Component 2-Peatland



This component is currently led by

- Lillian Øygarden, Norway, (lillian.oygarden@nibio.no)
- Kristiina Regina, Finland (kristiina.regina@mtt.fi)
- Åsa Kasimir Klemedtsson, Sweden (asa.kasimir@gvc.gu.se)
- Countries expressed in terest; Finland, Sweden, Norway, Denmark, USA, Canada, Germany, UK, Malaysia, Japan, Indonesia, Switzerland, The Netherlands.
- Others ?





Expected products

Overview reports of ongoing research / status of peatlands related to GHG emissions (e.g. reports posted on Alliance website will give information about regional activities, research group members, and research summaries of existing and recommended practices in member countries)

Publications / reports on recommended BMPs and their impacts on reducing GHG emissions, as result of this new joint research cooperation;

Compilation of GHG emission datasets that will contribute to the efforts of Component 1 about GHG emissions from cropland management systems, as well as be available for use in proposed C and N modeling research in Component 3.

Recommendations for improved technologies / BMPs to restore peatlands to a state of more naturally occurring ecosystem functioning

Data available for the Alliance cross-cutting research team on inventories and measurement methods, through knowledge transfer, datasets, discussion notes for methods, overview of existing methods, and contributions at seminars or other discussions forums.

synthesis article

GHG mitigation of agricultural peatlands requires coherent policies

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Agricultural peat soils could be used to help reach greenhouse gas mitigation goals in many countries but the full potential of mitigation of peat soils is not used. Although peatland cultivation inevitably leads to loss of the whole peat layer and high emissions, there are few incentives or regulation to effectively minimize these losses. This paper discusses the possibilities to reduce greenhouse gas emissions from agricultural peat soils, with specific emphasis on the barriers of implementing mitigation measures nationally. The lessons learned from the selected cases emphasise the role of all policy makers and their cooperation in planning coherent policies for achieving the goals determined by climate policies.



climate

policy



Main conclusions



- International and national climate policies have been a driving force for peat soil conservation in many countries.
- Contribution of different stakeholders is important but the resistance of some stakeholders has prohibited the better representation of soil emissions in the formulation of climate policies.
- The mitigation potential of peatlands could be better utilized by renewing agricultural and land use policies to include soil type and societal costs as criteria in decisions affecting the management of croplands.
- Climate policies alone are not efficient enough if the other policies contrast with the targets.
- Climate policies should be supported by other relevant policies to yield success stories of GHG mitigation by land use measures.





• All GRA partners are free to start discussion on removing the barriers of GHG mitigation on peatlands in their own countries.

Kristiina Regina has put the article available on GRA website- see GRA-Facebook. Need of further publicity?

Factsheet, Translation to local languages, Short version for policymakers.....

 New activity proposed by Kristina Regina: We could make a suggestion for the IPCC for the next update of the guidelines: addition of soil type names in the guidance.

At present only Histosols are mentioned in the text but according to the definition (based on clay/organic matter content), more soil types should be included. In the soil maps you find the soil types but not the properties needed for applying the IPCC definition. The change would ease the compiling of inventories.

- To be discussed with the GRA -Inventory and Monitoring group?
- To be discussed at the upcoming peatland workshop

Joint GRA and NJF workshop: Peatsoil and GHG emissions: Model tools for GHG estimation from cultivated peat soils



- We invite scientists interested in peatland ecology, hydrology and greenhouse gas emissions to discuss possibilities to develop Tier 3 tools that can be used for estimating annual greenhouse gas emissions from cultivated peat soils especially for the purposes of the greenhouse gas reporting.
- The outcome of the workshop could be a project proposal for a study testing the performance of different existing models or model combinations against measurement results. We especially hope to bring together hydrology modellers and greenhouse gas modellers who could work together to develop a functional method.

(NJF- Nordic Association of Agricultural Scientists)

Based on discussions at the GRA meeting 2014, suggestions for GRA workshop:



ON AGRICULTURAL GREENHOUSE GASES

- Network of experimental sites measuring emissions from peatland
- Measurments of GHG form peatlands
- How to cooperate with other GRA-Alliance Research Groups and international organisations like FAO
- Wider discussion on managing agricultural peatlands
- Invite participant from Cross-cutting Groups and paddy Rice groups. The inventory group could be especially interested.

New planning suggested to include:

- Modelling hydrology of cultivated peatsoil simulation of water tableneeded for better estimation of the emissions (Tier 3 method)
- IPCC guidance peatsoil/organic soil- suggestion of changes. A suggestion for the IPCC for the next update of the guidelines: addition of soil type names in the guidance can be discussed /written during the seminar.



Scientific committee

Scientific committee:

Finland: Kristiina Regina

UK: Robin Matthews (James Hutton Institute)

Sweden: Åsa Kasimir

Norway: Daniel Rasse/Simon Weldon/ Peter Doerch

Denmark? Other members From GRA ?

If arranged with NJF, someone from the section board has to be nominated too. Kristiina Regina will contact them.

- DATE: Suggested March 2016
- LOCATION: Scientific committee decides on location (Suggested in Nordic countries- for the NJF cooperation).

Peat land restoration seminar – 3-5 November 2015 Värnamo, Sweden



Everyone interested in peat land restorations are invited to join the Final Seminar of LIFE+ project Life to ad(d)mire. Main topics at the seminar will be planning and performing hydrological restoration actions, vegetative restoration in wetlands, and positive effects of wetland restoration. There will be field trips to Store Mosse National Park (Ramsar and Natura2000 site) and other large bogs that have been restored within the project. The event will take place 3–5 November 2015 in Värnamo, Sweden. The conference will mostly be held in English. Please check attached leaflets for more information.

Johan Rova Protected areas management officer, PhD Nature Department, Jönköping County Administrative Board, SE-551 86 Sweden Phone int+46-10-223 63 89 <u>www.lansstyrelsen.se/jonkoping</u> Registration www.lifetoaddmire.se <u>Slutseminarium Lifetoaddmire SV.pdf (0.1MB)</u> Final Seminar Lifetoaddmire.pdf (0.1MB)





Use of the paper

- Discussion paper presenting cases on policies affecting the GHG emissions from agricultural peat soils. How can such a paper influence better policymaking "management of peatlands and GHG emissions". Can countries learn from each other?
- The publication acknowledges GRA for facilitating the work .
- Information of the paper will be on GRA website and in Newsletter.
- Influence on ministries and other agencies deciding on peatland drainage and use
- Suggestion to translate some material into local languages- and inform theses agencies about consequences of peatland drainage. Several developing countries were interested in peatland- but little respons to emails.
- Follow up must be discussed.



http://www.fao.org/climatechange/micca/75150/en/

GRA - FAO – Possible Cooperation



- Raise awareness of peatland
 - \checkmark on the research agenda
 - \checkmark on the political agenda
- Organise joint seminar/workshop,
- Recommendations on agricultural peatland treatment
- Possibilities for initiating joint funding for research
- GRA Alliance newsletter- to inform of cooperation with FAO

2015: MICCA. Webinar peatland awareness- GRA invited to join. Forwarded invitation within GRA.