

Identifying and overcoming the many challenges facing forest and peatland conservation in Indonesia

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Tropical forests and peatlands are essential for wildlife conservation, preventing dangerous climate change, and the health and livelihoods of local people. They are home to tens of thousands of flowering plant species and critically endangered wildlife such as orangutans, store vast amounts of carbon in their soil and vegetation, provide clean water, and support fish populations for local consumption.

Unfortunately, Indonesia's forests and peatlands in particular are being rapidly lost and degraded, placing these many benefits at risk. This is due to agricultural expansion, especially for oil palm and pulp wood plantations, mining for minerals such as coal, and logging trees for timber. In peatland areas, these disturbances are associated with drainage of the normally sodden peat, which leads to fire during dry periods, causing forest loss, massive carbon emissions, and public health problems as people inhale the fires' toxic haze.

To help address the dramatic loss of forest and peatland in Indonesia, we convened a round-table, dual-language (English and Indonesian) workshop to identify key challenges, and provide potential solutions and future directions to meet forest and peatland conservation and restoration goals in Indonesia. Through this workshop and subsequent literature review, we compiled a list of 59 political, economic, legal, social, logistical and research challenges, for which five key underlying factors were identified. These challenges relate to the 3Rs (Rewetting, Revegetation and

Revitalisation) adopted by the Indonesian Peat Restoration Agency, plus a fourth R that we suggest is essential to peatland conservation planning: Reducing Fires.



Peat-swamp forest in Central Kalimantan burning during the severe 2015 fire season. Image: Bernat Ripoll Capilla/Borneo Nature Foundation.

Our analysis of these challenges suggests that narrowly-focused conservation solutions are likely to carry high risk of failure, and that peatland Rewetting and Reducing Fire are particularly important, as is acquiring local government and community support. Further, each conservation project will face unique challenges and have differing goals,

towards which project activities must always be individually tailored.

To aid in identifying and overcoming the specific challenges that individual projects may face, we propose an eight-step adaptive management framework, which we anticipate will help governments, NGOs, industry and communities in both Indonesia and other tropical areas to better achieve their forest and peatland conservation and restoration goals.



Roundtable discussion session at the University of Exeter, involving Indonesian and international experts (consent provided for image use). Image: Susan Cheyne/Borneo Nature Foundation.

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