

Fact Sheet

Managing Kampar Peatlands for Sustainable Development

Supports Principles 7, 8 and 9 of the UN Global Compact

The Kampar Peninsula, covering around 400,000 ha, is presently under serious threat of unabated degradation. The eco-hydrology of the peat-land forests is heavily impacted by uncontrolled drainage from a network of timber extraction canals abandoned from previous selective logging operations. Consequently, the residual forest ecosystem continues to deteriorate, peat decomposes and emits CO₂ into the atmosphere, and the risk of fire occurrence rises.

The situation continues to deteriorate everyday, and requires immediate, decisive and cohesive intervention by all concerned parties.

APRIL offers a viable approach, involving “best practice” development of degraded peat-land fringes that would help protect the deep-peat core forest, halt uncontrolled drainage and fire, stop illegal logging, and provide stable livelihood for local communities. The net effect would be a managed environmental impact on the plantation area and a positive carbon footprint on the wider, protected landscape.

APRIL’s Acacia Ring Strategy

Our strategy is to create a buffer zone through the establishment of an Acacia Plantation Ring on the degraded perimeter of the Kampar Peninsula based on prior High Conservation Value Forest (HCVF) assessment. APRIL is committed to meaningful collaboration with all stakeholders, including concerned NGOs and local communities, towards striking a balance between sustainable plantations and socio-economic benefits to local communities while protecting the remaining high-conservation values of the Kampar Peninsula.

In addition to our considerable experience and knowledge in developing sustainable plantation landscape, we have engaged a team of leading hydrologist, ecologist and physicist to predict, monitor and minimize hydrology and greenhouse gas impacts.

Responsible Water Management

Our water management strategy is founded on continual improvement in water level control so that peat drainage is minimized. Larger-sized canals for barge operation follow the ground contours so that drainage is avoided; shallower water control canals that cross contours are divided into



ever smaller steps using dams and gates so that water tables are maintained within 60 cm of the surface.

APRIL water management targets 50 cm depth in plantation areas to sustain the growth requirement of the planted acacia trees without any unnecessary drainage, oxidation and carbon emissions. High-water zones not lower than 40 cm form peat buffer plantation from conservation areas to minimize unwanted drainage impacts.

Science-based Management Support Program

To ensure that the Kampar Peninsula core (roughly 300,000 ha) is effectively conserved, APRIL has commissioned a team of experts from five research institutions to study the environmental and social impacts, and recommend corrective or enhancement action. Led by Delft Hydraulics (Netherlands), the 3-year study program will lend management support to ensure forest and carbon conservation in Kampar Peninsula while allowing a sustainable acacia plantation around it.

Key Facts

- APRIL has done a water table survey in Kampar Peninsula, and provisional results indicate that only the central 150,000ha region remains un-drained. The surrounding 250,000 ha are drained, a third of these to deeper than 50 cm – at a time of excess rainfall. Such drainage heavily impacts on peat-land eco-hydrology causing peat decomposition and CO₂ emission.
- The whole Kampar Peninsula landscape is estimated to presently emit 12M tons to 14 M tons of CO₂ per year.
- Degraded residual jungle in the planned Kampar Ring has standing biomass similar to that of the planned replacement acacia stands at 1/2 rotation age or the life-cycle average.
- Avoided CO₂ emission of 14 M tons per year can be valued at US\$ 17 million per year under the proposed Reduced Emission from Deforestation and Degradation (REDD) scheme.
- About 18,000 regular employment jobs can be generated by the proposed acacia plantation ring.