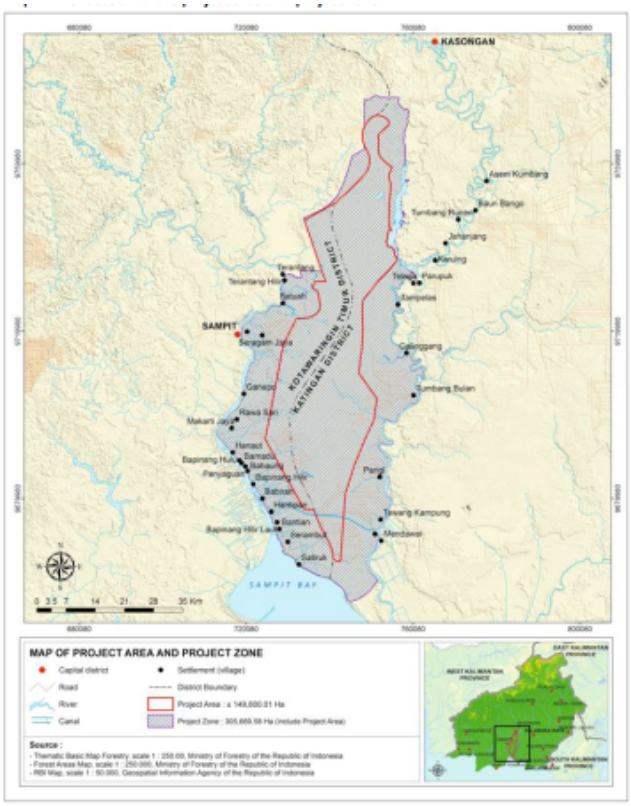
Tropical Peatland Conservation and Restoration in Katingan-Mentaya, Indonesia, for Biodiversity Conservation and Climate Mitigation and Adaptation

Introduction

Currently being the biggest Verified Carbon Standard (VCS) approved REDD+ project in the world, with potential emissions reductions reaching an average 7,4 million tonnes of CO2e per year, the Katingan-Mentaya Peatland Restoration and Conservation Project is creating sustainable development opportunities for people and restoring valuable ecosystems and habitat for endangered wildlife in Central Kalimantan, Indonesia. Since 2014, Wetlands International has applied its technical expertise in collaboration with PT Rimba Makmur Utama, Permian Global and Yayasan Puter Indonesia working on this project through the development of a knowledge base and awareness raising on the importance of these peatlands for biodiversity, climate and people. This is to stop the process of felling and draining of tropical peatland forests to make place for plantations; leading to huge GHG emissions, fires and biodiversity decline that has been going on for at least the past three decades in the area, and throughout the wider Southeast Asia.



Project Location of Katingan Mentaya Project Area, its Bufferzone and the Wider Project Zone

The Katingan-Mentaya Project

Wetlands International is one of the key partners of PT Rimba Makmur Utama in the effort to restore and conserve 149,800 ha of intact peatswamp forest, combined with the sustainable management of a 155,869 ha mixed use community buffer zone, totalling 305,699 ha.

Before the project intervened, the area was destined to be developed into an industrial timber plantation, which would have contributed to huge emissions as a result of forest clearance and drainage of the peat. A joint team of experts from Wetlands International, Silvestrum, Greifswald Wageningen Univeristy, Permian Global and the Katingan-Mentaya Project developed a new methodology for quantifying carbon emission avoidance in tropical peatlands. This was accepted by VCS, and was then used to accurately calculate the avoided emissions generated by the project. These carbon credits are now traded on the carbon market to finance the project.

Key to the conservation of the core area of the Katingan-Mentaya peatland is the sustainable management of the buffer zone surrounding it. In collaboration with PT RMU and the local NGO Yayasan Puter, Wetlands International facilitates and provides capacity building to local communities on the sustainable use of peatlands and, together with communities, develops land-use plans. This includes the blocking of drainage ditches with dams to stop the water flowing out of the peat and the introduction or stimulation of farming with species native to peatlands, such as Illipe nut (edible oil), Jelutung (natural rubber) and Rattan (for furniture). Wetlands International also helps local communities to attain land rights through a variety of types of social forestry licence, and to create new livelihood opportunities, for example through the production of craft products and furniture.

Biodiversity conservation

The Katingan-Mentaya peatland is home to a population of as many as 4,000 Orangutan, and biodiversity surveys have documented many other endangered animal and plant species. The area is known to be home to at least 312 plants, 206 birds, 77 species of mammals, 12 species of amphibians, 63 species of reptiles and around 110 species of fish. Measures are being taken to actively protect these species.

Rhinoceros hornbill (Left) and Proboscis monkey (right). Photo by Pt. RMU

Peat sampling in Katingan peatland. Photo by Reza Lubis

Community consultation on land use planning. Photo by Reza Lubis

Contributing to national goals

Oil palm and pulp wood plantations continue to threaten the sustainable development of lowland peatlands through drainage and deforestation. Wetlands International advocates the phasing-out of drainage-based plantations on peatlands and engages with stakeholders to enhance their knowledge of peatland management to jointly find solutions, such as paludiculture. We recognise the importance of working with local communities and actively support them through capacity building and funding for sustainable peatland management.

In 2016 the government of Indonesia established the Peatland Restoration Agency (BRG) which aims to restore 2.4 million hectares of peatlands by 2020. We work with BRG and the Ministry of Environment and Forestry to provide technical guidance and advice on peat management, planning and restoration. This will help to prevent huge amounts of greenhouse gas emissions, fires and flooding. The Katingan-Mentaya project is a showcase for private sector-led collaboration on sustainable development of peatland landscapes. This leads to best practice land-use planning in which biodiversity conservation and sustainable livelihood generation can be combined.