

# Integrated Tropical Peatland Management in Southeast Asia

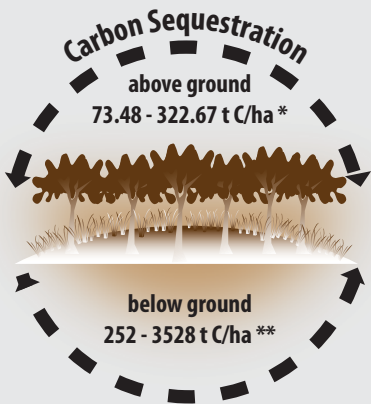
www.aseanpeat.net

## 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.



\* Page et al., 2012, \*\* Verwer, C. & Va der Meer, P., 2012

**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.

Others: Provides abundant goods and services such as food, medicinal plants, etc.

## Impacts From Peatland Degradation

Southeast Asia peatlands are disappearing at a rate of 2% 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 CO<sub>2</sub> per hectare, as well as loss of peat and its vegetation. It causes haze that affects millions of people.
- b) Climate change: Major GHGs released from degrading peatlands are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrogen dioxide (NO<sub>2</sub>), which contribute to climate change.



Projects funded by:

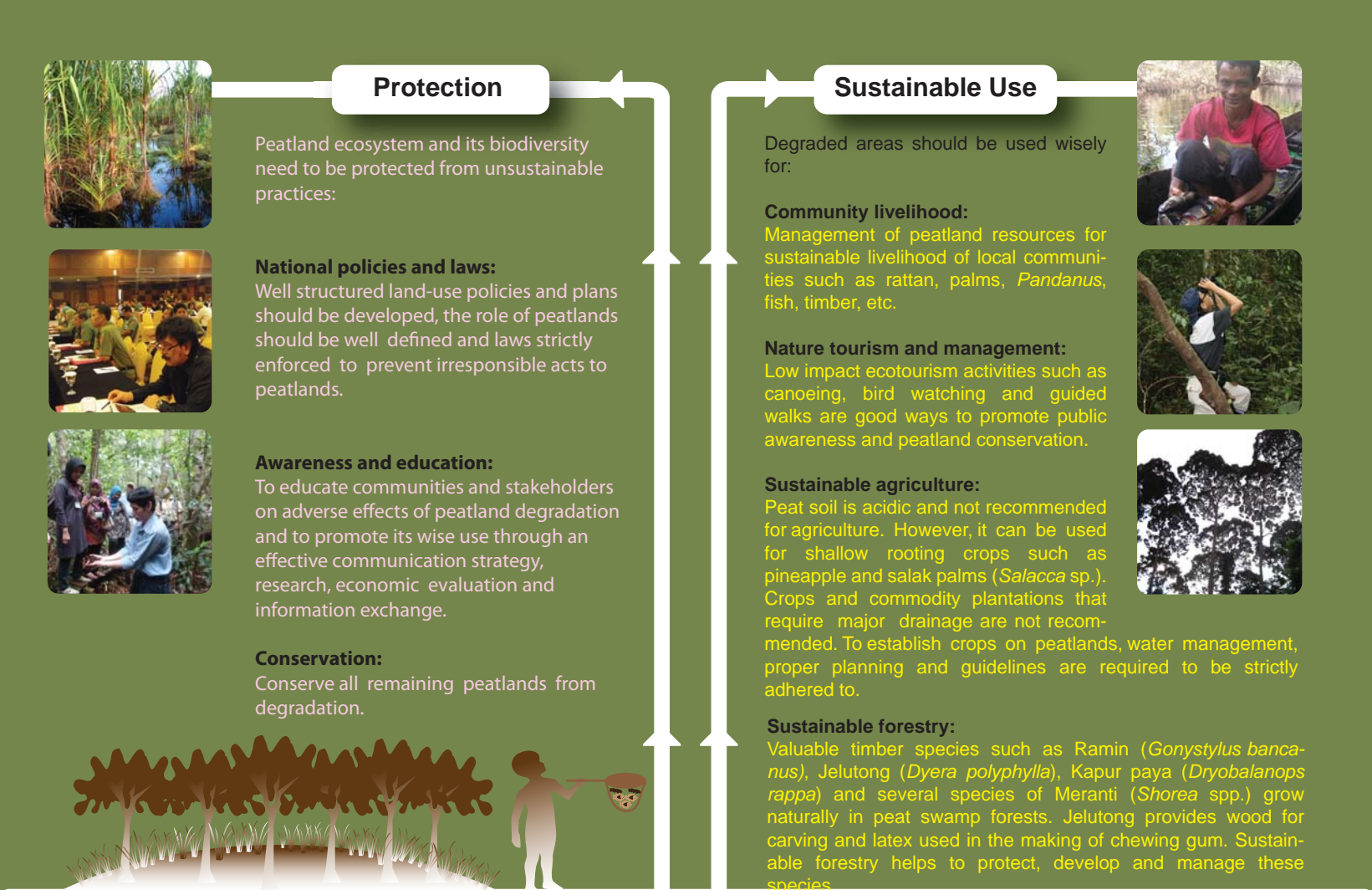


Projects implemented by:



The ASEAN Peatland Forests Project (APFP), funded by GEF/IFAD, and led by the ASEAN Secretariat, aims to demonstrate, implement and scale up sustainable management and rehabilitation of peatland forests while the SEApeat project, funded by the European Union, seeks to reduce deforestation and GHG emissions via degradation of peatland forests in Southeast Asia.

Photos by: Azura Ahmad/GEC, Balu Perumal/GEC, Julia Lo/GEC, Serena Lew/GEC. Designed by Global Environment Centre for APFP-SEApeat Project. Reprinted in June 2012.



## BEST MANAGEMENT PRACTICES

To ensure sustainability, an integrated management approach would ensure economic prosperity, environmental sustainability and societal well-being through sound water, soil and vegetation management.

