



Natural  
Climate  
Solutions  
Alliance

## Natural Climate Solutions in Action

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# Katingan Mentaya

<b>Project/Program Type</b>	Agriculture, Forestry and Other Land Use (AFOLU) project under the Reduced Emissions from Degradation and Deforestation (REDD+) mechanism.
<b>Description</b>	The project protects and restores 157,000 hectares of peatland rainforest, to help tackle climate change by ensuring the vast stores of carbon remain in the peat soil and biomass. In doing so, it works with local communities to improve wellbeing and develop sustainable sources of income, while also running conservation activity to safeguard the area's biodiversity.
<b>Location</b>	Mendawai, Kamipang, Seranau and Pulau Hanaut sub-districts of Katingan and Kotawaringin Timur districts, Central Kalimantan, Republic of Indonesia.
<b>Scale</b>	<p>The project area (the carbon crediting area) encompasses 157,000 hectares of intact tropical peatland forest land.</p> <p>The wider project zone represents the area in which the project activities are implemented. It extends to the banks of the Mentaya River in the west and the Katingan River in the east, and encompasses bordering areas to the north and south of the project area, covering an area of 305,669 hectares. The project zone was selected based on the dominant ecological, landscape and socio-economic features and in particular to include the main river catchments and to encompass the land of 34 villages likely to be affected by the project. No additional areas beyond the project zone are expected to be directly affected by the project.</p>
<b>Number of credits Issued</b>	Average of 7.5 million triple gold certified credits per year.



# Impacts

## Impact To-Date

The project is helping to combat climate change by ensuring the large amount of carbon stored in the forest remains locked away. The forest also plays a vital local role in stabilizing water flows, preventing devastating peat fires, enriching soil nutrients and providing clean water. It is rich in biodiversity, being home to an important population of many high conservation value species, including some of the world's most endangered; such as the Bornean Orangutan and Sunda pangolin. Beyond the forest, the project runs an extensive program of community development for the 34 villages surrounding the project zone. This includes supporting sustainable local livelihoods, improvements to welfare, health provision and education.

## Projected Longer-Term Impact

The long-term plans include the permanent protection and regeneration of the forest area, including the regeneration of areas of peatland and forest that were degraded prior to the project being established. Another objective of the project is to positively influence the local economy to ensure it is based on sustainable, non-destructive practices. The project is already directly contributing towards 11 of the United Nations Sustainable Development Goals and has established a strategy of delivering against the targets, which are being reported annually in the project Monitoring Reports ([Verra Search Page](#)).



# A New Kind of Conservation Rises from the Ashes of Indonesia's Wildfires

Before she became a firefighter, Murniah lost almost everything to fire. She grew up in Central Kalimantan, Indonesia in a village surrounded by peat swamp forest; and she started a rubber and rattan farm with her family at the forest edge. Peat is decaying plant material saturated with water, until large acacia plantations drained the moisture from the soil and left a tinderbox behind. In 2015, a peat fire lashed out of the forest and consumed Murniah's property without any warning. When the smoke cleared, half her fields were ash.

Peat fires raged across Indonesia that year, due largely to deforestation and unsustainable slash-and-burn agriculture by palm oil and acacia plantations. These fires took a huge toll on local communities, and their effects could also be felt around the world. Peat swamp stores more carbon than any other type of forest—and when it burns, it returns that carbon to the atmosphere. Peat fires, including the one that destroyed Murniah's farm, made Indonesia the world's fourth-worst carbon emitter in 2015. When the fires were at their peak, Indonesia was [spewing more carbon each day](#) than the economy of the United States.

Murniah and her family needed years to rebuild after the fire. In 2019, she discovered a new opportunity to improve their livelihoods and protect themselves and their community from losing everything again. A fire watch was forming in the local village with funds from an ecosystem restoration initiative called the Katingan Mentaya Project. Murniah became one of more than 700

firefighters in 30 local villages whom the Katingan Mentaya Project pays to patrol the peat swamps in Central Kalimantan during the dry season; dig wells to keep the peat moist; and use technology like drones and satellites to spot fires before they spread.



Dharsono Hartono

**This is not a donor-funded philanthropic model. For conservation to work at this scale, it needs to be financially sustainable.**

**Communities are our partners. We own this together. We save the forest together and we benefit together.**

The [Katingan Mentaya Project](#) protects 157,000 hectares of peat swamp forest and supports local businesses and institutions by selling carbon credits to companies via the Voluntary Carbon Market since 2017. "This is not a donor-funded philanthropic model. For conservation to work at this scale, it needs to be financially sustainable" says Dharsono Hartono, the chief executive of the Katingan Mentaya Project. "Communities are our partners. We own this together. We save the forest together and we benefit together."



**11 SDGs**  
contributed  
to by the  
project



**157,000**  
hectares  
of peat  
swamp  
forest  
protected



**34**  
villages  
benefited from  
the community  
development  
program

**5-10%**  
of the world  
population  
of Borneo  
orangutans live  
in the protected  
area of the project

**Follow the  
progress**





Hartono studied engineering in the United States and worked at companies like JP Morgan and PricewaterhouseCoopers before returning to Indonesia in 2007. Colleagues kept pitching him on unsustainable businesses like oil-palm production—until a friend introduced him to nature-based solutions, which seek to address societal and environmental problems in parallel through ecosystem conservation, management and restoration. The peat swamps of central Indonesia were doing the world a tremendous service by storing all that carbon in their soil; at the same time they were under serious threat of conversion. “Climate or carbon finance for environmental protection was still a new concept when we started. We knew we could accurately calculate the volume of carbon stored in peat and biomass, and equally we knew how to calculate the volume of CO<sub>2</sub> that would be released into the atmosphere over time if the land was allowed to be converted. By quantifying and commoditizing the CO<sub>2</sub> emissions that we had prevented by protecting the forest, we could generate carbon credit as a way to fund our conservation activity,” Hartono said.

Every verified carbon unit (VCU) that the Katingan Mentaya Project sells, compensates for one ton of carbon emissions. The Katingan Mentaya Project produces an average of 7.5 million VCUs each year, making it the largest forest-based avoided emissions project in the world. By tracking historical trends and closely comparing similar forest areas that have been lost to industrial conversion, we can say with a high degree of certainty that without the project’s intervention, at least three industrial acacia plantations would have taken control of the area and begun clearing the forest.

The protected forest not only keeps carbon in the ground but also protects some of the planet’s most impressive biodiversity. Between 5 and 10 percent of the world population of Borneo orangutans live in the protected area of the Katingan Mentaya Project, as well as other endangered species like the proboscis monkey and Sunda pangolin.

As the Katingan Mentaya Project has grown, Hartono’s business philosophy has evolved also. “Nature-based solutions are not purely about carbon credits,” he says. “More importantly, it’s about what kind of activities, awareness and empowerment you do with communities.” The Katingan Mentaya Project would not be able to protect so much forest without buy-in from the 43,000 people who live in 34 villages throughout the protected area. Many of these people resorted to illegal logging, poaching and unsustainable slash-and-burn agriculture in the past because they lacked other opportunities.



Murniah  
Forest Fire Patrol

**The Katingan Mentaya Project has been so helpful for our community.**

**In 2015, there was no forest-fire prevention. Now we have the budget and equipment to fight fire.**

The Katingan Mentaya Project invests a large amount of its project budget in local community activity. It supports a variety of local businesses, like a women-run nursery in the village of Desa Parupuk, which has planted 20,000 seeds so far. It has developed a local brand called Mentaya Sweets and built a training center and processing facility for coconut sugar – Mentaya Sweets has helped coconut farmers produce goods that they can sell for three times the price of fresh fruit. It is also helping farmers sustainably grow high-value crops like coffee, cashew and vanilla. “We believe in a model of protection and production,” Hartono says. “Farmers have to produce, and we cannot protect the area without them. The key becomes to produce in a non-deforesting way.”

Murniah has seen the difference in her own village. Not only has the Katingan Mentaya Project supported the fire watch, but it has also developed a women’s health clinic and educational programs for children. “The Katingan Mentaya Project has been so helpful for our community,” she says. “In 2015, there was no forest-fire prevention. Now we have the budget and equipment to fight fire.”



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## About the NCS Alliance

The NCS Alliance (NCSA) conveys the voice of businesses, NGOs and solution providers on the need to mobilize a high integrity demand for high quality Natural Climate Solutions (NCS). The Alliance focuses on identifying opportunities and barriers to investment in the NCS voluntary carbon market and serves as a forum for knowledge sharing and technical capacity building to ensure natural climate solutions reach their full potential in abating climate change, while also tackling nature loss and socio-economic issues. NCS in Action was established to showcase how NCS are making a real difference in the world today.

For more information visit [www.naturalclimatesolutionsalliance.org](http://www.naturalclimatesolutionsalliance.org) and follow us on [LinkedIn](#).



## Statement of Acknowledgment

The NCS in Action are testimonials designed to highlight the benefits for people and nature associated with NCS projects and programs financed through the voluntary carbon market. The NCS Alliance strongly believes that the voluntary carbon market is necessary for financing NCS projects and programs. It is critical however that it rests on the integrity of the climate benefits, i.e. the ability of credits to truly represent real and verifiable carbon reductions.

The NCS Alliance recognizes the importance of staying up-to-date with the latest science and best practices as carbon-crediting programs evolve. We acknowledge that there have been challenges with certain methodologies and that improvements have not always been made as quickly as necessary. However, we believe that this is a valuable learning-by-doing process and that scaling up NCS is crucial in achieving global 1.5C goals. In support of this, the NCS Alliance will continue to highlight projects and programs in this space while also advocating for consistent improvement in standards and methodologies. For more information about how and when these methodologies are updated see [Verra](#), [Plan Vivo](#), [ACR](#), [ART](#).

NCS in Action is made possible with generous funding support from the We Mean Business Coalition.

## Disclaimer

Inclusion of an NCS project or program in the NCS in Action program does not imply a recommendation to purchase, trade or retire credits associated with the project or program.

The NCS Alliance and its members take no responsibility for the purchase, trade or retirement of credits from these projects and programs. Instead, it recommends that individuals, companies and other organisations procuring credits as part of their climate strategies conduct their own independent due diligence to validate the quality and environmental integrity of their purchases.

The NCS Alliance secretariat in no way benefits financially or by other means from the selection.

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Citation: NSCA (2023) NCS in Action - Katingan Mentaya.  
Natural Climate Solutions Alliance.  
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