# FORESTS NEWS

## **REDD+** research maps complex path to protect forests, people and climate

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This year, with much of the world suffering through a global pandemic and stuck at home, people are seeking nature, fresh air and green spaces. Unfortunately, they are becoming harder to find.

Fires in the Amazon, floods in the Philippines, heatwaves in Europe – accelerating climate change is altering the planet. Scientific investigations into climate change and mitigation strategies are more important now than ever.

One of the approaches employed to combat climate change is known as REDD+ (Reducing Emissions from Deforestation and forest Degradation). Under this initiative, wealthy countries offer financial incentives to developing countries that are rich with forests and peatlands but struggle to conserve them. This structure has triggered many questions, including how to balance the needs of people living in and near forests while at the same time protecting forests themselves for their carbon sequestration potential.

Since REDD+ began over a decade ago as a policy initiative adopted at U.N. climate talks in 2013 and was subsequently recognized under the U.N. Paris Agreement in 2015, scientists have been looking into who is benefiting and who is not, and where the framework is working to reduce emissions and where it is not. This is an essential part of the process because implementing REDD+ is complex in its global-to-local actions, in the people involved – from policymakers to Indigenous communities – and the need to measure a vast range of data from satellite images to local incomes.

In order to identify opportunities to improve the livelihood opportunities for forest dwellers while tackling climate change, we need to learn from REDD+ projects that have piloted a range of approaches and reduced emissions.

For example, in Indonesia, more than a decade ago, Dharsono Hartono and Rezal Kusumaatmadja developed a conservation project in Katingan and Kotawaringin Timur regencies in the province of Central Kalimantan on the heavily forested island of Borneo. Their idea was to protect an area about twice the size of Singapore – about 150,000 hectares of intact forest and peatlands – from palm oil, acacia and other development activities. After careful analysis, collaboration with scientists from the Center for International Forestry Research (CIFOR) and designing a strategy in line with stringent REDD+ criteria, the Katingan Mentaya Project now delivers carbon credits to business customers around the world. Companies now indirectly engage in offsetting industrial carbon emissions, while protecting forests and supporting local livelihoods.

German automaker Volkswagen – still emerging from its 2015 "emissionsgate" scandal – is one such beneficiary. In September 2019, the firm announced it was investing in Katingan Mentaya with the aim of compensating for unavoidable CO2 emissions, while supporting local communities and U.N. and other international efforts to combat climate change and protect biodiversity.

"People are realizing the benefit of nature-based solutions," Hartono said, referring to a key REDD+ premise of sustainably harnessing nature to simultaneously benefit the environment and address socio-economic disparities. "What we have with Katingan Mentaya, as the largest project in the voluntary market today based on emissions avoided, is proof of concept. That is a win-win for everybody."

In order to qualify for the voluntary market, i.e. to sell carbon offsets, projects must be independently audited for compliance with REDD+ standards, and the market highly values credits from those that demonstrate the provision of social and environmental benefits in addition to reductions in carbon emissions.

Estimated to prevent the release of, on average, 7.5 million tonnes of carbon dioxide equivalent per year, the Katingan Mentaya project is regularly audited by third-party certifiers and is an important place to observe REDD+ in action.

### On avoided deforestation

Last year, North Carolina State University graduate student Vivi Selviana focused her master's thesis on the Katingan Mentaya REDD+ project. She recognized that the site offers a valuable case study opportunity because it has successfully prevented deforestation of carbon-rich peatlands by large actors. Her emphasis was into if and how forest use and the livelihoods of local people living near the project area have been affected.

Her thesis builds on research that CIFOR has been conducting for the past decade on REDD+ implementation at national, subnational and local levels.

"Our analysis of REDD+ projects in six countries highlights modest but positive outcomes for forests and local people when their interventions include livelihood enhancements, such as in the Katingan Mentaya project," said scientist Amy Duchelle, CIFOR climate change team leader.

Since 2011, CIFOR's research has tracked four of the 34 villages around Katingan Mentaya that were initially selected for interventions, and four similar – but not identical – comparison villages in the same two regencies. In 2014 and 2018, survey respondents in the comparison villages reported declines in forest area and quality consistent with loss of forest cover observed by satellite. In the four villages selected for project interventions, patterns were more variable, with forest gains and losses varying across data sources, time periods and villages.

This is the complicated nature of REDD+, and pitfalls can emerge in attempts to simplify the story.

Through an impassioned rebuke of Volkswagen and its carbon footprint, in a recent publication, Greenpeace makes reference to Selviana's findings on forest loss. The environmental watchdog singles out satellite data used to measure forest cover in the intervention villages, overlooking other evidence from the comparison villages detailing what happened when REDD+ was not deployed and disregarding other important caveats explained in the thesis.

For example, the Katingan Mentaya project has not been implemented at the same pace and intensity in all of the villages originally selected for interventions, and by chance, there had been fewer project activities in several of the intervention villages originally included in the thesis.

### People and forests

The other side of the REDD+ conversation is the experience of local people. Selviana's research looked at community perceptions of the project and changes in household income.

Average household income increased in each of the eight villages between 2011 and 2014, but increased more slowly in the four intervention villages, resulting in lower household incomes in those villages in 2014 and again in 2018. Selviana found that this difference was mostly due to lower business income in the intervention villages. One reason was that households in those villages had made large investments, often supported by the project, in businesses such as food stalls and

swallow nest cultivation, reducing their current net income but potentially leading to higher incomes in the future.

The research process included meetings in each village to elicit collective opinions about forest trends and REDD+ interventions. Selviana found that in most of the villages, perceptions of REDD+ became more negative over time, partly due to unmet – and perhaps unrealistic – expectations that all villages would benefit immediately from the project. Instead, the project has targeted support for livelihoods that are potentially more sustainable but also slower to mature than other common livelihood options in these regencies, such as gold mining.

The findings on household income and village perceptions were used to support the broader Greenpeace position, which is critical of carbon offsets, but ignores the context and interpretation offered in the thesis, including why incomes changed and the longer-term prospects for local livelihoods. For example, Greenpeace highlighted higher out-migration from the intervention villages than from the comparison villages in the first time period, but did not mention that this trend reversed in the second time period. The report also failed to recognize the importance of private financing for tackling the powerful forces driving deforestation and hence climate change.

The Katingan Mentaya work has successfully prevented the conversion of an enormous area of peatlands and is investing in restoration, which is creating employment opportunities for local people that offer attractive alternatives to wage labor in mines or oil palm plantations.

"We know balancing positive outcomes for climate and for people is complicated, and we need continued data collection to understand the impacts of climate change mitigation efforts like REDD+," Selviana said. "Local communities like the villagers I worked with in Central Kalimantan are at the center of this, and solutions need to address their present and their future."

#### Inclusive impacts

The world is still striving to find climate solutions that are effective and equitable, and that avoid worst-case scenarios. Forests are crucial not only in tackling accelerating climate change but also in the transition to a sustainable future that provides livelihoods, wellbeing and a wide range of ecosystem services. This is the foundation of REDD+.

CIFOR scientists have been studying REDD+ since its inception, with one clear finding: the path to good results for people and forests must lie in processes that consider all involved. Only with diverse perspectives in dialogue and implementation with governments, conservationists, Indigenous Peoples, financiers and corporations, can we hope to really address the problem.

Source: <u>https://forestsnews.cifor.org/70141/redd-research-maps-complex-path-to-protect-forests-people-and-climate?fnl=enen</u>