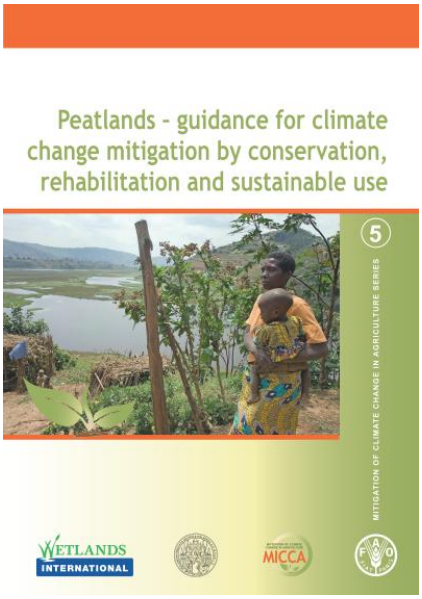
Key conclusions from the report
'Peatlands – guidance for climate change mitigation by conservation, rehabilitation and sustainable use'

The drainage of peatlands and peat fires are responsible for almost one quarter of global carbon dioxide emissions from the land use sector, or about 6 percent of global carbon dioxide emissions. About 15 percent of the world's peatlands have been drained and used for agriculture, grazing and forestry. Peatland conservation and restoration, and improved peatlands management are realistic goals that can be reached and are low-hanging fruit in global efforts to make progress on climate change mitigation, adaptation and climate-smart agriculture.



Peatlands provide many important ecosystem services, including carbon sequestration and storage, water regulation, biodiversity conservation and livelihood support.
The main strategies for reducing emissions from peatlands and organic soils are:

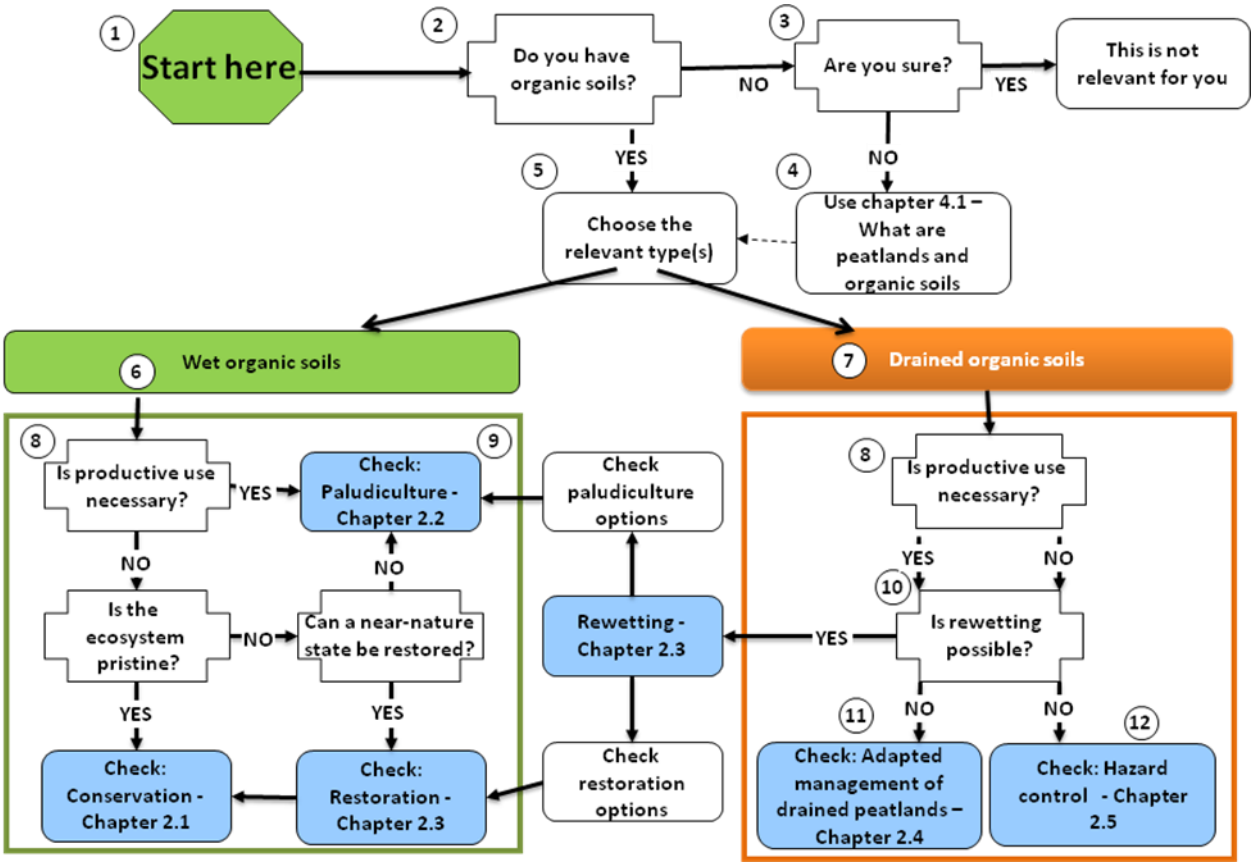
- secure undrained peatlands to prevent emissions;
- rewet drained peatlands to reduce emissions; and
- adapt management of peatlands that cannot be rewetted.

10 elements of strategic action

1. Identify occurrence and status of all peatland worldwide. Are they pristine, drained, abandoned or under productive use?
2. Improve assessment of greenhouse gas emissions from peatlands. Improve methodologies for measuring, reporting and verifying (MRV).
3. Conserve all reasonably intact peat swamps.
4. Prevent further degradation of already degraded peatlands including:
   - no further intensification of artificial drainage in already drained areas;
   - install hazard monitoring and mitigation schemes to avoid and restrain uncontrolled fires and soil erosion;
   - no further expansion of agricultural practices that require drainage. Swap drained land use on peat(e.g. oil palm and pulpwood plantations) to mineral soils and apply paludiculture;
   - no further uncontrolled selective nor illegal logging.
5. Restore degraded peatlands by rewetting, reforestation in the tropics and subsequent conservation and/or paludiculture. Restoration of peatlands reduces emissions, improves water regulation, benefits biodiversity and opens other income options.
6. Target financial resources to peatland conservation, restoration and better management.
7. Stimulate and apply existing and developing climate financing mechanisms on the compliance market (Kyoto Protocol, REDD+, NAMA's), the voluntary market (private sector investment in peatland rehabilitation) and from other sources.
8. Support local communities at the earliest stage and stimulate community development to overcome their opportunity costs and dependence on unsustainable peatland use.
9. Ensure that GHG criteria are integrated in credible certification and subsidy schemes for products that are derived from drained peatlands, including biofuels, palm oil, pulp wood, and other products from agriculture, horticulture and forestry. Each country that imports such products should review relevant domestic policies.
10. Share experiences and expertise on peatland conservation, restoration and better management among countries rich in peatlands and organic soils – especially with those in need of capacity building.

WETLANDS INTERNATIONAL MICCA FAO

Decision support tree for management of peatlands and organic soils



1) This decision tree guides through the key management options both for cultivated and uncultivated peatlands.

2) Organic soils (≈ peat soils) are soils with a substantial layer of organic matter at or near the surface.

3) Almost all countries of the world have organic soils. If you are not completely sure, choose 'NO'.

4) Find out w*hat are peatlands and organic soils* . You can find suggestions for data sources and data suppliers with respect to organic soils in your country from the report *Peatlands – guidance for climate change mitigation by conservation, rehabilitation and sustainable use*.

5) The drainage condition of organic soils is strongly associated with the ecosystem services provided and environmental problems instigated.

6) Wet organic soils are inundated or saturated by water for all or part of the year to the extent that the prevailing soil biota and rooted plants are adapted to anaerobic conditions. Wet organic soils retain carbon and emit methane. Worldwide, most wet organic soils are not in productive use

7) Drained organic soils are organic soils that are not 'wet'. They are subject to inherent degradation loose carbon and emit carbon dioxide. Most organic soils used for agriculture, grazing or forestry are drained.

8) On land under 'productive use', management (for retrieving food, feed, fiber or fuel) controls the composition and volume of the standing biomass.

9) Organic soils can be used productively without drainage in so called 'paludicultures'. Rewetting of drained degraded soils may reinstall productivity and decrease environmental problems.

10) Continuation of productive use on drained organic soils inevitably leads to loss of productivity on the long run. Drainage requiring land use should – whenever possible – be swapped to mineral soils.

11) If land swap is not feasible, management must be adapted to mitigate environmental problems and to extent land productivity as long as possible.

12) Drained and abandoned organic soils without proper management are prone to uncontrolled fire events and soil erosion. It is recommendable to install a hazard monitoring and mitigation scheme.

The Organic Soils and Peatlands Climate Change Mitigation Initiative has been established to increase the awareness of peatlands and promote strategic action for reducing atmospheric greenhouse gas (GHG) concentrations while simultaneously providing other vital environmental services and contributing to food security and poverty reduction www.fao.org/climatechange/micca | www.wetlands.org/peatclimate