

PEATLAND ECOSYSTEM

TATA SUSTAINABILITY MONTH, JUNE 2021

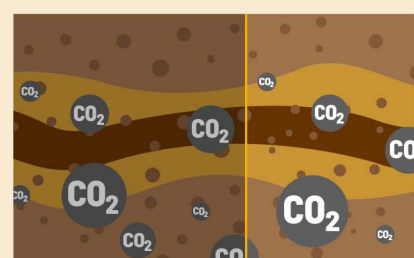


WHAT IS IT?

Peat, sometimes known as turf, is an accumulation of partially decayed vegetation or organic matter.

PEATLANDS ARE TERRESTRIAL WETLAND ECOSYSTEMS IN WHICH WATERLOGGED CONDITIONS PREVENT PLANT MATERIAL FROM FULLY DECOMPOSING.

Consequently, the production of organic matter exceeds its decomposition, which results in a net accumulation of peat. Present in more than 180 countries, peatlands are vital, super-powered ecosystems. They provide vital services such as controlling water supplies and preventing floods and droughts and provide many people with food and fuel. They also house rare plants and animals that can only survive in these unique, watery environments.

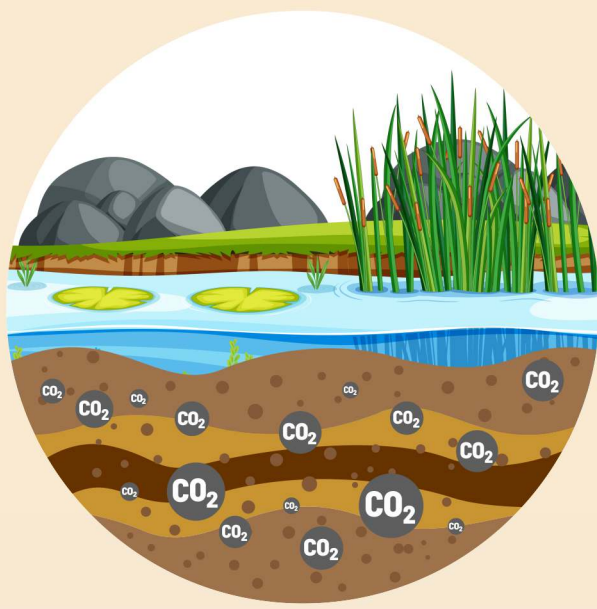


THOUGH PEATLANDS COVER ONLY 3 PER CENT OF THE WORLD'S LAND, THEY STORE NEARLY

42% OF THE WORLD'S SOIL CARBON (550 GIGATONNES)

PEATLAND DEGRADATION CAN TRIGGER RELEASE OF STORED CARBON

WHY IS IT IMPORTANT?



PEATLANDS ARE THE LARGEST NATURAL TERRESTRIAL CARBON STORE, therefore their protection and restoration is vital in the transition towards a low-carbon future.

They are one of the quickest wins in the fight against climate change



THEY ARE CRITICAL FOR PRESERVING GLOBAL BIODIVERSITY, providing safe drinking water, minimising flood risk



IN MANY PARTS OF THE WORLD, peatlands supply food, fibre and other local products that sustain local economies

HOW IS IT DEGRADED?



FIRE

Peatlands that are drained and 'unwet' are highly susceptible to fires



AGRICULTURE

Peatlands have been drained for conversion to plantations



DRAINED FOR WATER

Peatlands surrounded by crop lands are over exploited for water



COMMERCIAL MINING

Peat is mined for horticulture, fuel and whisky production

HOW BAD IS THE SITUATION?

About **15%** of the world's peatlands have been drained

The condition of peatlands in Indonesia, which has half the peatlands of the world, is alarming.



CO₂ emissions from drained peatlands are estimated at

1.3 gigatonnes annually, equivalent to 5.6% of global anthropogenic CO₂ emissions

WHAT CAN BE DONE TO RESTORE IT?



1 REWET BY DRAIN BLOCKING

Includes a variety of techniques including peat dams, plastic piling and bunding, plantation removal



2 PEATLAND MAPPING

To know where the peat is, what condition it is in and help in maintaining water regulation services and biodiversity



3 INVOLVE LOCALS

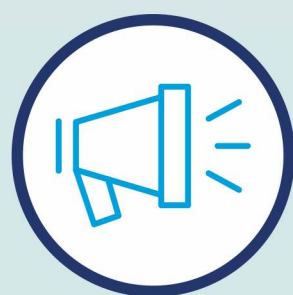
It is crucial to educate local communities and involve them in restoration initiatives



4 RE-VEGETATION

An important process, which also keeps the peatland wet

WHAT CAN MY ORGANIZATION DO?



CREATE LARGE SCALE AWARENESS

by sharing experience and expertise on peatland conservation, restoration and improved management



SUPPORT CONSERVATION EFFORTS in peatland ecosystems

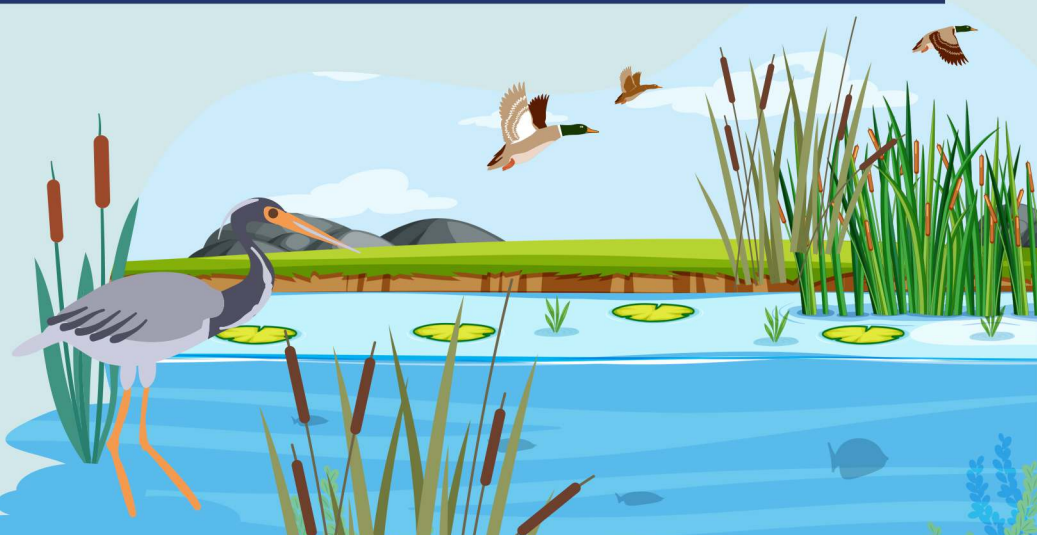
WHAT CAN I DO TO HELP?



Educate yourself and others around you



Don't buy products that benefit from peatland destruction (palm oil)



Sources: <https://www.weforum.org/agenda/2016/05/5-steps-to-restore-indonesia-tropical-peatlands/>
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