# Forests and Conflict: The Relevance of REDD+

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Deforestation for the construction of a new highway between Dolosie and Pointe-Noire, Congo-Brazzaville. Courtesy of flickr user Bobulix, http://www.flickr.com/photos/bobulix.

FOREST LOSS IS A MAJOR DRIVER of climate change, with deforestation alone contributing to about 20 percent of global greenhouse gases (Gullison et al., 2007). Accordingly, policies aimed at slowing deforestation have attracted growing interest in recent years in the international climate change arena and beyond. Given that competition over forest resources and deforestation-related environmental degradation serves as a potential driver of conflict at the local, regional, and international levels, this article explores the security implications of efforts to mitigate climate change through woodland preservation.

In some ways, climate change mitigation tactics aimed at preserving woodlands provide a sound opportunity for regional and international collaboration, thanks to the cross-border environmental benefits of decelerated deforestation. Forest preservation also can help stabilize conflict-prone areas by strengthening institutional capacities and integrating sustainable woodland management into broader international climate change mitigation efforts. Yet at the same time, mitigation efforts prioritizing forest preservation entail a degree of risk, and must be carried out with great sensitivity to avoid triggering fresh unrest in conflict-prone countries. This article examines the conditions under which such mitigation efforts may contribute to or undermine the likelihood of conflict.

### Exploring the Nexus Between Forest Resources and Conflict

The majority of forest-dwelling and forest-dependent households suffer from poverty and lack public services (Dubois, 2002). For these impoverished populations, woodlands are a vital resource. However, in part because of their economic importance, forests can also become hotbeds of conflict, since they tend to be remote and inaccessible, far from government presences, and home to multiple ethnic groups and minority populations with competing claims (Blundell, 2010). Sustainable forestry management, if carried out in a way that helps improve livelihood security, can therefore be a key to preventing violent conflict in some places (ETFRN, 2008).

A background study for the *World Development Report 2010* identified different ways woodlands can contribute to armed conflict (Harwell, 2010). One of the study's central focuses was the timber industry's contributions to the outbreak, escalation, or continuation of armed conflict, which assumed the following forms:

- Financial flows from timber revenue or corrupt payments that fund violence;
- Direct engagement in violence or weapons trafficking by loggers or those employed by loggers; and,
- Linkages between logging and other forms of crime and violence.

Many of the world's prime tracts of woodland are located in countries already considered fragile or conflict-prone. With climate change mitigation policies now becoming a regular part of environmental peace-building discussions, intriguing new questions have arisen regarding how woodland-preservation plans might impact conflict dynamics within these states.

#### A Closer Look at the REDD Approach

During the last few decades, competing land-use demands and emissions from deforestation have become an increasingly important climate change issue, with forest preservation often emerging as a focal point of such debates. As used by the Intergovernmental Panel on Climate Change (IPCC), "emissions from land use, land-use change, and forestry" include aggregated emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) from deforestation, biomass, and burning; decay of biomass from logging and deforestation; and the decay of peat.

Worldwide, forests support the livelihoods of an estimated 1.6 billion people and are home to 300 million (UN Forum on Forests, 2011). In Indonesia alone, 36 million people out of a total population of 235 million rely on the forestry sector as their primary source of income (Indonesia Ministry of Forestry, 2002). While

forests' role as an economic lifeline for local communities is undeniable, woodland preservation also provides concrete benefits in other realms of society. For instance, forests play a vital role in boosting communal adaptive capacities by reducing the impact of events connected to climate change, such as landslides, flooding, and erosion.

Over the course of the last several years, international climate change negotiations have brought fresh attention to the question of how to most effectively address deforestation in developing countries. The debate has focused on designing policy instruments that can reduce emissions from deforestation and integrating these instruments into the post-2012 architecture of global climate change mitigation measures, when the first commitment period under the Kyoto Protocol will end and the reform process of the international climate policy landscape will take shape.

In 2007, delegates at the 13th Conference of the Parties in Bali adopted a decision on forest protection as a climate policy instrument called "Reducing emissions from deforestation in developing countries: approaches to stimulate action (REDD)." The REDD document specifically encourages parties to "explore a range of actions, identify options, and undertake efforts, including demonstration activities, to address the drivers of deforestation relevant to their national circumstances, with a view to reducing emissions from deforestation and forest degradation and thus enhancing forest carbon stocks due to sustainable management of forests" (UNFCCC, 2007).

In the ensuing years, a number of governments and multilateral institutions have launched initiatives indicating that REDD will be relevant not only for stable countries, but also for conflict-prone and post-conflict countries as well:

The UN Food and Agriculture Organization, UN Development Programme, and UN Environment Programme launched UN-REDD, which has invested US\$42.6 million in nine pilot countries: Bolivia, the Democratic Republic of Congo, Indonesia, Panama, Papua New Guinea, Paraguay, Tanzania, Vietnam, and Zambia.

- The World Bank established a number of initiatives addressing forest issues in developing countries. The Forest Carbon Partnership Facility, launched in Bali in 2007, looks to build capacity for REDD in developing countries, testing a program involving performance-based incentive payments in select pilot countries (the Central African Republic, Liberia, and Nepal) to gauge the feasibility of a much broader system of financing mechanisms and incentive payments in the future.
- Various governments have set up REDD initiatives on a bilateral basis. For instance, Norway has committed US\$600 million a year to REDD activities, including the country's high-profile work in Indonesia. Australia, meanwhile, is actively engaged with deforestation issues in the South Pacific, while German International Cooperation is a participant in REDD projects in Indonesia and Laos. The United States is working on a number of REDD-ready programs with a focus on building capacity for inventories, monitoring, and verification in Latin America (Brazil, Colombia, Mexico), Asia (India, Indonesia, Cambodia) and Africa (Zambia, Uganda).

## A Means for Promoting Peace and Stability?

Given that REDD programming to date has been designed to generate new income streams for local populations and build strong institutions that improve governance, it serves as an example of how climate change mitigation policies could have potentially stabilizing effects in fragile or conflict-prone environments.

First, in principle, REDD can contribute to economic development by generating new sources of revenue for oft-marginalized social groups. Depending on the design of benefit-sharing agreements, central governments as well as local communities could earn income and put it to productive use by rebuilding infrastructure and expanding public services. Further, employment opportunities under a REDD agreement could be created for forest monitoring and law enforcement positions, while

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afforestation campaigns could provide at least temporary employment, given the need for workers to run nurseries and plant tree seedlings (Agrawal & Angelsen, 2009).

Second, at present, many developing nations and active-conflict countries lack the governance capacity required to implement REDD programming. An established REDD mechanism could provide incentives to improve governance capacities as a prerequisite for receiving funds for anti-deforestation projects. In fact, some ongoing initiatives and pilot projects explicitly aim to improve target countries' governing capacities to make them "REDD ready" (Williams et al., 2011). In this way, the financial resources and technical assistance provided for "REDD readiness" support the building of governance capacity and the strengthening of institutions—trends that may yield positive spillover effects for peacebuilding beyond the forest sector.

Third, REDD can foster cooperation, dialogue, and confidence-building at all levels. Whereas large-scale logging, mining, oil extraction, and other activities incompatible with REDD often lead to conflict with local communities, REDD approaches should protect the environment and are much less likely to provoke conflict. Using REDD programs as a vehicle for land tenure reforms that provide legal titles to local communities could also help reduce the type of conflicts that often arise when land tenure is unclear (Cotula & Mayers, 2009).

#### Potential Risks of REDD Policies

The potential stabilizing effects of REDD programs aside, there are a number of possible risks that must be taken into account when considering the introduction of REDD into fragile or conflict-prone countries and regions.

First, the procedures required to measure and monitor carbon emissions can prove expensive to implement, as can the establishment of REDD governance systems. Accordingly, indigenous communities and micro-project enterprises could be excluded from participating in REDD projects because they would not be able to recover transaction costs. One way to address this problem might be to foster better communication and cooperation among communities in a given REDD target country as a means of cutting transaction costs. The confidence-building that would accompany such collaboration could prove especially helpful for divided or rival communities. However, unless measures to ensure the transparent and fair distribution of related benefits are outlined ahead of time, REDD projects could potentially create new rifts.

Second, local communities may be marginalized if REDD programs are badly designed or poorly implemented. Proactively addressing questions of land tenure and land-use rights is therefore of the utmost importance. For instance, if REDD campaigns that successfully stave off deforestation are rewarded financially and linked to global compliance markets, enormous amounts of money may flow to the country. The main beneficiaries would most likely be government entities that would need to redistribute resources, e.g., by establishing a transfer system. The likely increase of the value of forested land would serve as an incentive for governments and powerful private sector actors to seize control of woodlands and reap the profits of REDD. Consequently, the rights of forest-dwelling communities, especially those without formalized land titles, could either be denied or ignored.

The danger inherent in selling carbon rights to investors without first consulting forest dwellers is especially high in the 75 percent of the world's woodlands that are

officially owned by governments. Even communities with recognized land rights in woodlands could be pressured into signing deals that limit their access to forest resources while providing them with scant compensation (Cotula & Mayers, 2009). Income generated by successful REDD campaigns could instead be "used by the state to equip forest protection agencies with jeeps, walkie-talkies, arms, helicopters, and GPS in an outdated and anti-people 'guns and guards' approach to forest protection," leading to a potentially violent escalation of local resource conflicts (Griffiths & Martone, 2009, p. 24).

Third, unclear land-tenure rights within woodlands could be complemented by the still largely undefined ownership of carbon. To date, only a few countries have legislated who owns the carbon stored in trees. New Zealand's move to declare forest carbon the property of the government, for instance, sparked resistance from private forest owners. After several years of lawsuits, continuing protests, and stalled efforts to inventory carbon stocks, carbon ownership was eventually transferred back to the forest owners (Rights and Resources Initiative, 2010). To successfully implement REDD programming, a target country or region must first have legal institutions capable of fairly resolving disputes, as well as clearly defined land-tenure rights and carbon-ownership rights.

Fourth, unequal benefit sharing under REDD programming could trigger another set of conflicts. The local elites who likely would emerge as primary negotiation partners could capture a disproportional share of REDD income, while poorer and landless households might receive far less revenue. Such increased income inequality could spark social or political unrest or conflict at the local level. Since the forestry sector in many countries already has a reputation for irregular and corrupt business practices, REDD programs will have to be designed in a manner that minimizes the potential for corruption—otherwise, REDD projects could be viewed by locals as illegitimate, and the projects' effectiveness would likely be compromised as a result (Tacconi et al., 2009). Transparency International devoted a special section of its most recent report on climate change and corruption in the forest sector. The



Logging in New Guinea. Courtesy of flickr user Greenpeace/ Jeremy Sutton-Hibbert, http://www.flickr.com/photos/ greenpeace\_esperanza.

analysis made clear that corruption will be an ongoing risk even once well-designed REDD programs are fully operational. "To avoid inappropriate validation of projects, the verification of fictitious projects, and the overestimation, double-counting, or fraudulent trade of carbon credits," strong monitoring and enforcement mechanisms are needed, as well as a role for independent civil society groups to participate in monitoring efforts (Transparency International, 2011).

Fifth, setting the right baseline—making an accurate estimation of how much deforestation would occur without intervention—is crucial for the integrity of any REDD program. Further, deforestation rates are influenced heavily by conflict. Sierra Leone, for example, lost more than 19,000 hectares of forest per year from 2000 to 2005, as the country worked to recover from civil war (Forest Industries, 2011). Deforestation can be accelerated due to the lack of law enforcement, extraction of timber to finance the purchase of firearms, or the survival strategies of war-affected and displaced communities.

Even once an active conflict has ended, woodlands remain under threat. For instance, when formerly dangerous battlegrounds become accessible again, large-scale logging operations may move into those areas, pushing the agricultural frontier forward. Consequently, setting the right baseline in the context of a post-conflict scenario

poses a serious challenge: What amount of avoided deforestation can be attributed to a specific intervention financed by REDD, and what amount can be attributed to pre-existing peace and conflict dynamics?

#### **Initial Experiences With REDD**

Since most REDD-related activities have started only recently, it is too early to assess positive and negative impacts in conflict-prone countries. To a certain extent, however, current REDD projects backed by the United Nations or the World Bank can be linked to relevant preexisting programs and agencies within the target countries.

In Nepal, for example, the Swiss Agency for Development and Cooperation commissioned the Nepal Swiss Community Forestry Project to participate in a project intended to contribute to economic growth and social development by focusing on gender, social equity, peacebuilding, and poor peoples' livelihood issues under the umbrella of Forest User Groups (Hobley, 2007). Meanwhile, the International Union for the Conservation of Nature (IUCN) has been helping Liberia restore its woodlands, focusing on refugee camp reforestation and forest sector reform as a means of restoring stability as the country recovers from civil war. IUCN has expanded its approach into a broader portfolio that currently emphasizes community forest management, climate change, and forest governance, with the latter category focused primarily on REDD and forest sector policy support. The initiative is built on local community-based natural resource management strategies that seek to achieve poverty reduction; empower impoverished forest-dependent populations through enhanced land rights; improve forest law enforcement and governance; and revitalize woodland ecosystems through forest landscape restoration.

#### A Conflict-Sensitive Approach to REDD

While REDD programming can potentially create or exacerbate conflicts and increase the marginalization of certain populations, it can also provide opportunities to develop sustainable livelihoods, generate new income streams, and strengthen the political and economic position of forest dwellers in post-conflict settings. How REDD projects fare depends largely on the existence of detailed and well-balanced REDD-related frameworks and institutions in target countries. To design REDD programming that not only reduces conflict potential but also plays a constructive role in peacebuilding, I recommend the following:

- Clarify legal issues surrounding land tenure: In order to prevent conflicts, REDD projects should be used to strengthen the political and economic clout of communities living in woodland areas, rather than marginalizing or displacing them. It is critical that REDD program designers also take into account traditional, and often complicated, land tenure arrangements, as well as the rights of resource users without legal titles.
- Ensure fair sharing of REDD-related benefits: The equitable sharing of benefits generated by REDD projects is a necessary condition for conflict-sensitive strategies to succeed. Since corruption is rife in the forest sector of many developing countries, greater openness in forest-resource management must be fostered to increase the legitimacy of REDD programming, secure benefits for local populations, and reduce conflict potential.
- **Establish reliable, transparent, and efficient governance structures**: REDD projects require transparent and dependable local institutions to ensure that measurement, reporting, and verification duties are carried out accurately. Local institutions should also be capable of identifying and dealing with the drivers of deforestation effectively, as well as building confidence among investors. Building these capabilities will be particularly difficult in post-conflict settings, but the development of such institutions could potentially yield positive spillover benefits that bolster the target country's overall stability.

- Design pro-poor REDD programs so that revenues are used to advance socioeconomic development: Apart from reducing the risk of conflict, allocating REDD-related income in this fashion could make REDD programs more attractive to investors and reduce the risk of project failure. Additionally, reinvesting revenue to bolster socioeconomic development in a target country could help advance the well-being of the entire population, especially traditionally marginalized groups.
- Secure international support for capacity-building and "REDD-readiness" and prioritize local participation: Generating new REDD-related jobs within a target country will happen only if tasks like project monitoring and accounting are at least partly performed by the local population and not just by international consultants. Developing alternative income opportunities must be a part of any comprehensive REDD scheme.

## REDD Fulfills a Need for Conflict-Sensitive Climate Change Mitigation Policies

In addressing the lack of reflection on the linkages between climate change, peacebuilding, and sustainable forest stewardship, this article has outlined how reducing deforestation may help contribute to political stability and the socioeconomic advancement of post-conflict countries. While climate change policies aimed at mitigating deforestation pose certain risks and opportunities, the prospects for the success of such initiatives are bolstered by the establishment of REDD mechanisms that are the product of both multilateral negotiations and bilateral initiatives. Anti-deforestation programs can also contribute to peacebuilding by helping to strengthen institutional capacities, creating new streams of income generation, and engaging various local stakeholders in participatory processes.

Creating conflict-sensitive climate policies that have positive, transformative effects is undoubtedly an ambi-

tious task. This is true not only for REDD programming, but also for the design and implementation of climate-change adaptation measures in general. To reduce the likelihood that climate policies have unintended adverse impacts in the countries they are meant to benefit, it is critical that policymakers and program designers conduct careful conflict assessments to ensure an understanding of the local contours of conflict within their target countries *before* implementing programming. Further, in order for climate policies to be conflict-sensitive, they must be developed using a multi-faceted system that incorporates various levels of decision-makers, from the administrative to the societal.

Ultimately, designing and implementing REDD programming in a manner that is sensitive to local conflict dynamics will increase the likelihood that anti-deforestation climate change policies can serve as a threat minimizer in post-conflict settings. Indeed, since anti-deforestation strategies are still being fine-tuned, there is a good chance that efforts to preserve and sustainably manage woodlands can be conducted in a way that mitigates the potential for unrest in conflict-prone, resource-rich nations. For that reason, REDD programming, if carefully and thoughtfully designed and implemented, can go a long way toward promoting and supporting peace and stability across the developing world.

#### Note

1. This paper is based on a more comprehensive analysis in Dennis Tänzler and Felix Ries (2012).

#### References

Agrawal, Arun, & Arild Angelsen. (2009). "Using Community Forest Management to Achieve REDD+ Goals." Realising REDD+ National Strategy and Policy Options. Bogor, Indonesia: Center for International Forestry Research.

Blundell, Arthur G. (2010, June). Forests and Conflict: The Financial Flows That Fuel War. Washington, DC: The World Bank.

Cotula, Lorenzo, & James Mayers. (2009). "Tenure in REDD: Start-Point or Afterthought?" Natural Resource Issues No.

- 15. London: International Institute for Environment and Development. Available online at http://pubs.iied.org/pdfs/13554IIED.pdf
- Dubois, Olivier. (2002, October). Forest-Based Poverty Reduction:

  A Brief Review of Facts, Figures, Challenges and Possible

  Ways Forward. Available online at http://www.fao.org/

  DOCREP/005/AC914E/AC914E00.HTM
- European Tropical Forest Research Network (ETFRN). (2008). Financing Sustainable Forest Management (ETFRN News 49). Wageningen, The Netherlands: Tropenbos International. Available online at http://www.tropenbos.org/publications/financing+sustainable+forest+management+(etfrn+news+49)
- Forest Industries. (2011, March 7). Forest Loss Threatens Sierra Leone Water Supplies. Available online at http:// forestindustries.eu/content/forest-loss-threatens-sierra-leonewater-supplies
- German Advisory Council on Global Change. (2008). World in Transition: Climate Change as a Security Risk. London: Earthscan. Available online at http://www.preventionweb.net/english/professional/publications/v.php?id=8021
- Griffiths, Tom, & Francesco Martone. (2009, May). Seeing 'REDD'? Forests, Climate Change Mitigation and the Rights of Indigenous Peoples and Local Communities. Washington, DC: Rights and Resources Initiative. Available online at http://www.rightsandresources.org/publication\_details. php?publicationID=923
- Gullison, Raymond, Peter Frumhoff, Josep Canadell, Christopher Field, Daniel Nepstad, Katharine Hayhoe, Roni Avissar, Lisa Curran, Pierre Friedlingstein, Chris Jones, & Carlos Nobre. (2007). "Tropical Forests and Climate Policy." Science 316(5827), 985–986.
- Harwell, Emily. (2010). Forests in Fragile and Conflict-Affected States (Background paper for the World Development Report 2011). Washington, DC: The World Bank. Available online at http://documents.worldbank.org/curated/ en/2010/10/14275578/forests-fragile-conflict-affected-states
- Hobley, Mary. (2007). Where in the World Is There Pro-Poor Forest Policy and Tenure Reform? Washington, DC: Rights and Resources Initiative. Available online at http://www.rightsandresources.org/publication\_details. php?publicationID=134
- Indonesia Ministry of Forestry. (2002). Country Report on the Progress and Achievement Toward Sustainable Forest Management in Indonesia. Jakarta, Indonesia: Ministry of Forestry.
   Rights and Resources Initiative. (2009–2010). The End of the

- Hinterland: Forests, Conflict and Climate Change. Available online at http://www.rightsandresources.org/documents/files/doc\_1400.pdf
- Tacconi, Luca, Fiona Downs, & Peter Larmour. (2009). "Anti-Corruption Policies in the Forest Sector and REDD+." In Arild Angelsen (Ed.), Realising REDD+: National Strategy and Policy Options (pp. 163–174). Bogor, Indonesia: Center for International Forestry Research.
- Tänzler, Dennis, Achim Maas, & Alexander Carius. (2010, July 26). "Climate Change Adaptation and Peace." Wiley Interdisciplinary Reviews. Available online at http://wires. wiley.com/WileyCDA/WiresArticle/wisId-WCC66.html
- Tänzler, Dennis, & Felix Ries. (2012). "International Climate Change Policies: The Potential Relevance of REDD+ for Peace and Stability." In Juergan Scheffran, et al. (Eds.), Climate Change, Human Security and Violent Conflict (Hexagon Series on Human and Environmental Security and Peace Volume 8), pp 695–705. Berlin, Germany: Springer.
- Transparency International. (2011, June 2). *Global Corruption Report: Climate Change.* London: Earthscan. Available online at http://transparency.org/whatwedo/pub/global\_corruption\_report\_climate\_change
- UN Forum on Forests. (2011). "Fact Sheet: International Year of Forests 2011: Forests for People." *UN International Year of Forests 2011*. Available online at http://www.un.org/en/events/iyof2011/wp-content/uploads/2011/10/Fact\_Sheet\_IYF.pdf
- UN Framework Convention on Climate Change (UNFCCC). (2007). Reducing Emissions from Deforestation in Developing Countries: Approaches to Stimulate Action (UNFCCC, Decision 2/CP 13, 3). Available online at http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf#page=8
- UN General Assembly. (2009, September 11). Climate Change and Its Possible Security Implications: Report of the UN Secretary-General (A/64/350). Available online at http://www.unhcr.org/refworld/docid/4ad5e6380.html
- Viana, Virgilio. (2009, March). Financing REDD: How Government Funds Can Work With the Carbon Market (International Institute for Environment and Development Policy Brief). Available online at http://pubs.iied. org/17053IIED.html
- Williams, Lauren, Gaia Larsen, Sarah Lupberger, Florence
  Daviet, & Crystal Davis. (2011). Getting Ready With Forest
  Governance: A Review of the World Bank Forest Carbon
  Partnership Facility Readiness Preparation Proposals and the
  UN-REDD National Programme Documents. Washington,
  DC: World Resources Institute.