Media Brief:

UN REDD Media Trip to Kalimantan (4-6 May 2018)

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KEY MESSAGES

- **68% of tropical peatlands are found in Southeast Asia**
- **People depend on peatlands for their livelihoods and they are important sources of food, water and biodiversity (including orangutans and the Sumatran Tiger)**
- **Peatlands contain 2x as much carbon as is found in all the world's forests**
- **In Indonesia, the Government has set up the Peatlands Restoration Agency and has pledged to restore 2 million hectares of peatlands by 2020**
- **Peatlands are a crucial aspect of Indonesia's National REDD+ Strategy**

THE IMPACT OF INDONESIA'S PEAT FIRES

The destruction or degradation of forest cover on peatlands delivers a double blow for carbon emissions with losses from both standing biomass and from the degradation of peat soils. During the worst of the 2015 peat fires in Indonesia, smoke from the fires was seen from as far as outer space. Many experts called it the worst environmental disaster of the 21st century. At the peak of the disaster, carbon emissions from Indonesia's fires on certain days *exceeded the average daily emissions from the United States.*

However, carbon emissions weren't the only negative consequence. The health fall-out from the 2015 peat fires was tremendous. It affected 43 million people, and caused over 500,000 people to be treated for respiratory diseases.

In terms of economic loss, The World Bank estimated that 2.6 million hectares of land in Indonesia were destroyed at that time, causing USD16 billion of damage.

In regards to the ecosystem, deforestation and drainage of peatlands increases the likelihood of flooding and leads to higher flood peaks and lower baseflow. Biodiversity is also threatened, as peatlands are home to a host of endangered species including orangutans and the Sumatran Tiger.

Furthermore, degraded peatlands are exposed to subsidence, which in the case of coastal peatlands can lead to saltwater intrusion, with highly damaging effects for agricultural production.

REDD+ IN INDONESIA AND ITS CONNECTION TO PEATLANDS

The UN-REDD Programme, a partnership between FAO, UNDP and UN Environment, was launched in 2008 with a mandate to support partner countries in their efforts to Reduce Emissions from Deforestation and Forest Degradation (REDD). Since then, REDD has evolved to REDD+ with an additional focus on forest conservation, sustainable management of forests and the increase of forests. Currently, the UN-REDD Programme is involved in supporting 64 developing nations – at different levels – to develop and implement national REDD+ strategies.

Indonesia was selected as one of the UN-REDD Programme's initial pilot countries, and the Government of Indonesia has shown its strong commitment to implement REDD+ over the past decade. This underscores the reality that successful implementation of REDD+ on the ground in Indonesia depends on governance reform in forest and peatland management.

On 26 May 2010, the Government of Indonesia and the Kingdom of Norway signed a Letter of Intent (LoI) on REDD+. Under the LoI, Indonesia agreed to develop a *National REDD+ Strategy*; establish a dedicated agency to implement the REDD+ strategy; and develop and implement policy instruments and enforcement capability (including a suspension of all new concessions for the conversion of peatland and natural forest areas to other uses).

In January 2017, Indonesian President Joko Widodo approved a two-year extension to this moratorium on issuing new licenses to use land designated as primary forest and peatland. It was the third extension of the moratorium, which was established in 2011 under the previous administration of President Susilo Bambang Yudhoyono, in an effort to reduce emissions from fires caused by *deforestation.*

The moratorium's application to peatlands is likely to generate the most significant environmental benefits due to their large carbon storage capacity. It will help prevent disastrous wildfires and billions of tons of carbon dioxide emissions over the next few decades, which will translate into huge *health benefits for the local populations*.

A NEW GENERATION OF FIREFIGHTERS

Indonesia is prone to outbreaks of forest fires during dry seasons, often blamed on the draining of peatland forests and land clearance for agriculture. But increasingly, smallholder farmers who previously damaged peatlands through slash-and-burn agriculture are becoming into guardians of peatlands in their communities. They are beginning to act as early warning providers, first responders and fire fighters. Local communities are playing an important role in eradicating peat fires in Indonesia. Villagers are organizing themselves with the support of local government interventions to form effective village-level volunteer firefighter brigades (Fire Awareness Committees, locally known as "MPA") and local fire centers. Within this context, training local communities to fight fires as they occur is now an integral part of implementing REDD+ successfully in Indonesia.

SOUTH AFRICA AND INDONESIA JOIN FORCES ON PEAT FIRES

In line with this strategy, firefighters from South Africa are training their Indonesian counterparts on combatting peatland fires by sharing their knowledge of peatland management. In turn, the Indonesian firefighters will go to rural villages to share these techniques with the local "MPA".

The South African firefighters are part of the Government of *South Africa's Working on Fire (WoF) Programme*, which aims to provide work opportunities to young men and women from marginalized South African communities by training them in fire awareness and education, fire prevention and fire suppression skills. As part of its mandate, WoF supports the international firefighting community by sharing skills and expertise, as well as by providing essential integrated fire management services at an international level.

Having travelled to *Indonesia in 2015* to assist with fighting fires that had been raging for more than six consecutive weeks, WoF firefighters have now returned to Indonesia for a two-week period with the objective of training their counterparts in Indonesia on combatting peatland fires.

Even though communities in South Africa and Indonesia differ, certain aspects of the WoF Program are transferable to Indonesia and learning from the highly-advanced South African integrated wildfire management system is expected to support the development of promising fire management initiatives and *successful fire management in Indonesia*.

Image source: WoF Fac

The United Nations is also supporting the Government of Indonesia to develop programmes similar to WoF for Indonesian community firefighters with the objective of positively impacting peatland management. Such activities are in line with the UN-REDD funded *Generating Anticipatory Measures for Better Utilisation of Tropical Peatlands (GAMBUT) project*, which aims to improve the ability of fire coordination centers and community organizations in 12 Indonesian districts to respond to fires in a more effective manner.

WHY PEATLANDS MATTER

Peat is partially decayed plant material that accumulates under water-logged conditions over long periods of time. Natural areas covered by peat are called peatlands. Terms commonly used for specific peatland types are peat swamp forests, fens, bogs or mires. Peat is found around the world – in permafrost regions towards the poles and at high altitudes, in coastal areas, beneath tropical rainforest and in *boreal forests.*

While peatland forests cover less than 3% of the Earth's surface, they are the largest terrestrial organic carbon stock – storing twice as much carbon as all of the world's forests. In fact, greenhouse gas emissions from drained or burned peatlands account for *5% of the global carbon budget.*

A recent report by the *Global Peatlands Initiative* titled, *Smoke on Water*, found that:

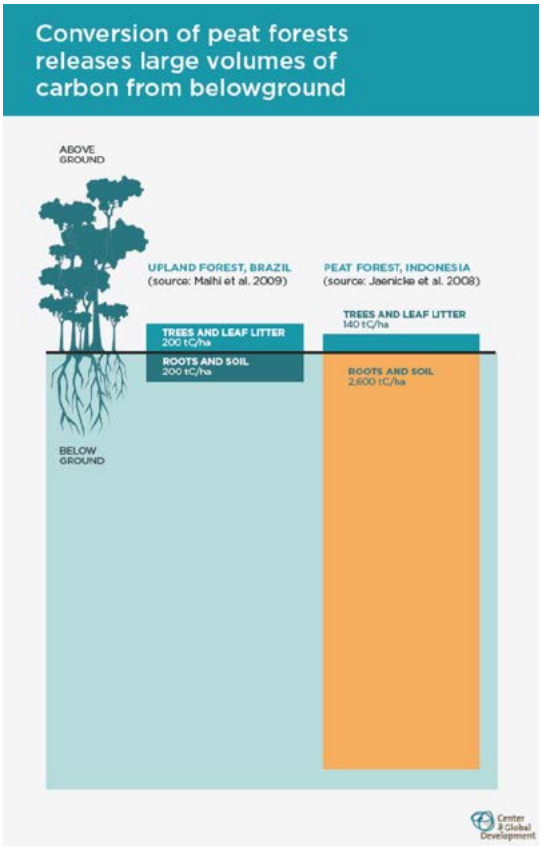
- Peatlands are important to human societies around the world. They contribute significantly to climate change mitigation and adaptation through carbon sequestration and storage, biodiversity conservation, water regime and quality regulation, and the provision of other ecosystem services that support livelihoods.

- Immediate action is required to prevent further peatland degradation and the serious environmental, economic and social repercussions it entails. Existing options to tackle the issue vary, and for that reason, implementation should be regionally adapted to local environmental, economic and social needs and characteristics.

- A landscape approach is vital and good practices in peatland management and restoration must be shared and implemented across all peatland landscapes to save these threatened ecosystems and their services to people.

- A comprehensive mapping of peatlands worldwide is essential to a better understanding of their extent and status, and to better conserve them. Research and monitoring should be improved to provide better maps and tools for rapid assessment and the transparent use of peatlands in order to mobilize multi-stakeholder engagement.

- Local communities should receive support to sustainably manage their peatlands by preserving traditional non-destructive uses and introducing innovative management alternatives.

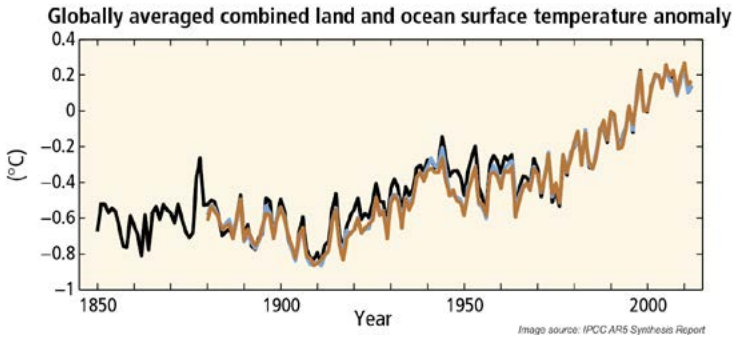


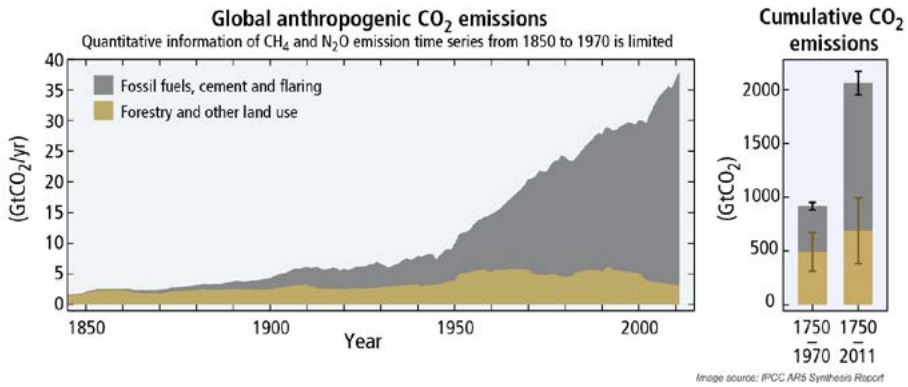
GLOBAL WARMING AND CLIMATE CHANGE

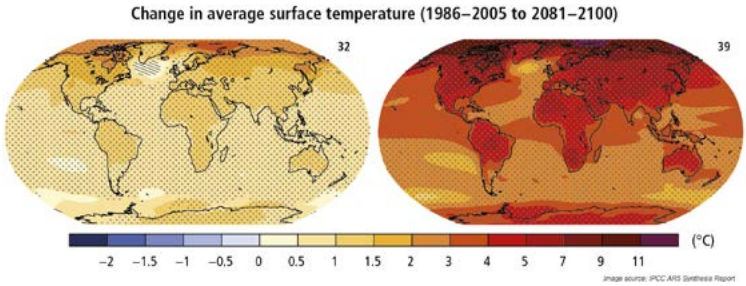
Global warming is the increase in the temperature of the Earth's surface, oceans, and atmosphere. According to America's Environmental Protection Agency (EPA), the average temperature on Earth has risen by 0.8 degrees Celsius in 100 years. It is predicted that the temperature will rise by another 1.13 to 6.42 degrees C in the next 100 years.

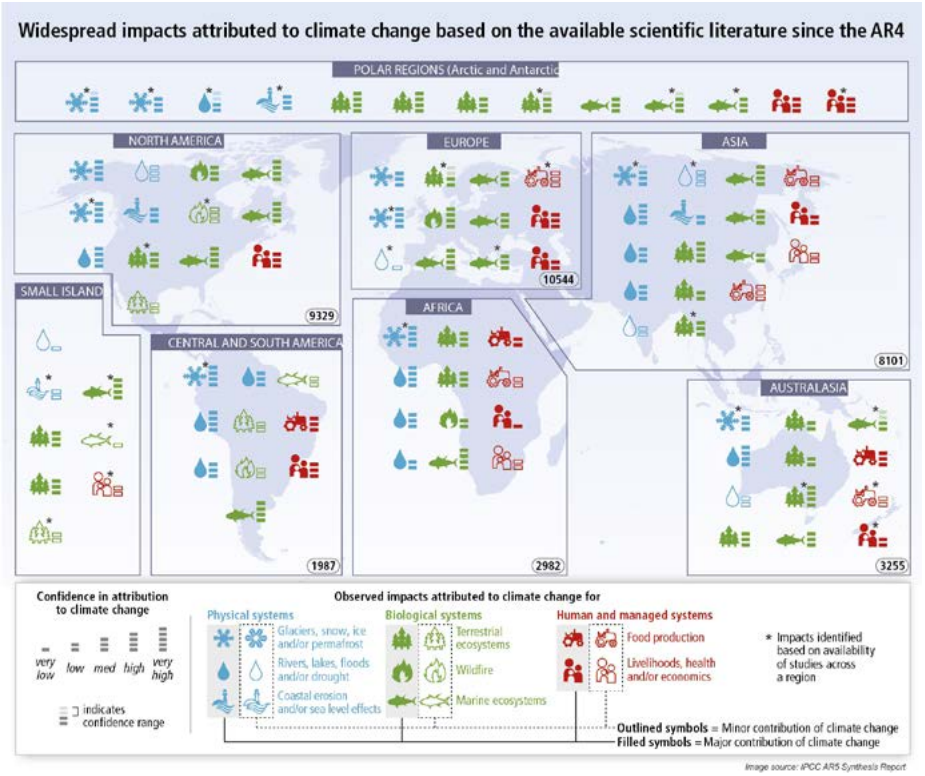
In 2013, the Intergovernmental *Panel on Climate Change (IPCC) released a report* that clearly indicated the link between global warming, climate change and human activities. Global warming is mostly caused by greenhouse gases that create the greenhouse effect, which is essential for life on Earth.
Of the greenhouse gases, an increase in carbon dioxide is the main cause of global warming, as this is one of the greenhouse gases that can remain in the Earth's atmosphere for thousands of years.

While global warming is causing Earth's temperature to rise, this is resulting in the rise of sea levels; the warming of oceans; the melting of ice sheets and the retreat of glaciers; changes in the amount and pattern of precipitation; and an increase in extreme weather events such as rainfall, tornadoes, and hurricanes. Therefore, addressing the issue of global warming is now a universal priority.









UN-REDD PROGRAMME

THE CRUCIAL ROLE OF FORESTS

Healthy forests have helped regulate climate change for millions of years by acting as 'carbon sinks' that convert harmful atmospheric carbon into harmless carbon elements through the process of photosynthesis. This 'carbon cycle' has ensured that Earth's atmosphere is well suited for all forms of life to survive and thrive.

However, since the industrial revolution began in the 1800s, large amounts of carbon dioxide has been emitted to the air mainly by human activities such as the burning of fossil fuels (i.e. oil, coal, etc.) and agriculture, which is estimated to be the direct driver for *around 80% of deforestation worldwide*. The deterioration of the health of forests (forest degradation) and deforestation has also increased the amount of carbon dioxide in the atmosphere, because trees and soil release large amounts of this gas that has been absorbed from the air during millions of years.

The scientific evidence is clear: Forests are a critical part of the answer to our climate challenge, both because of the emissions reductions that can be achieved by ending deforestation and because of the additional carbon that can be sequestered from the atmosphere through improved forest management and reforestation.

In fact, eliminating emissions from deforestation and increasing carbon removals by promoting forest regrowth could reduce global net emissions by 24-30%, and over the next decade, forests could provide as much as 50% of the cost-effective mitigation available. Put simply, achieving the Paris Agreement goal of limiting the average global temperature increase to 1.5 °C will be impossible without a major role for forests.

Moreover, forests also provide vial services that are essential for human societies to thrive, adapt, and achieve climate resilient societies. This includes important non-carbon climate benefits, like their role in sustaining livelihoods, providing water and food security, and regulating global rainfall patterns.