

# ASEAN PEATLAND NEWS SEPTEMBER 2014

The ASEAN Peatland Forests Project activities officially ended on 30th June 2014. Following this is a Terminal Evaluation of the project which begins in mid-September. All four participating countries have submitted their completion reports and are now in the final stages of completing exhibits for the evaluation team.

In the meantime, SEApeat work continues until its completion in 2015.

### INDONESIA RATIFIES AATHP

The Indonesian parliament on Tuesday,16th September 2014 agreed to ratify the ASEAN Agreement on Transboundary Haze Pollution (AATHP) which was earlier signed in 2003.

The agreement came into existence in response to the 1997-98 haze which affected six countries and cost losses up to 3 billion US dollars in flight cancellations, decline in tourism, health issues and disruption to businesses.

The decision was well received by ASEAN neighbours especially Singapore and Malaysia.

On the same day, the President signed Governmental Decree No 71, Year 2014 for the Protection and Management of Peatland Ecosystems.

This document was much discussed by all parties since 2006 and is expected to safeguard peatland ecosystems in Indonesia. **50** 



Friday, 19 September, 2014 | 13:54 WIB

#### ASEAN Neighbors Praise Indonesia's Haze Treaty Ratification

**TEMPO.CO, Kuala Lumpur** – The Malaysian government welcomes Indonesia's decision to ratify the ASEAN Agreement on Transboundary Haze Pollution (AATHP). Malaysia's Minister of Environment and Natural Resources, Datuk Seri G. Palanivel, said the move shows Indonesia's seriousness in overcoming the effects of haze caused by forest fires.

"This will further strengthen our bilateral relations. Malaysia and Singapore are two countries most affected by the haze from Indonesia," Palanivel told Malaysian news agency *Bernama* yesterday.

Indonesian lawmakers voted to ratify the regional agreement on air pollution on Tuesday, as haze from land-clearing fires in Sumatra and Kalimantan polluted Malaysia and Singapore. Indonesia became the latest country to sign the ratification, which took force in 2013.

"The ratification of the ASEAN Agreement is an appropriate step for Indonesia to show that we are serious in tackling transboundary haze pollution resulting from land and forest fires," Environment Minister Balthasar Kambuaya said on Tuesday.

In June 2002 in Kuala Lumpur, ASEAN member countries signed a pact to overcome the impact of transboundary haze pollution. In June 2013, nine ASEAN countries ratified the agreement.

Singapore's Ministry of Environment and Water Resources also praised Indonesia's ratification. "The ratification is done in an appropriate time; amid the emergence of more hotspots in Sumatra and Kalimantan," Minister Vivian Balak Rishnan said as reported by *Channel News Asia*.

BERNAMA | CHANNEL NEWS ASIA

Click to download the final draft signed by the President, <u>Rancangan Peraturan Pemerintah No 71 Tahun 2014</u> <u>tentang Perlindungan dan Pengelolaan Ekosistem Gambut.</u> The document is in Bahasa Indonesia.



### Newly discovered peatlands in mangrove area of Peam Krasop Wildlife Sanctuary, Koh Kong Province, Cambodia

In tropical areas, peat swamp forests are usually found in low lying areas behind mangrove zones. In a field assessment held from 6 to 15 August 2014, peatlands was found IN a mangrove area; which is highly unusual. This discovery has excited those working on peat cycles in the ASEAN region while shedding new light on little known peatland areas in Cambodia.

from Global Environment Centre, Malaysia, rangers and community from Peam Krasop Wildlife Sanctuary.

Using a combination of remote sensing and ground- truthing, an early estimate had shown that there are about 3,700 hectares of peatlands in the Peam Krasop Wildlife Sanctuary mangrove area, located in Koh Kong Province, Cambodia.

*"In a field assessment held from 6 to* 15 August 2014, peatlands were found in a mangrove area; which is highly unusual."

The assessment was carried out by the Department of Wetland and Coastal, Ministry of Environment Cambodia, led by peatlands expert Dr Le Phat Quoi from Ho Chi Minh University, Viet Nam and assisted by Julia Lo

32 locations were assessed with a gauge auger, where the peat depth was found to be in the range of 44cm to 200cm, with an average depth of 115cm. The mangrove of Peam Krasop Wildlife Sanctuary grows on several small islands. What is most interesting about this recent finding is that mangrove species had actually grown on a layer of peat.

The outer layer, about 50m along the coast of these islands are dominated by tall Rhizophora apiculata and Rhizophora mucronata. This area is a typical mudflat area. However, as one moves further in to about 100 -150m, there is a clear change of vegetation in terms of species and tree height. In general, 4 types of vegetation were identified- 1) stunted Rhizophora apiculata only, 2) stunted Ceriops tagal only, 3) stunted Ceriops tagal with tall Lumnitzera littorae and 4) mixed species of Hibiscus tiliaceus, Xylocarpus granatum and Melaleuca cajuputi. In total, 14 tree species were recorded during this survey, all common mangrove species with the exception of *Melaleuca cajuputi* which is a species typical to fresh water swamps.



Stunted Rhizophora apiculata with tall Lumnitzera littorae



Stunted Ceriops tagal

### Loagan Bunut National Park

Centered around Sarawak's largest freshwater lake, the 100 km<sup>2</sup>Loagan Bunut National Park was gazetted as a protected area in January 1990. The lake itself is one of the most unusual aquatic systems in the country, as it is drained almost completely during dry spells, which occur between two and four times a year. This unique hydrological regime has created a remarkable food chain that supports a variety of aquatic and terrestrial animals as well as human communities.

The Berawan fishermen of Loagan Bunut use a unique method of catching fish as they enter and

leave the lake into the Bunut river. Known as the Selambau, ...





An excerpt from the Malaysia's Special Publication entitled "Gambut". Click on the thumbnail on the left to download the full document (15.3 Mb).

### REGIONAL

### 11th APFP PROJECT MANAGEMENT MEETING and PREPARATORY MEETING FOR THE ESTABLISHMENT OF ASEAN TASK FORCE ON PEATLANDS

The 11th APFP Project Management Meeting was held on 21st August 2014 at Seri Pacific Hotel Kuala Lumpur.

The main thrust of the meeting was to discuss the completion, reporting and terminal evaluation

for the project which officially ended its activities on 30th June 2014

The report and annexes of the meeting are available through the following links: (i) <u>Special Project</u> <u>Management Meeting, Kuala Lumpur, Malaysia, August</u> <u>2014</u>; (ii) <u>Annexes</u>.





On 22nd August 2014, the country representatives discussed the terms for establishing an ASEAN Task Force on Peatlands.

The Meeting minutes were adopted on the same day.

On 24th August, participants visited the Malaysian rehabilitation site in Raja Musa Forest Reserve and sampled the ecotourism offerings by the locals of Kampung Ampangan. ♣

#### A FOND FAREWELL TO THE APFP PROJECT DIRECTOR

The 4th of September marked the day APFP Project Director, Dr Raman Letchumanan retired from the ASEAN Secretariat.

At dinner on 21st August, the APFP team organized a small ceremony to thank him and wish him well.

Truth be told, it would be very much more difficult to navigate the challenges of this project without his able leadership.

It was also apt to mark the closure of APFP with a presentation of past activities and the sharing of a meal with old and new team members.

With collective agreement, the Peatland family has requested that he continue leading the project to its completion in December 2014 as an independent Advisor.



Everyone who could make it, even retired peat family members came to wish the very best to Dr Raman.



### MORE RESOURCES MADE AVAILABLE ON WWW.ASEANPEAT.NET

If you have not visited the **ASEAN** Peatlands website of late. maybe it's time to do so with the addition of new resources.

#### 1) Meeting minutes and annexes.

APFP and SEApeat meeting minutes have been made available online so that you won't have to search the document stores for the materials that you need.

2) Technical Reports, Photos and Videos from country and regional activities.

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ntroduction - Malaysia Project Overview - Malaysia	2009	Ast Protect Management Meeting, Kuele Lemmer, December 2003
Antial view of Kaja Nusa Funct Reserve, Malaysia production - Philippines Philippines straduction - Viet Ram Project Overview - Viat Ram U Mink Thoung Reliand Paik, Viat Ram Paulanda in Viet Nam UPPP Project Overview UPPP Contact List UPPP Project Overview UPPP Contact List DMMD, Nu. December 2013 PMMD, Nu. December 2013 PMMD, Nu. Studie Lampon, April 2014	2010	2nd Project Management Meeting (PMM2), Kuala Lumpur, July 2010 3rd Project Management Meeting (PMM3), Manila, November 2010 2nd Project Steering Committee Meeting (PSC2), Manila, 2010
	2011	Ath Project Management Meeting (PMM4), Jakarta, June 2011 Sth Project Management Meeting (PMM5), Ho Chi Minh City, November 2011 3rd Project Steering Committee Meeting (PSC3), Ho Chi Minh City, November 2011
	2012	Special Project Management Meeting, Petaling Java, Selangor, Malaysia, February 2012 6th Project Management Meeting (PMM6), Cherating, Pahang, Malaysia, June 2012 2th Project Management Meeting (PMM7), Portianak, Indonesia, November 2012 4th Project Steering Committee Meeting (PSC4), Pontianak, Indonesia, November 2012
	2013	Ith Protect Management Meeting (PMM6), Mania, Philopines, June 2013 9th Protect Management Meeting (PMM9), Genmane Shah Alam, Selangor, Malaysia, December 2013 5th Project Steering Committee Meeting (PSC5), Shah Alam, Selangor, Malaysia, December 2013

### NEW BOOKS

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Another publication entitled Enhancing Sustainability of Forestry Practices on Peatlands (7.6 MB) has also been available since July on the ASEAN Peatlands website. For more useful publications, do explore the Resources tab.





A new book, the Guidelines on Integrated Management Planning for Peatland Forests in Southeast Asia (1.42 Mb) is now available for download. Just click on the link above or the image on the left to get your very own copy.



2) FDRS maps, hotspot maps, satellite images and many more will be made available through a web interface on our website. In the meantime, if you need the relevant data, just email or call us for assistance.



Scientific articles 3) and bulletins. Other than relevant newspaper articles that are updated weekly on the "Peatland News" page, also visit "Scientific Articles/Reports, Newsletters and Press Releases" under the Resources tab. Click the highlighted text above to see for yourself.

Please share with your contacts, researchers and anyone else in peatland conservation. You can share YOUR publications too!



## **PUBLISHED ARTICLES**

## MAJOR ATMOSPHERIC EMISSIONS FROM PEAT FIRES IN SOUTHEAST ASIA DURING NON-DROUGHT YEARS: EVIDENCE FROM THE 2013 SUMATRAN FIRES

#### Authors:

David L. A. Gaveau<sup>1</sup>, Mohammad A. Salim<sup>1</sup>, Kristell Hergou**alc'h**<sup>1</sup>, Bruno Locatelli<sup>1,2</sup>, Sean Sloan<sup>3</sup>, Martin Wooster<sup>4</sup>, Miriam E. Marlier<sup>5</sup>, Elis Molidena<sup>1</sup>, Husna Yaen<sup>1</sup>, Ruth DeFries<sup>5</sup>, Louis Verchot<sup>1,6</sup>, Daniel Murdiyarso<sup>1,7</sup>, Robert Nasi<sup>1</sup>, Peter Holmgren<sup>1</sup> & Douglas Sheil<sup>1,8</sup>

#### Abstract:

Trans-boundary haze events in Southeast Asia are associated with large forest and peatland fires in Indonesia. These episodes of extreme air pollution usually occur during drought years induced by climate anomalies from the Pacific (El Nin~o Southern Oscillation) and Indian Oceans (Indian Ocean Dipole).

However, in June 2013 – a non -drought year – Singapore's 24hr Pollutants Standards Index reached an all-time record 246 (rated "very unhealthy"). Here, we show using remote sensing, rainfall records and other data, that the Indonesian fires behind the 2013 haze followed a two-month dry spell in a wetterthan-average year. These fires were short-lived (one week) and limited to a localized area in Central Sumatra (1.6% of Indonesia): burning an estimated 163,336 ha, including 137,044 ha (84%) on peat. Most burning was confined to deforested lands (82%; 133,216 ha). The greenhouse gas (GHG) emissions during this brief, localized event were considerable: 172 6 59 Tg CO<sub>2-eq</sub> (or 31 6 12 Tg C), representing 5–10% of Indonesia's mean annual GHG emissions for 2000–2005.

..... Click on images to download the full documents. (Main report is 1.75 Mb and Supplementary materials 0.8 Mb)





## CARBON STORAGE AND RELEASE IN INDONESIAN PEATLANDS SINCE THE LAST DEGLACIATION



Authors: René Dommain, John Couwenberg, Paul H. Glaser, Hans Joosten, I. Nyoman N. Suryadiputra

#### Abstract:

Peatlands have been recognised as globally important carbon sinks over long timescales that produced a global, net-climatic cooling effect over the Holocene. However, little is known about the role of tropical peatlands in the global carbon cycle.

We therefore determine the past rates of carbon storage and release in the Indonesian peatlands of Kalimantan and Sumatra e the largest global concentration of tropical peatlands since 20 ka (kiloannum before present). Using a novel GIS (geographic information system) approach we provide a spatially-explicit reconstruction of peatland expansion in a series of paleogeographic maps.

Download the full document here (3.63 MB).

#### APFP is a project of



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