomposition.

Barriers / Opportunities to achieving **C neutrality** in cropping systems

- **Barriers:**

- Current high economic-value, and high market demand crops are cultivated under drained peat condition, rather than under undrained condition (paludiculture)
- In some countries agricultural areas under drained peatland are relatively large, and it contribute to a high emission source

- **Opportunities:**

- There are regulations in many countries on peatland protection
- Emission reduction from peatland is an important part of NDC among parties to the UNFCCC