Press release West et al.

Carbon crediting in tropical forest projects needs massive reform

A paper entitled "Demystifying the romanticized narratives about carbon credits from voluntary forest conservation," just published in the journal *Global Change Biology,* explains a series of problems with carbon credit in REDD+ projects for the Voluntary Carbon Market (available at: https://doi.org/10.1111/gcb.70527). REDD+ refers to Reducing Emissions from Deforestation and Degradation, with the "+" referring to complementary actions to sequester carbon in forests. The first author, Thales West, is a Brazilian Forest Engineer (with a PhD focused on Food & Resource Economics from the University of Florida) who has wide experience with carbon projects in tropical forests around the world and is currently an assistant professor in the Department of Environmental Geography at the Free University of Amsterdam, in the Netherlands. He has brought together 16 co-authors with vast combined experience related to carbon projects. The paper focusses primarily on avoided deforestation but briefly treats other REDD+ project types such as forest management and tree planting.

Problems explained include biased baselines – the counterfactual scenarios representing what would have occurred if a carbon project had not been implemented. These scenarios are used to quantify the climate benefits of the project but frequently are projections that exaggerate the carbon benefits. The result is carbon credit that is not "additional," that is, that rewards supposed changes in carbon fluxes that would have occurred anyway, or that didn't really exist.

Other areas where projects tend to exaggerate benefits or minimize or ignore climate impacts include "leakage" (the annulation of climate benefits due to indirect effects of a carbon project outside the project area) and permanence (the time that carbon that is sequestered or stored by a project stays out of the atmosphere). Double counting of benefits, for example a country considering both the benefits of a carbon project within its borders and those claimed on a "jurisdictional" basis based on the changes in carbon balance at a subnational or national level, also represents a way that inappropriate accounting can annul the climate benefits of REDD+ projects. Social benefits of REDD+ projects are also frequently exaggerated. These various problems stem from inherent conflicts of interest of the various actors, including beneficiaries, project developers and auditing entities.

The problems and need for reform in the voluntary carbon market are only part of the challenge. The same problems must be addressed in formulating policies for any future official market under the Climate Convention. Although REDD+ has been approved in principle for future implementation under the Paris Agreement, the critical rules that would govern it have yet to be agreed upon. Mitigation actions that avoid emissions from tropical forests have huge potential benefits for climate provided the calculated benefits are real. Massive reforms are needed to assure this is the case.