

Sharing Best Management Practices on Peatlands in Southeast Asia

Text: Noor Azura Ahmad

Did you know that peat which has dried out too many times floats and refuses to absorb water? This is among the things learnt by participants in a Technical Workshop on Best Management Practices (BMP) for Sustainable Peatland Management held in Luwansa Hotel, Palangka Raya, Central Kalimantan, from 15th to 18th June 2011.

The objective of the workshop was to build capacity among those involved in peatland conservation so that they can bring back new knowledge and shared experiences to be implemented in their respective countries.

The main organiser of the event was the Global Environment Centre (GEC) as the Regional Project Executing Agency of both the ASEAN Peatland Forests Project (APFP) and SEApeat. APFP and SEApeat are two closely related programmes which are supported by GEF/IFAD (Global Environment Facility / International Fund for Agricultural Development) and the European Union (EU) respectively. They work together to demonstrate, implement and scale up the sustainable management and rehabilitation of peatland forests by reducing deforestation and GHG emissions from peatland forest degradation in Southeast Asia.

Co-organising the event was Lembaga Pengkajian, Pendidikan, dan Pelatihan Lingkungan Hidup (LP3LH), a local institute for environmental study, education and training, led by Mr. Alue Dohong. Mr. Alue, who is the Director of LP3LH, is widely

known among peat conservationists for his expertise in canal blocking and carbon conservation. Other resource persons were Dr. Suwido Limin whose strong area is fire management and Dr. Darmae Nasir who specializes in the socio-economic aspect of peat management.

Thirty-four participants represented eight (8) ASEAN countries namely Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand and Vietnam. They were from various departments and ministries; including national environment protection agencies, forestry departments, fire departments, university experts and relevant NGOs; all involved in implementing programmes for peatland management.

To launch the workshop, Ir. Mursid Marsono, Head of the Central Kalimantan Department

Participants of the workshop with Ir. Mursid Marsono, Head of Central Kalimantan DOE (second from left, second row). Photo: Azura Ahmad



of Environment (BLH Kalteng) welcomed the participants and announced the opening of the event. The Indonesian Ministry of Environment (KLH) supported the conference and hosted a welcome dinner for the participants. The workshop began with an indoor session of a series of presentations regarding Best Management Practices (BMPs) on peatlands. All through the workshop, participants were encouraged to interact closely and share their experiences with each other.

The workshop gave an overview of peatlands in Central Kalimantan, principles of wise use, social-economic factors, practical aspects and good practices in peatland management. Among the topics covered was an introduction to peatland hydrology, benefits of canal blocking and its options plus effective fire fighting techniques for peatland fires. Among others, the experts compared the effectiveness and cost of dousing fire using deep-wells compared to using helicopters. Dr. Suwido also shared a technique used by patrolling volunteers, using 'water bombs' in plastic bags to douse small fires before they spread.

Following the indoor sessions, participants were taken to visit the Natural Laboratory for Peat Swamp Forest (NLPSF) which is managed by the Centre for International Management of Tropical Peatland (CIMTROP) in Sebangau. This was reached by bus, boat, and most interestingly; a rustic 'train'. The last uses a small motor to drive the 'car' between a jetty and the NLPSF,

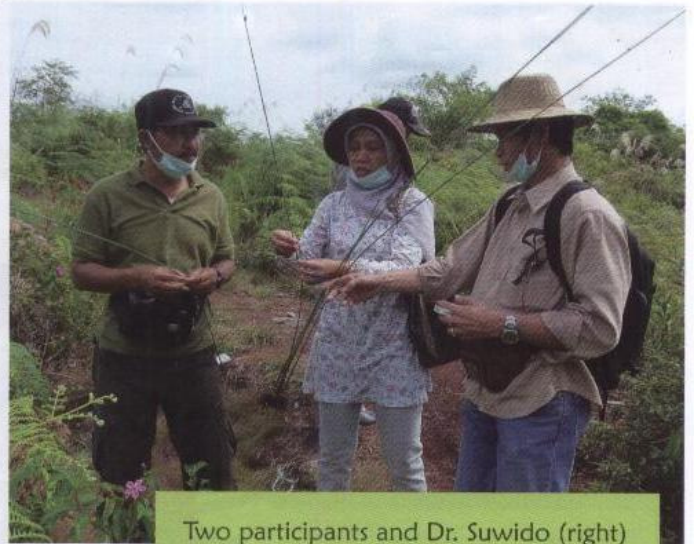


The exciting ride to the Natural Laboratory for Peat Swamp Forest (NLPSF). Photo: Julia Lo

traversing over the dark waters of the Sebangau Lake. The large waterway is relatively shallow and harbours large clusters of *pandanus* type plants along its edges. This was one of the most unique and unforgettable experience for many in the group.

At the NLPSF, various researchers based there have posted their findings on the community notice board. This included biodiversity, especially orang-utans; and carbon emission studies. An interactive question and answer session made the knowledge sharing more memorable. Later, participants visited a climate study tower and a small canal block nearby. The canal block, known by the local Dayak community as 'tabat', had accumulated organic matter and degraded just enough to be an inherent part of the canal, proving the wisdom of the elders who construct such dams using local organic materials instead of cement or concrete.

The role of the Sebangau Lake for eco-friendly socialising and recreation was seen in the form of children enjoying an afternoon dip near the Kereng Bangkirai jetty. The importance of the peat swamp was reflected in our dinner which included catfish and freshwater prawns, rich sources of protein to the community. This precious



Two participants and Dr. Suwido (right) taking a closer look at some 'purun'. Incidentally, Dr. Suwido's hat is made of dried purun. Photo: Azura Ahmad

resource must be protected and kept sustainable.

The next day, the group visited block C of the ex-Mega Rice project sites in Kalamangan. Close to the CIMTROP Community Centre was a small agricultural project site. Various vegetables like eggplants, bird's-eye chillies and lemongrass were planted here. Goats were also kept to provide meat for people and fertilizer for the plants. The combination allows for a self-sustaining system that is important for the livelihood of the people.

Participants were then taken to dams 3 and 5 by motorcycle to have a closer look at their construction. Along the way, it was depressing to see the widespread destruction in the area due to excessive draining of the peatlands for the Mega-Rice project and subsequent fires that plagued the area. The dry, exposed soil readily turned to dust as the motorcycles passed. The dams, which were built to halt uncontrolled draining of the peat, have stabilized the water level and rehydrated the soil by raising the water table. Where the canals have been blocked, the vegetation was seen to be greener with more plant regeneration. Some of the species seen were tenggek burung trees (*Euodia roxburghiana*), *Nepenthes* spp. and kemunting plants. Also found was a type of sedge called 'purun', whose hardy grass-like



One of the participants sharing his experiences with the group. Photo: Serena Lew

The workshop ended with presentations by participants from the various countries on the best management practices in the use of peatlands or wetlands in their respective countries. Among the memorable ones were traditional techniques for using controlled fire in land preparation, raising catfish in blocked drainage canals, as well as land and fire management in peat areas. Through this exercise, everyone had the opportunity to exchange ideas, knowledge and lessons learnt with colleagues working in peat conservation, with which to improve and enhance the management of peatlands in their respective countries.

stems are traditionally dried and woven into various items such as hats and baskets.

Close to an area which burnt two years ago, Hokkaido University had supported the building of a 45 metre high climatology research tower. This would help to gather more information about the link between peatlands and climate change. Those who took the challenge of climbing the tower were rewarded with a clear view of two orang-utans on nearby trees. It showed that biodiversity can still survive in degraded areas, as long as their needs for food and shelter can be met. A demonstration on fire suppression on peat was also held to give participants the opportunity to examine the deep well, water pump and hose set up; and to try their hands at putting out the blaze. Fire prevention and control is one of the key BMPs in protecting peatlands.

In the nearby Tumbang Taruna village, a programme called the "Buying Living Tree System" has been introduced by CIMTROP to engage the local community in carbon conservation efforts. The trees grown under this effort are from *Shorea*, *Melaleuca* and *Dyera* species. Villagers are rewarded as long as the trees are growing. When the trees are harvested, the carbon is conserved in the wood, not released to the atmosphere as CO₂. Villagers are allowed to harvest the trees to

support their livelihood or for their own needs, if they have kept the trees long enough and replacement trees are planted.

We also stopped by a vegetable smallholding, owned by Pak Sujadi, a transmigrant from Java, where corn, chillies, long beans and several other vegetables are successfully grown on the peat soil using sustainable agricultural practices. The knowledge was gained through technical assistance from a local university, from where he had learnt about environment friendly soil preparation techniques, fertilization methods and the rotation system. From his struggle to make a living on the acidic and waterlogged soil in the early days, the income from his land now allows him to lead a comfortable life, hopefully well into the future.

It is hoped that the bonds forged in this workshop would strengthen the network of people conserving peatlands through their specific roles in South-east Asia. For the full report and more photos, please visit the ASEAN Peat website at www.aseanpeat.net.

The Global Environment Centre (GEC) is a non-profit NGO established in 1998 to address key environmental issues. Based in Malaysia and supporting activities worldwide, GEC is focused on bringing together all parties to help foster lasting changes for environmental benefit.

Noor Azura Ahmad
Peatland Programme, Global Environment Centre, Selangor, Malaysia
phone: +603 7957 2007
email: azura@gec.org.my
www.gec.org.my, www.peat-portal.net
www.aseanpeat.net

Participants trying their hand at dousing a small fire in Kalamangan. At the back is the goat shed. Photo: Azura Ahmad

