What Are Peatlands?
Peatlands are wetland ecosystems that are characterised by the accumulation of organic matter (mostly semi-decomposed plant matter: trees, sedges, mosses) in waterlogged conditions over thousand of years.

Importance Of Peatlands
Climate Regulation: One of the world’s largest carbon stores. Peatlands cover approximately 3% of Earth’s surface but store 20-35% of all carbon on land.

Valuable Biodiversity: Peatlands are habitat for unique fauna and flora, and are natural havens for tigers, orang-utans, sun bears, birds, fish, insects and hundreds of plants and timber tree species.

Water Regulation: Peatlands are composed of 90% water and 10% organic matter. Hence, they serve as important water catchments that regulate water supply.

Impacts From Peatland Degradation
Southeast Asia peatlands are disappearing at a rate of 3% per year and contribute significantly to:

a) Peatland Fires: Drainage or drought can lower the water table, making the peatlands extremely vulnerable to fires which are extremely difficult to extinguish unless the water table is brought back to the surface. Peatland fires can release up to 2000 tonnes of CO2 emissions.

b) Climate change: Major GHGs released from degrading peatlands are carbon dioxide (CO2), methane (CH4) and nitrogen dioxide (NOx), which contribute to climate change.

Benefits of Peatlands
- Store approximately 3% of Earth’s surface but 20-35% of all carbon on land.
- Provide goods and services such as food, medicinal plants, etc.