PEATLANDS AND CLIMATE CHANGE

Peatlands provide vital ecosystem services

Store carbon
Peatlands contain **about 1/3** of world's soil carbon.

Regulate water flow
Peatlands reduce flooding, droughts and seawater intrusion.

Conserve biodiversity
Peatlands are home to orangutans, tigers and many other endangered species.

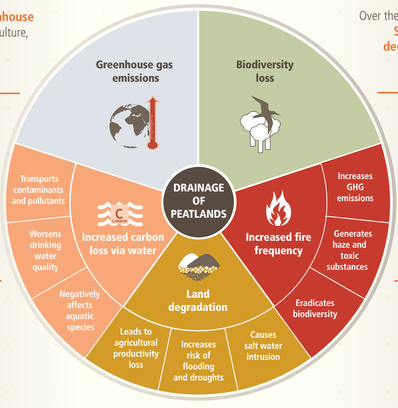
Supply forest products
Peatlands are a source of nutritious foods, medicinal plants and construction materials.

Provide a space for culture
Peatlands offer a natural haven for spiritual reflection, leisure, recreation and education.

Draining peatlands harms the environment

~10% of the global greenhouse gas emissions from the agriculture, forestry and land use sector are caused by the draining of peatlands.

When intact peatlands are drained **carbon losses via water increase by 50%**



Over the last 75 years, the number of **Sumatran Orangutans has declined by 80%**. Today there are only **400 Sumatran tigers** living in the wild.

Smouldering peatland **fires can persist for months** and continue to burn even after days of rain and under a cover of snow.

The surface of the land can **can decrease in height up to 2.5 metres** after 25 years of drainage.

Climate change mitigation and adaptation strategies should include the rewetting of drained peatlands.

1. **Safeguard and preserve natural peatlands from degradation**
2. **Rewet drained peatlands**
3. **Manage peatlands in a climate-responsible way**
4. **Follow adaptive management practices where rewetting is not possible**

Responsible management practices apply to both undrained and rewetted peatlands.

Paludiculture, i.e. the cultivation of biomass in wet conditions, is an option for the responsible management of peatlands.

Actions for achieving large-scale paludiculture

Identify suitable (preferably perennial) species, provenances and cultivars.

Overcome technical challenges for harvesting on wet and inundated peatlands.

Develop production lines adapted to new types of biomass.

Improve agricultural consultations for site-adapted peatland use.

Adapt laws, rules and regulations to accommodate wet peatland agriculture.

Remove market distortions, such as situations where subsidies are provided for drainage-based peatland agriculture but not for paludicultures.

Develop incentives, such as payments for ecosystem services, that adequately account for the social and environmental costs and benefits of paludiculture.

Adaptive management avoids over-drainage, soil tillage and the use of fertilizers.

In forestry, a shift towards continuous forest cover and the avoidance of clear-cutting is recommended. On croplands, permanent crops are the preferred agricultural option.

http://fao.org/2/peatlands

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