



UNEP UNITED NATIONS ENVIRONMENT PROGRAM

PEATLANDS ARE QUICK AND COST-EFFECTIVE MEASURE TO REDUCE 10% OF GREENHOUSE EMISSIONS

International community calls for urgent action to protect and restore peatlands- the world's most important carbon store.

Bali, 11 December 2007- Clearing, draining and setting fire to peatlands emits more than 3 billion tonnes of carbon dioxide every year - equivalent to 10% of global emissions from fossil fuels, according to Assessment on Peatlands, Biodiversity and Climate Change, the first comprehensive global assessment of the link between peatland degradation and climate change.

"Just like a global phase out of old, energy guzzling light bulbs or a switch to hybrid cars, protecting and restoring peatlands is perhaps another key "low hanging fruit" and among the most cost- effective options for climate change mitigation," said Achim Steiner, UN Under-Secretary General and Executive Director UN Environment Programme (UNEP).

Peatlands are wetland ecosystems that accumulate plant material under saturated conditions to form layers of peat soil up to 20m thick - storing on average 10 times more carbon per hectare than other ecosystems. Peatlands occur in 180 countries and cover 400 million hectares or 3% of the world's surface.

Steiner said, "the new Assessment, funded by the Global Environment Facility (GEF), shows that peatlands are a critical part of the global climate regulation system, storing twice as much carbon as the biomass of the world's forests - a fact that has escaped the attention of many of the world's negotiators. Peatlands worldwide," he added, "are under severe threat from human activities and climate change especially permafrost, mountain and coastal peatlands".

UNEP and the Convention on Biological Diversity (CBD) together with the GEF, the Global Environment Centre (GEC) and Wetlands International today called for the international community to take urgent action on to protect and restore peatlands through integration into climate adaptation and mitigation strategies.

Continued burning, degradation, drainage and exploitation of peatlands all over the globe particularly, in Southeast Asia due to forest fires, constitute a "time bomb" of massive amounts of below-ground stored carbon ready to be released in the atmosphere - which can undo much of the mitigation efforts already underway. The assessment identifies several other major areas in Northern Europe and Russia and North America with serious peatland degradation.

"The Assessment, compiled by an multidisciplinary expert team and, represents for the first time key information on the relationship between peatlands, biodiversity and climate change has been analysed on a global level." according to Faizal Parish - Director of Malaysia-based Global Environment Centre which coordinated the preparation together with Wetlands International.

Marcel Silvius of Wetlands International, which has been undertaking pilot projects for peatland restoration in China and Indonesia linked to the Assessment said, "Fortunately despite the high emissions from degraded peatlands, it is possible to drastically reduce emissions through very cost-effective water management, restoration and fire prevention measures"

"An Expert meeting organized by the Ramsar Convention on Wetlands and the Convention on Biological Diversity (CBD) earlier this year concluded that investments in conservation and restoration of peatlands can be up to 100 times more cost effective as other carbon sequestration measures" said Ahmed Djoghlaif, Executive Secretary of the CBD. "In addition to their climate functions - peatlands are also critical for biodiversity conservation with key species such as Orang Utan and crane species being found mainly in peatland areas."

He further added that peatlands also provide major ecosystem services and that in July of this year CBD Parties welcomed the assessment and have requested rapid follow up in partnership with the UNFCCC and other organizations. He concluded, "We now need to raise the profile of these ecosystems in the debate on linkages between wetlands, biodiversity and climate change as the conclusions of the assessment demonstrate one of the clearest opportunities for win-win outcomes. "and that, "the most important need is for this progress to be reflected in real changes to the policies, management and use of peatlands on the ground."

In South East Asia Governments have taken action by endorsing the ASEAN Peatland Management Strategy 2006-2020 (APMS) which outlines 25 objectives in 13 focal areas to prevent peatland degradation and fires in the region.

According to Faizal Parish, "Peatland fires in SE Asia have burnt 3 million ha of peatland in the last 10 years generating average emissions of 1.4 billion tonnes per year and regularly blanketing the region in smoke with major impacts on the health and livelihood of millions of people. Addressing these problems will solve key local issues as well as addressing global concerns. Similarly the destruction of mountain peatlands in Africa, Asia and Latin America threatens the water and food supply for large rural and urban populations."

"Permafrost and steppe peatlands are already being impacted by climate change," added Steiner. "Melting permafrost may increase methane emissions in some areas and enhance fires in others. Increasing temperatures and declining rainfall will reduce the area of peatland and enhance emissions. With proper management peatlands can be more resilient to climate change - but this needs to be adequately incorporated into climate adaptation strategies,"he said.

Marcel Silvius cautions "We need to avoid ill-advised climate mitigation measures on peatlands." "Cultivation of biofuel crops such as soy, oil palm or sugar cane on peatlands generates much more CO₂ emissions than saved through fossil fuel substitution. Construction of windfarms and hydropower reservoirs on peatlands also generates significant emissions and large-scale development of biofuel feedstocks on peatlands is stimulating massive increases in emissions."

For more information please contact (in Bali)

UNEP :

Nick Nuttall on +62 (0)81 708 19577, +41 795965737, email nick.nuttall@unep.org, or Robert Bisset on +62 (0)81 338 958 986, email robert.bisset@unep.fr, CBD Secretariat: Marie Aminata Khan + 62 815 5869 8174 marie.khan@cbd.int, Global Environment Centre: Faizal Parish + 60 12 322 7350 faizal.parish@gmail.com, Wetlands International Alex Kaat (Communications Manager) Alex.kaat@wetlands.org, During COP 13:+ 813 1828 1893; After: +31 (0)317 478854

Resources available on www.gecnet.info

Executive Summary of Assessment on Peatlands Biodiversity and Climate change photo gallery
CD with executive summary and full assessment available in BICC

Note

The Assessment on Peatlands, Biodiversity and Climate Change was initiated by the project on Integrated Management of Peatlands for Biodiversity and Climate Change implemented by Wetlands International and the Global Environment Centre with the support of UNEP-GEF, the governments of the participating pilot countries (China, Indonesia and the Russian Federation) and regions (ASEAN); as well as the Dutch and Canadian governments and a range of other organisations including APN).

Annex Key Findings from the Assessment on Peatlands, Biodiversity and Climate Change

Major overall findings

Some of the major overall findings of the assessment are:

- Peatlands are the most efficient terrestrial ecosystems in storing carbon. While covering only 3% of the World's land area, their peat contains as much carbon as all terrestrial biomass, twice as much as all global forest biomass, and about the same as in the atmosphere.
- Peatlands are the most important long-term carbon store in the terrestrial biosphere. They sequester and store atmospheric carbon for thousands of years.
- Peatlands are critical for biodiversity conservation. They support many specialised species and unique ecosystem types, and can provide a refuge for species that are expelled from non-peatland areas affected by degradation and climate change.
- Peatlands play a key role in water resource management, storing a significant proportion of global freshwater resources. Peatland degradation can disrupt water supplies and decrease flood control benefits.
- Degradation of peatlands is a major and growing source of anthropogenic greenhouse gas emissions. Carbon dioxide emissions from peatland drainage, fires and exploitation are estimated

to currently be equivalent to at least 3,000 million tonnes per annum or equivalent to more than 10% of the global fossil fuel emissions.

- Peatland degradation affects millions of people around the world. Drainage and fires in SE Asian peat swamp forests jeopardise the health and livelihoods of millions of people in several countries in the region. The destruction of mountain peatlands in Africa, Asia and Latin America threatens the water and food supply for large rural and urban populations.

- Climate change impacts are already visible through the melting of permafrost peatlands and desertification of steppe peatlands. In the future, impacts of climate change on peatlands are predicted to significantly increase. Coastal, tropical and mountain peatlands are all expected to be particularly vulnerable.

- Conservation, restoration and wise use of peatlands are essential and very cost-effective measures for long term climate change mitigation and adaptation as well as biodiversity conservation.

- Optimising water management in peatlands (i.e. reducing drainage) is the single highest priority to combat CO₂ emissions from oxidation and fires as well as address peatland degradation and biodiversity conservation.

- There is in most countries an urgent need to strengthen awareness, understanding and capacity to manage peatlands- to address peatland degradation, biodiversity conservation and climate change.